Frontier Analytical Laboratory

PROJECT REQUEST SHEET

Project #:	5887	Sample #:	1	Client Manager:	BS
Client:	Analytical Resources Inc. Sue Dunnihoo			Hold Time:	12/10/2010
Matrix:	Sediment	Extraction Batch:	1910	Due Date:	01/15/2010
Method:	EPA 1613 D/F			Storage:	R1
SOP:	SOPs: EP2A Rev.7 IP2A Rev.8				

COMMENTS/INSTRUCTIONS:

Results: 5887

Extract/s located in box: "2010"

Standards: 5873

Instrument:

DB5	FAL-3
DB225	____
DB1	____
Other	____

Frontier Analytical Laboratory
Percent Solids

FAL Project: 5887

Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv
1.32 5887-001-0001-SA	GN	12/30/09	9.72	8.08	83.13	12.03

% Solids Summary:

Non-Filtered Determination

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

Filtered Determination

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

% Solids calculation

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

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

EXTRACTION SHEET

Project #: 5887 Extraction Date: 2009-12-30 Extraction Chemist: GN

Method/Analysis: EPA 1613 D/F

Procedure: SOX/SDS Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS Amt: 10.0uL ID: 090918A Vial: 3 Chemist/Witness/Date	NS Amt: 10.0uL ID: 090918B Vial: 3 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 090918C Vial: 3 Chemist/Witness/Date
5873 1910-001-0001-MB					
1910-001-0001-OPR					
5887-001-0001-SA	5.39	4.48	GN GG 12/30/09	NA	GN GG 12/31/09

AX-21 Charcoal Cleaned	083109	Acetone	49226	Acid Alumina	08623DJ	Hexane	49272
Hydrochloric Acid	B08505	Methanol	094346	Methylene Chloride (DCM)	49268	Silica Gel	TA1593034
Sodium Hydroxide	9145	Sodium Sulfate	48273845	Sulfuric Acid	093621	Tetradecane	081394
Toluene	49068	Water	49242	C-18 Empore Discs	320469	Cyclohexane	48149

Comments:

CLEANUP SHEET

Project #: 5887

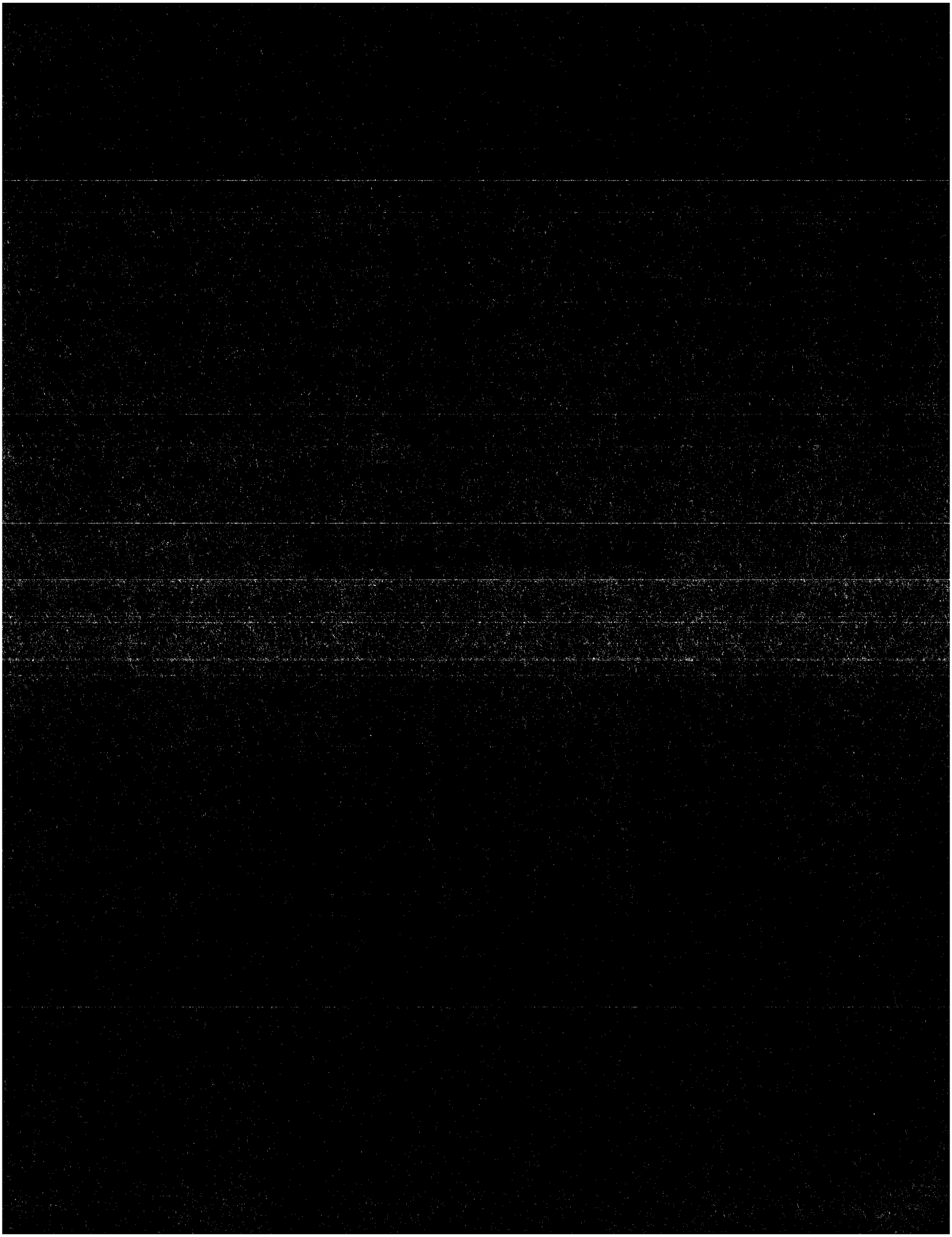
Method/Analysis: EPA 1613 D/F

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

Sample ID	Cleanup 1 MSG/AA Chemist/Date	Cleanup 2 Charcoal Chemist/Date	Cleanup 3 NA Chemist/Date	RS Amt: 10.0uL ID: 090918D Vial: 3 Chemist/Witness/Date
1910-001-0001-MB				
1910-001-0001-OPR				
5887-001-0001-SA	GN 12/31/09	GN 1/4/10	NA	GN 1/4/10

5873

Comments:



Sample Results

FAL ID: 1910-001-0001-MB Filename: 04JAN10M Sam:5 Acquired: 4-JAN-10 13:44:26 ICal: PCDDFAL3-11-18-09
Client ID: Method Blank ConCal: ST010410M1 EndCal: ST010410M2
Results: GC Column: DB5 Amount: 5.000 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	* n	NotFnd	1.02	*		2.50	734	556	0.268
1,2,3,7,8-PeCDD	*	* n	NotFnd	0.96	*		2.50	528	227	0.209
1,2,3,4,7,8-HxCDD	*	* n	NotFnd	1.37	*		2.50	578	362	0.266
1,2,3,6,7,8-HxCDD	*	* n	NotFnd	1.34	*		2.50	578	362	0.311
1,2,3,7,8,9-HxCDD	*	* n	NotFnd	1.37	*		2.50	578	362	0.286
1,2,3,4,6,7,8-HpCDD	*	* n	NotFnd	1.17	*		2.50	496	490	0.439
OCDD	*	* n	NotFnd	1.21	*		2.50	380	438	0.821
2,3,7,8-TCDF	*	* n	NotFnd	1.29	*		2.50	214	342	0.0514
1,2,3,7,8-PeCDF	*	* n	NotFnd	0.89	*		2.50	491	284	0.146
2,3,4,7,8-PeCDF	*	* n	NotFnd	0.91	*		2.50	491	284	0.152
1,2,3,4,7,8-HxCDF	*	* n	NotFnd	1.00	*		2.50	504	507	0.234
1,2,3,6,7,8-HxCDF	*	* n	NotFnd	0.92	*		2.50	504	507	0.247
2,3,4,6,7,8-HxCDF	*	* n	NotFnd	0.99	*		2.50	504	507	0.259
1,2,3,7,8,9-HxCDF	*	* n	NotFnd	1.09	*		2.50	504	507	0.270
1,2,3,4,6,7,8-HpCDF	*	* n	NotFnd	1.36	*		2.50	323	326	0.208
1,2,3,4,7,8,9-HpCDF	*	* n	NotFnd	1.61	*		2.50	323	326	0.233
OCDF	*	* n	NotFnd	0.84	*		2.50	286	269	0.447
										Rec
13C-2,3,7,8-TCDD	2.04e+07	0.73 y	27:21	0.94	337					84.2
13C-1,2,3,7,8-PeCDD	1.87e+07	1.68 y	33:10	1.02	287					71.7
13C-1,2,3,4,7,8-HxCDD	1.33e+07	1.26 y	38:32	0.98	356					89.1
13C-1,2,3,6,7,8-HxCDD	1.23e+07	1.25 y	38:42	0.94	345					86.4
13C-1,2,3,4,6,7,8-HpCDD	1.14e+07	1.06 y	44:08	0.90	334					83.5
13C-OCDD	1.17e+07	1.00 y	49:41	0.67	464					58.0
13C-2,3,7,8-TCDF	3.48e+07	0.83 y	26:36	0.88	350					87.5
13C-1,2,3,7,8-PeCDF	2.95e+07	1.67 y	31:27	0.88	297					74.2
13C-2,3,4,7,8-PeCDF	2.80e+07	1.67 y	32:45	0.85	291					72.8
13C-1,2,3,4,7,8-HxCDF	2.24e+07	0.48 y	37:08	1.72	344					86.1
13C-1,2,3,6,7,8-HxCDF	2.57e+07	0.47 y	37:21	2.00	339					84.8
13C-2,3,4,6,7,8-HxCDF	2.20e+07	0.47 y	38:17	1.74	334					83.6
13C-1,2,3,7,8,9-HxCDF	1.99e+07	0.48 y	39:43	1.51	349					87.3
13C-1,2,3,4,6,7,8-HpCDF	1.31e+07	0.46 y	42:14	1.10	314					78.6
13C-1,2,3,4,7,8,9-HpCDF	1.08e+07	0.45 y	45:03	0.85	336					84.0
13C-OCDF	2.13e+07	0.93 y	50:03	1.17	479					59.9
37Cl-2,3,7,8-TCDD	8.66e+06		27:22	0.97	138					86.6
13C-1,2,3,4-TCDD	2.57e+07	0.74 y	26:47	-	19.6					
13C-1,2,3,4-TCDF	4.53e+07	0.84 y	25:31	-	19.6					
13C-1,2,3,7,8,9-HxCDD	1.52e+07	1.27 y	39:09	-	14.8					

				Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*	NotFnd	1.02	*	2.50	734	556	0.268		0
Total Penta-Dioxins	*	NotFnd	0.96	*	2.50	528	227	0.209		0
Total Hexa-Dioxins	*	NotFnd	1.36	*	2.50	578	362	0.311		0
Total Hepta-Dioxins	*	NotFnd	1.17	*	2.50	496	490	0.439		0
Total Tetra-Furans	*	NotFnd	1.29	*	2.50	214	342	0.0514		0
1st Fn. Tot Penta-Furans	*	NotFnd	0.90	*	2.50	491	284	0.152	PeCDF	0
Total Penta-Furans	*	NotFnd	0.90	*	2.50	491	284	0.152	*	0
Total Hexa-Furans	*	NotFnd	0.99	*	2.50	504	507	0.270		0
Total Hepta-Furans	*	NotFnd	1.47	*	2.50	323	326	0.233		0

Analyst: _____ Date: 1/5/10

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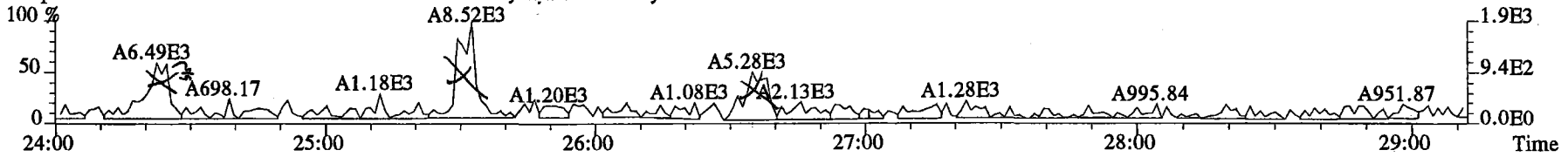

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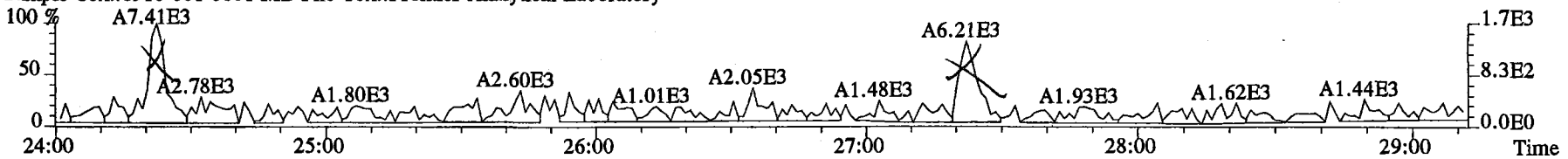

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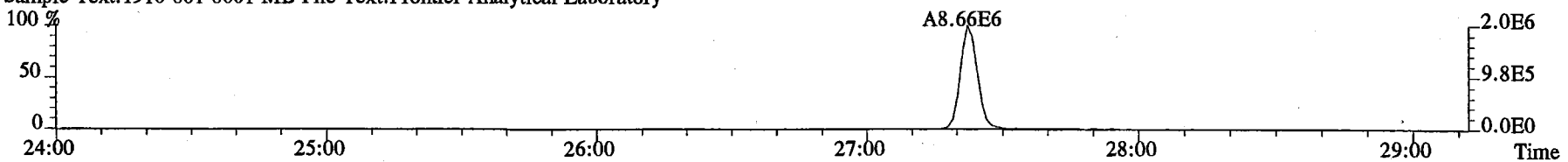

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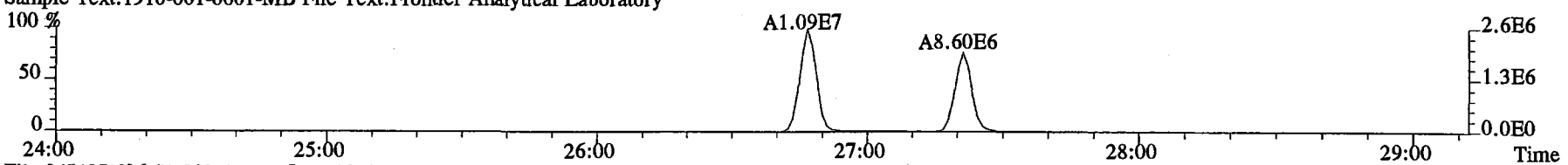

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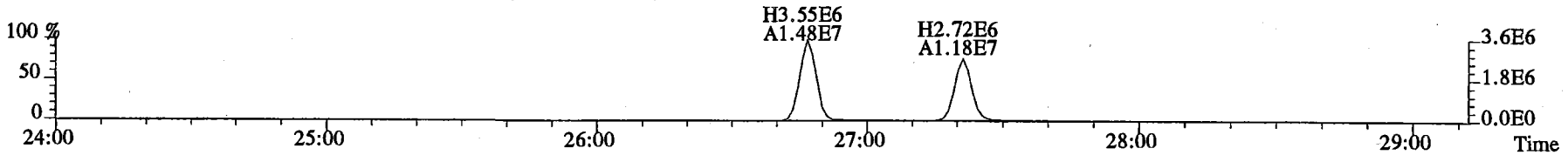

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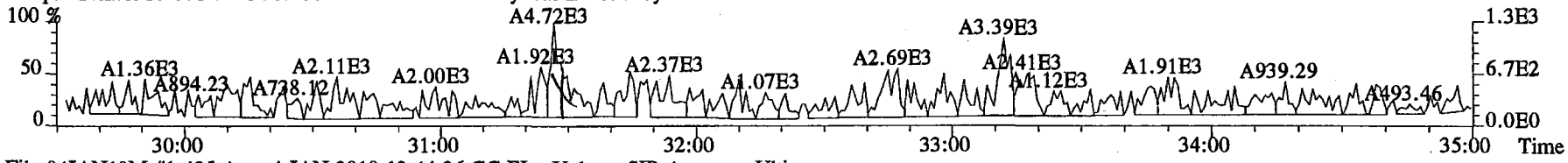

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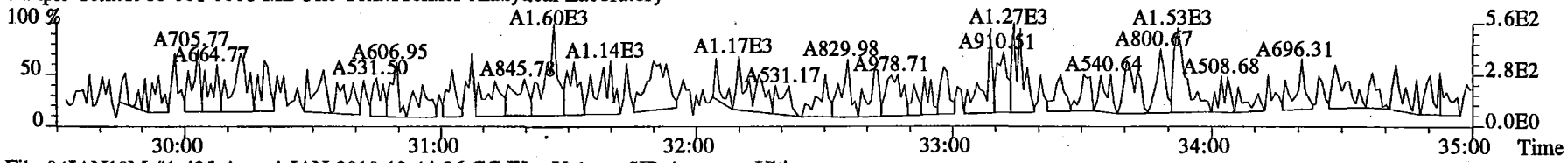

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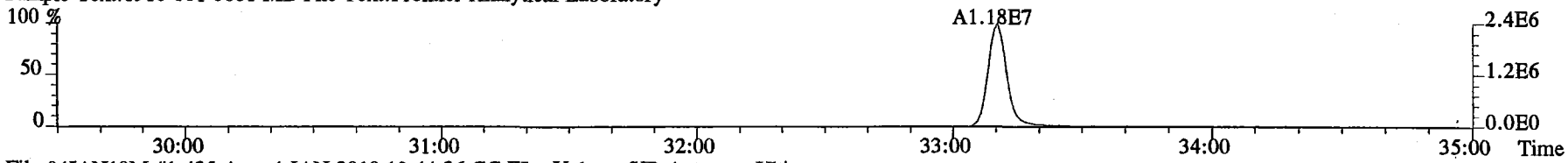

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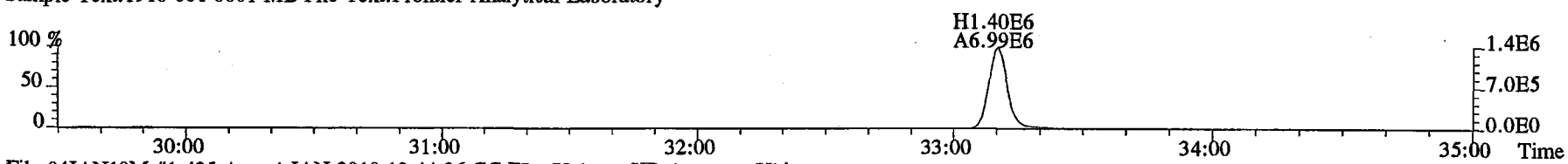

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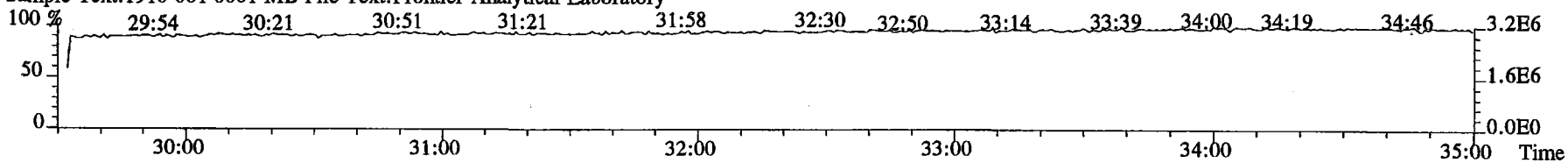

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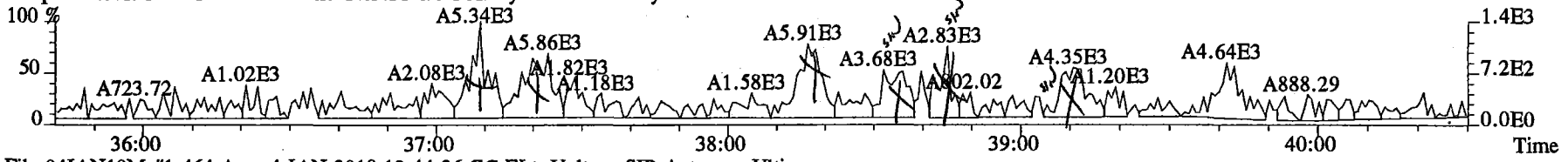

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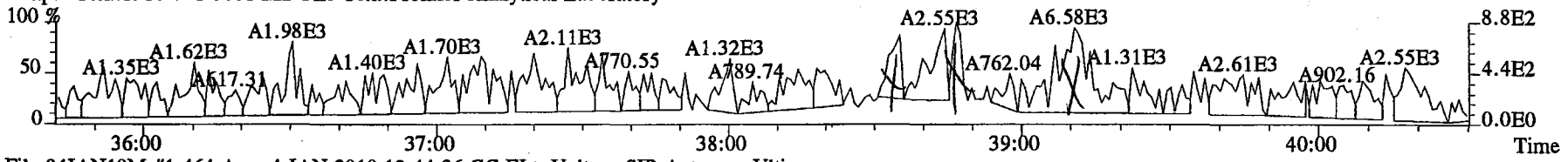

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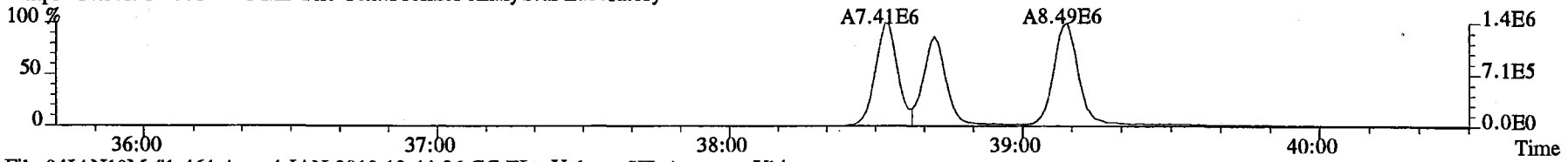

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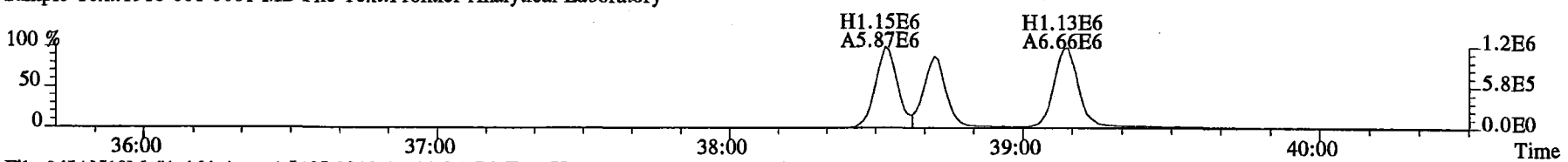

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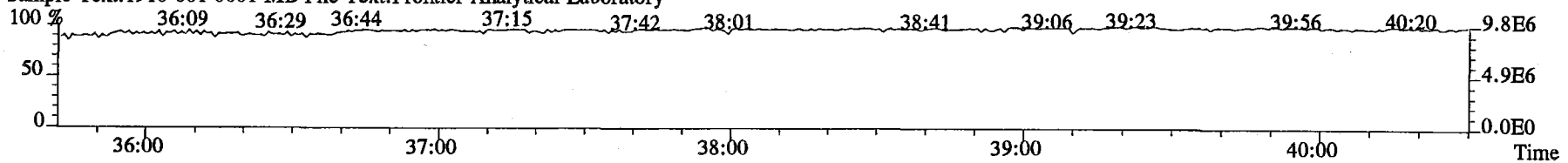

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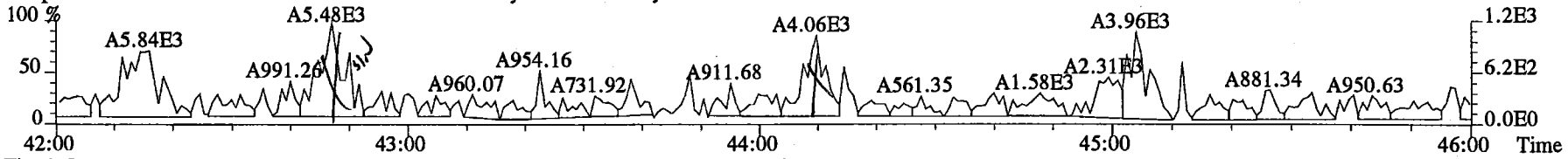

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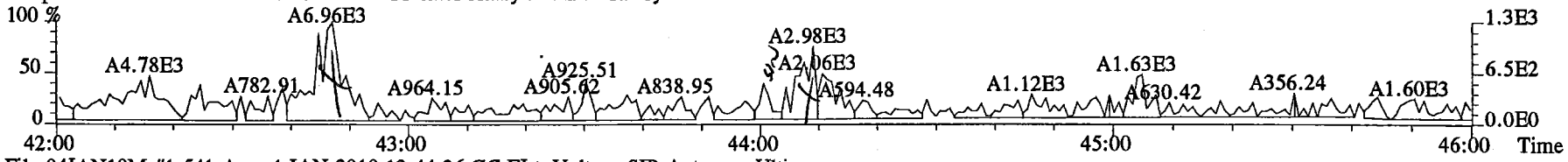

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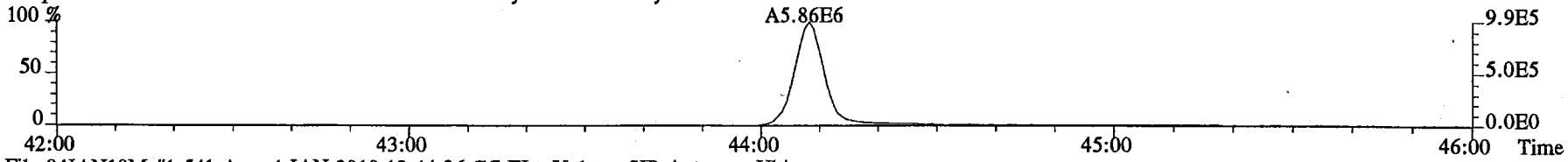
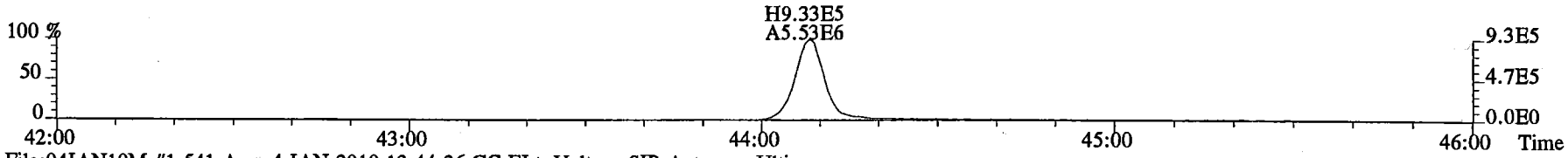
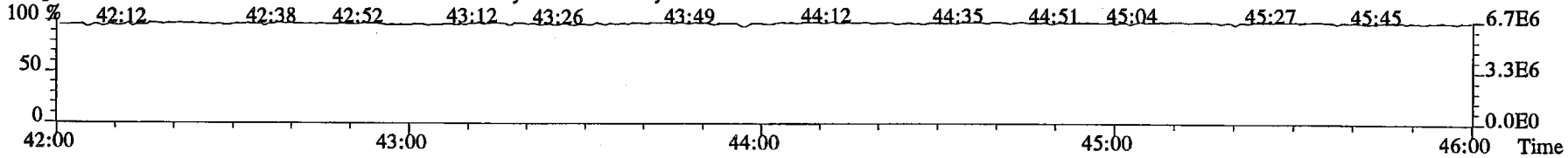


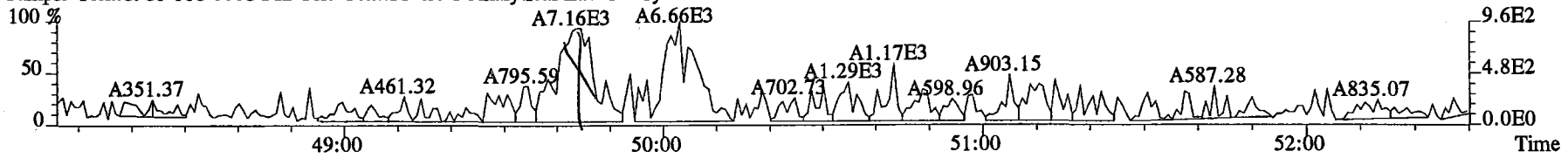
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



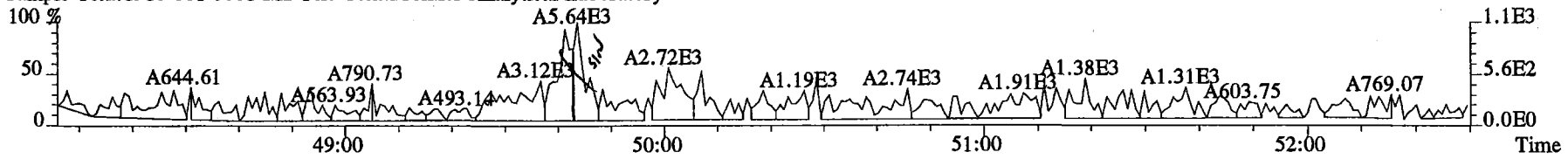
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 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:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 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:1910-001-0001-MB File Text:Frontier Analytical Laboratory



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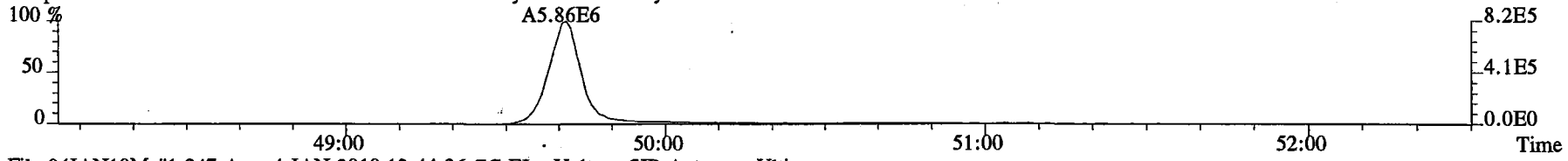
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



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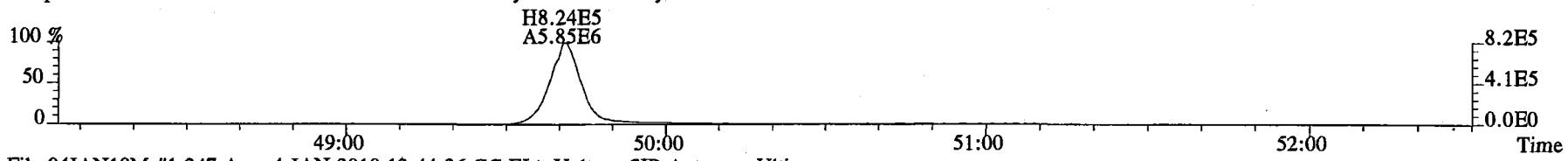
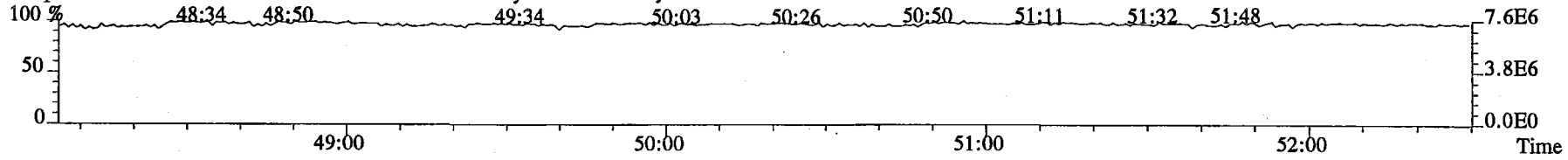
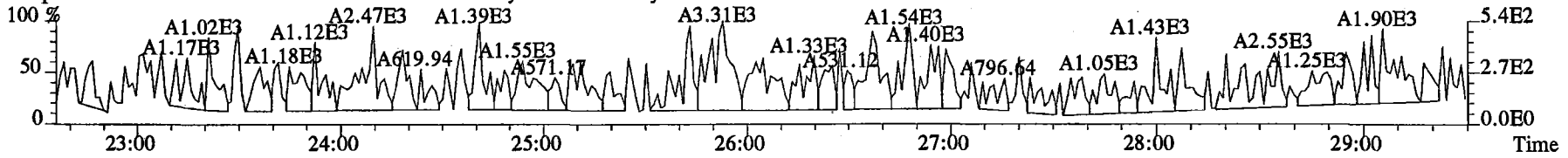
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



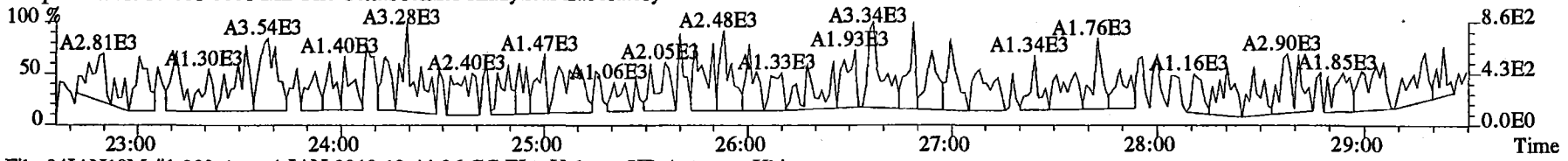
File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



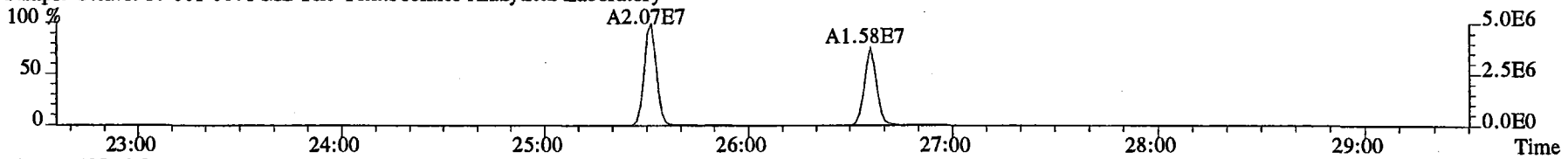
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



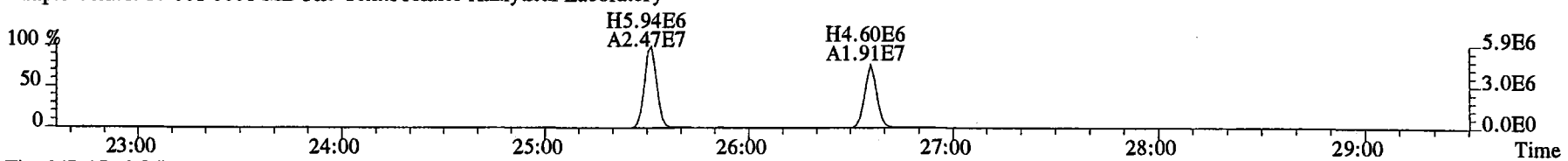
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



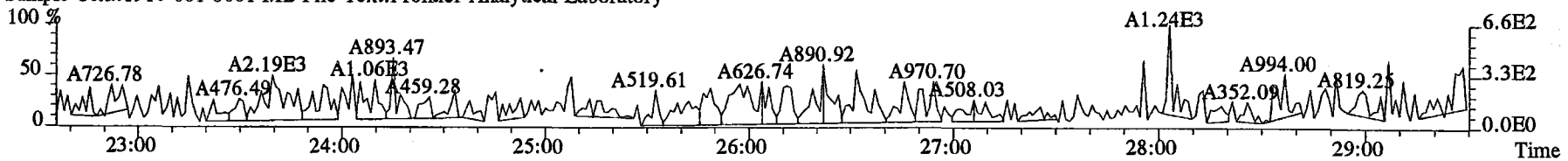
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



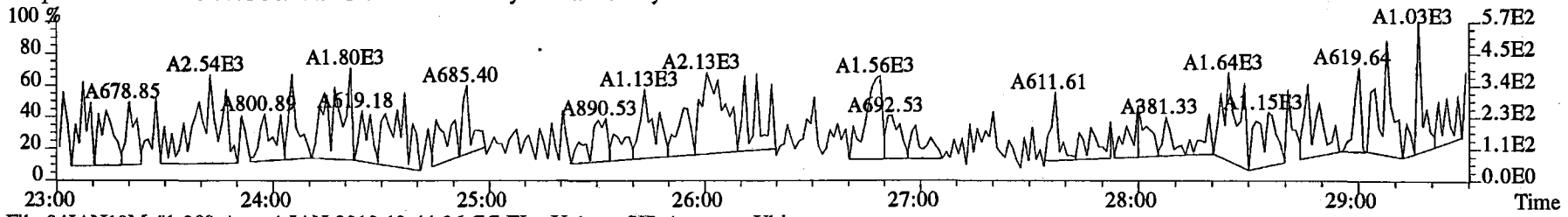
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



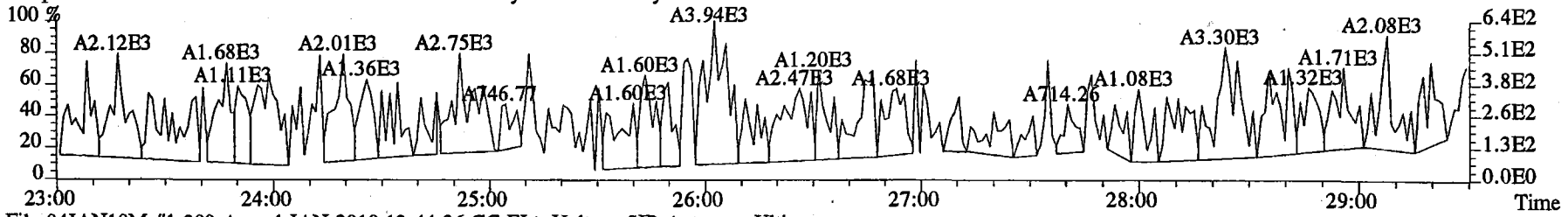
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



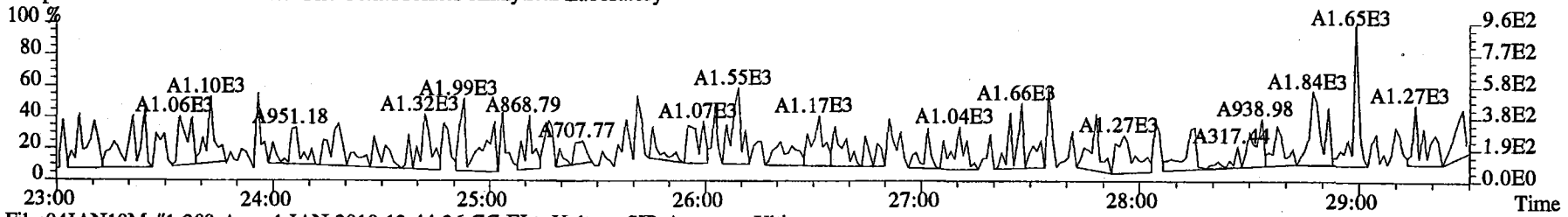
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



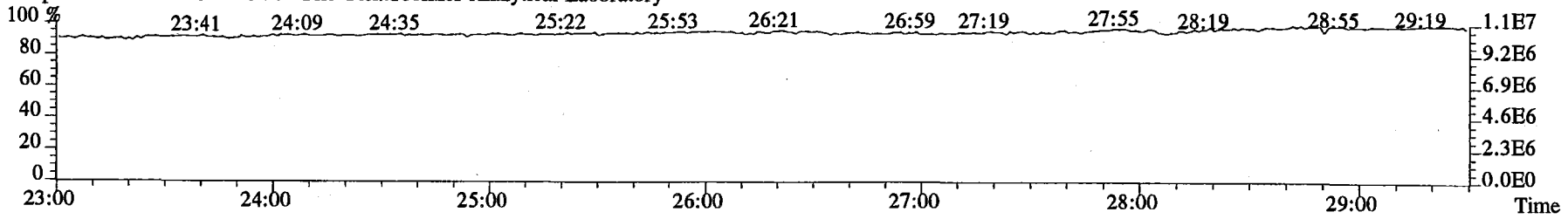
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



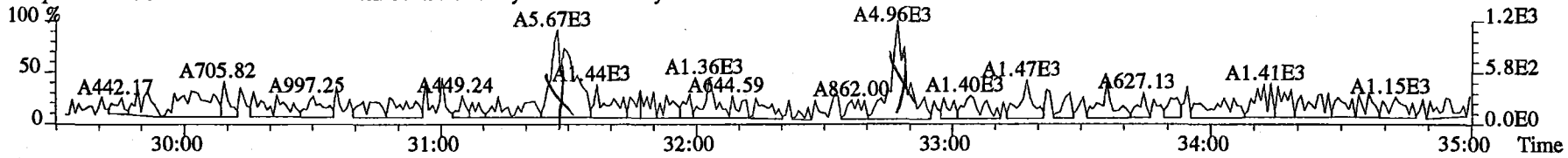
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



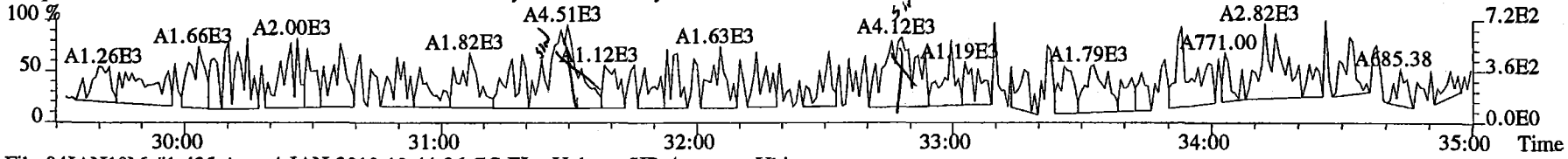
File:04JAN10M #1-390 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



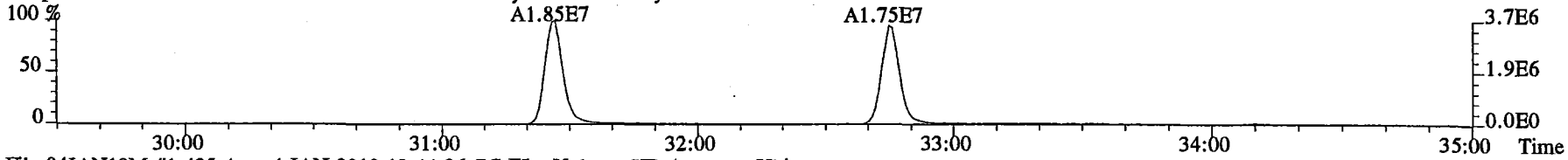
File:04JAN10M #1-425 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



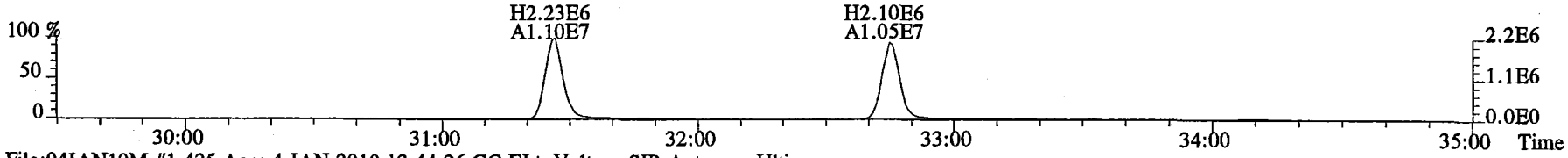
File:04JAN10M #1-425 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



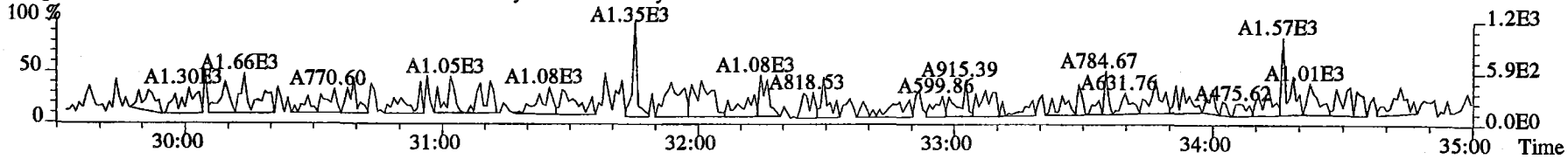
File:04JAN10M #1-425 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



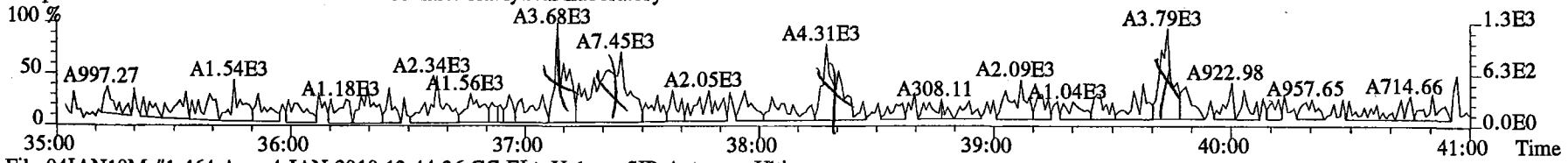
File:04JAN10M #1-425 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



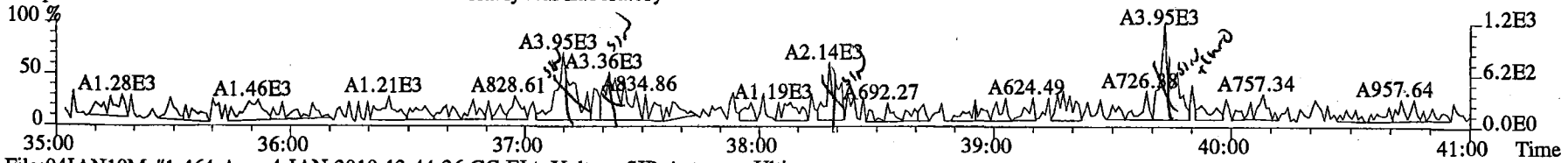
File:04JAN10M #1-425 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



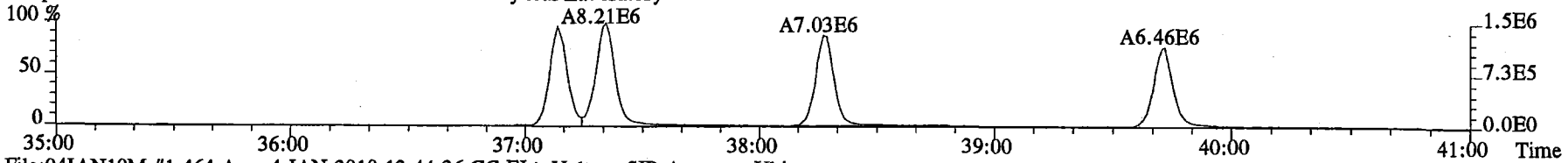
File:04JAN10M #1-464 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



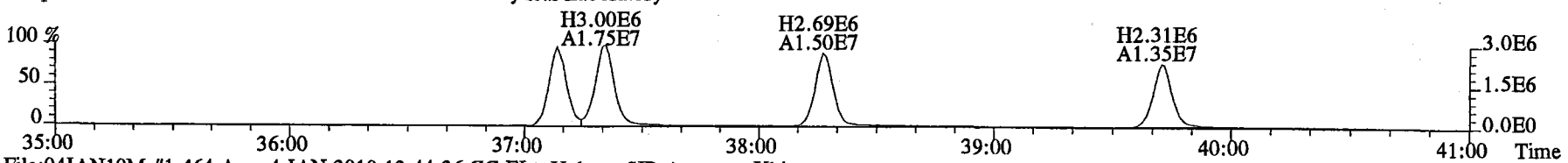
File:04JAN10M #1-464 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



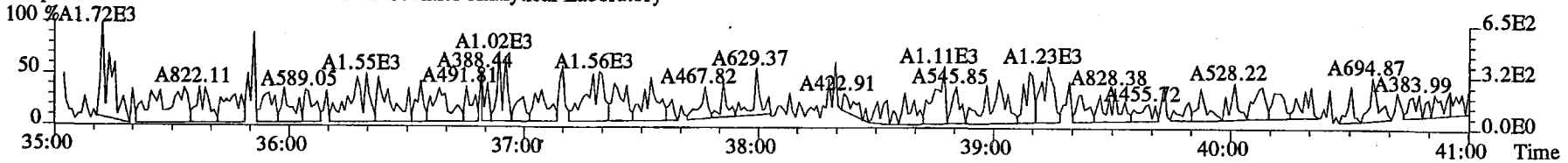
File:04JAN10M #1-464 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



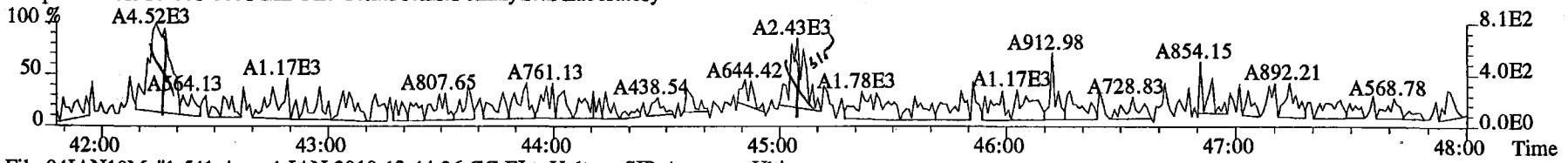
File:04JAN10M #1-464 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



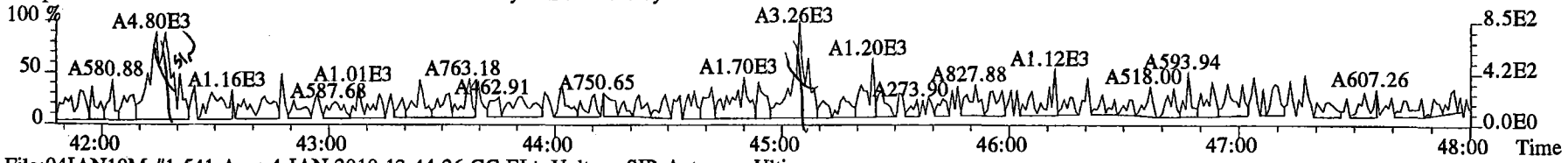
File:04JAN10M #1-464 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



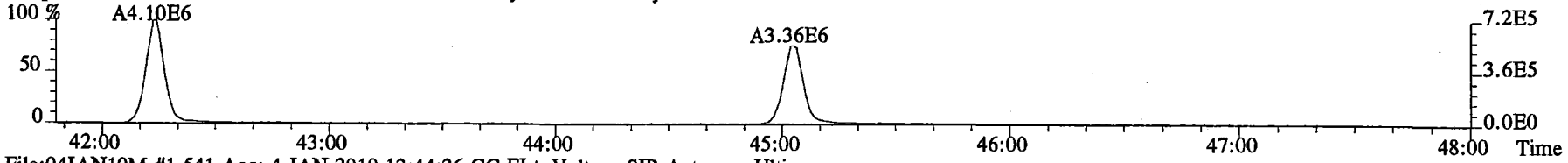
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



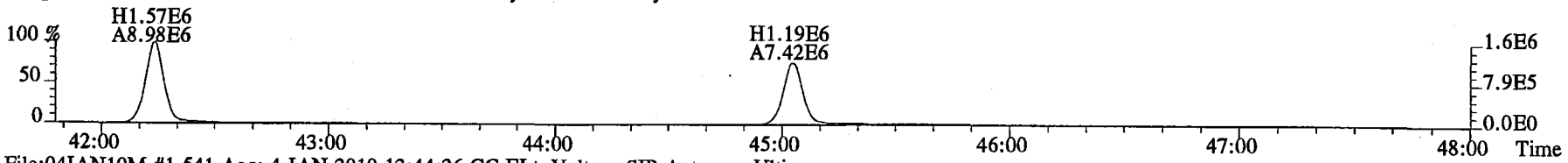
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



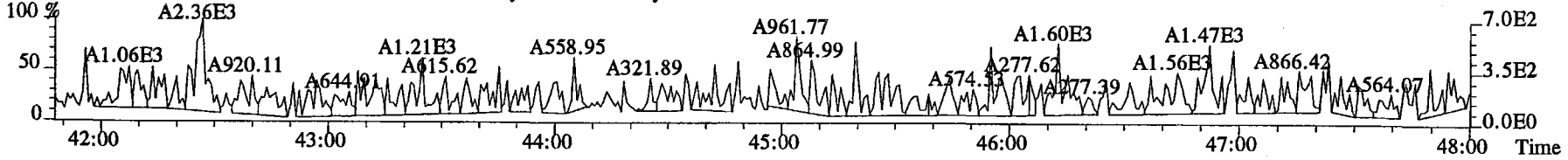
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



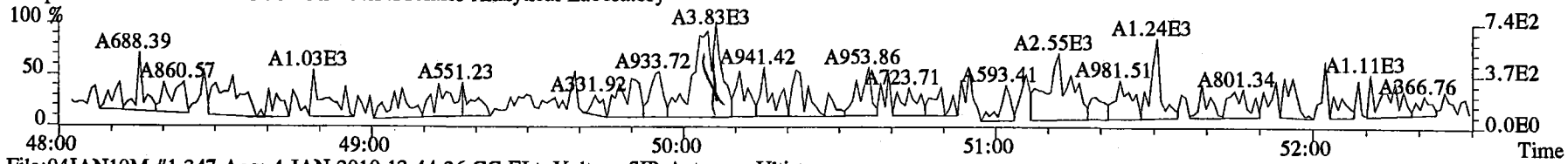
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



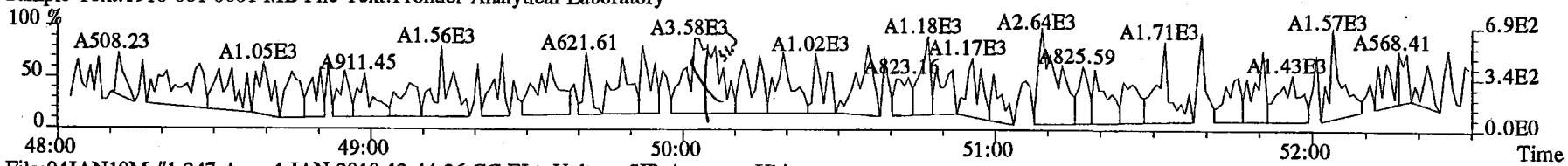
File:04JAN10M #1-541 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



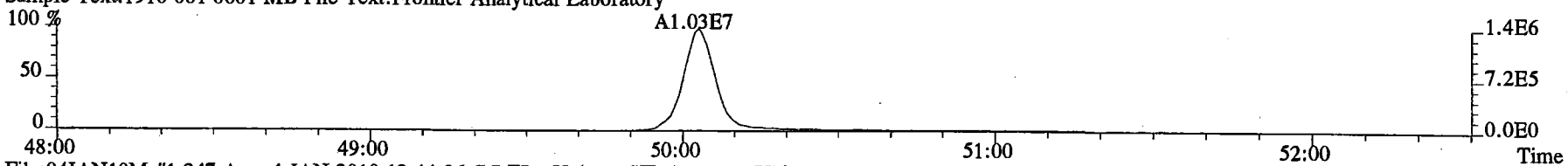
File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 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:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 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:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 GC EI+ Voltage SIR Autospec-Ultima
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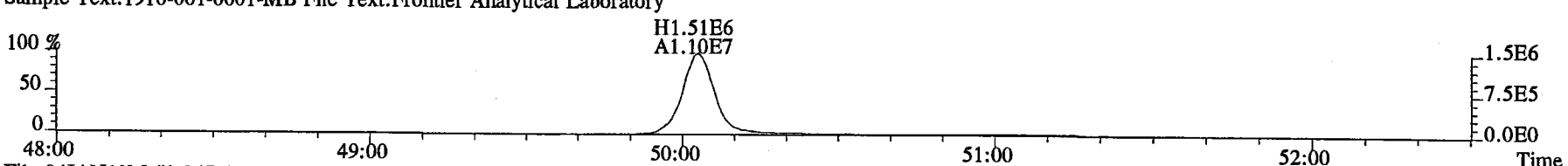
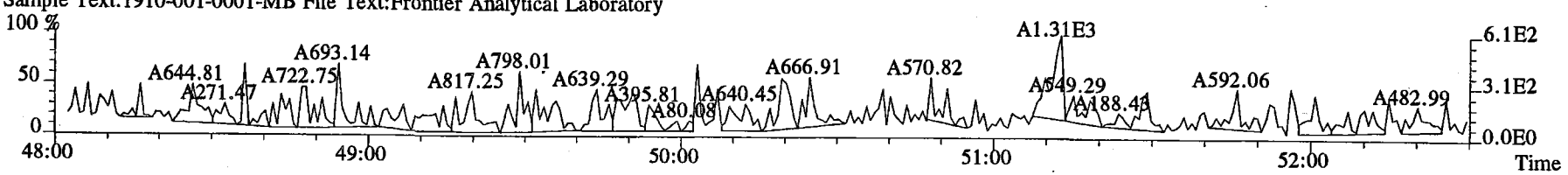
Sample Text:1910-001-0001-MB File Text:Frontier Analytical Laboratory



File:04JAN10M #1-347 Acq: 4-JAN-2010 13:44:26 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:1910-001-0001-MB File Text:Frontier Analytical Laboratory



1910-001-0001-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): Sediment OPR Data Filename: 04JAN10M Sam:3

Ext. Date: 12/30/09 Shift: Day Analysis Date: 4-JAN-10 11:45:09

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
NATIVE ANALYTES			
2,3,7,8-TCDD	10	10.1	6.70 - 15.8
1,2,3,7,8-PeCDD	50	49.8	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	47.8	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	46.3	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	49.2	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.3	35.0 - 70.0
OCDD	100	97.1	78.0 - 144
2,3,7,8-TCDF	10	9.99	7.50 - 15.8
1,2,3,7,8-PeCDF	50	49.9	40.0 - 67.0
2,3,4,7,8-PeCDF	50	50.7	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	50.1	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	49.6	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	48.1	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	49.9	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	51.2	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	52.3	39.0 - 69.0
OCDF	100	101	63.0 - 170

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

Analyst: _____ Date: 1/5/10

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): Sediment OPR Data Filename: 04JAN10M Sam:3

Ext. Date: 12/30/09 Shift: Day Analysis Date: 4-JAN-10 11:45:09

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	100	76.4	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	69.4	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	79.0	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	84.3	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	81.4	26.0 - 166
13C-OCDD	200	117	26.0 - 397
13C-2,3,7,8-TCDF	100	82.2	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	74.0	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	71.2	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	83.5	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	82.0	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	78.6	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	79.6	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	74.3	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	82.4	20.0 - 186
13C-OCDF	200	120	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	34.6	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: 1/5/10

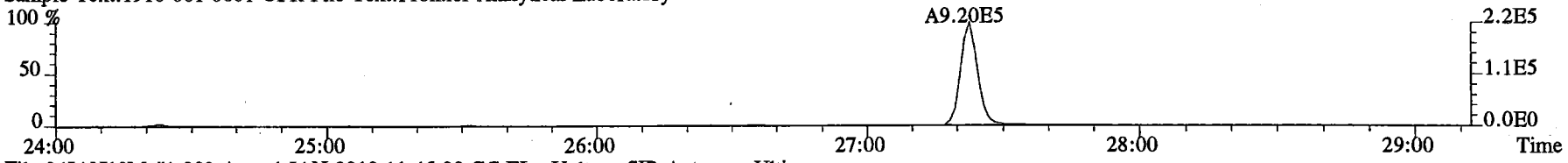
FAL ID: 1910-001-0001-OPR Filename: 04JAN10M Sam:3 Acquired: 4-JAN-10 11:45:09 ICal: PCDDFAL3-11-18-09
Client ID: OPR ConCal: ST010410M1 EndCal: ST010410M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 99.7
WHO 1998 Tox: 124 WHO 2005 Tox: 113

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.07e+06	0.80 y	27:23	1.02	10.1		2.50	-	-	*
1,2,3,7,8-PeCDD	9.49e+06	1.59 y	33:12	0.96	49.8		2.50	-	-	*
1,2,3,4,7,8-HxCDD	8.42e+06	1.22 y	38:33	1.37	47.8		2.50	-	-	*
1,2,3,6,7,8-HxCDD	8.10e+06	1.24 y	38:43	1.34	46.3		2.50	-	-	*
1,2,3,7,8,9-HxCDD	8.69e+06	1.21 y	39:10	1.37	49.2		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	7.09e+06	0.96 y	44:09	1.17	50.3		2.50	-	-	*
OCDD	7.56e+06	0.92 y	49:43	1.21	97.1		2.50	-	-	*
2,3,7,8-TCDF	4.45e+06	0.67 y	26:37	1.29	9.99		2.50	-	-	*
1,2,3,7,8-PeCDF	1.38e+07	1.68 y	31:27	0.89	49.9		2.50	-	-	*
2,3,4,7,8-PeCDF	1.33e+07	1.68 y	32:46	0.91	50.7		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.18e+07	1.18 y	37:10	1.00	50.1		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.23e+07	1.18 y	37:22	0.92	49.6		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.07e+07	1.16 y	38:18	0.99	48.1		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.07e+07	1.21 y	39:44	1.09	49.9		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	9.36e+06	1.01 y	42:16	1.36	51.2		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	9.65e+06	1.03 y	45:04	1.61	52.3		2.50	-	-	*
OCDF	9.86e+06	0.92 y	50:05	0.84	101		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.02e+07	0.72 y	27:22	0.94	76.4					76.4
13C-1,2,3,7,8-PeCDD	1.98e+07	1.72 y	33:11	1.02	69.4					69.4
13C-1,2,3,4,7,8-HxCDD	1.28e+07	1.23 y	38:32	0.98	79.0					79.0
13C-1,2,3,6,7,8-HxCDD	1.30e+07	1.25 y	38:42	0.94	84.3					84.3
13C-1,2,3,4,6,7,8-HpCDD	1.21e+07	1.06 y	44:09	0.90	81.4					81.4
13C-OCDD	1.28e+07	1.00 y	49:42	0.67	117					58.4
13C-2,3,7,8-TCDF	3.46e+07	0.86 y	26:35	0.88	82.2					82.2
13C-1,2,3,7,8-PeCDF	3.11e+07	1.68 y	31:26	0.88	74.0					74.0
13C-2,3,4,7,8-PeCDF	2.90e+07	1.67 y	32:45	0.85	71.2					71.2
13C-1,2,3,4,7,8-HxCDF	2.36e+07	0.46 y	37:09	1.72	83.5					83.5
13C-1,2,3,6,7,8-HxCDF	2.71e+07	0.47 y	37:20	2.00	82.0					82.0
13C-2,3,4,6,7,8-HxCDF	2.25e+07	0.47 y	38:17	1.74	78.6					78.6
13C-1,2,3,7,8,9-HxCDF	1.97e+07	0.49 y	39:43	1.51	79.6					79.6
13C-1,2,3,4,6,7,8-HpCDF	1.34e+07	0.46 y	42:14	1.10	74.3					74.3
13C-1,2,3,4,7,8,9-HpCDF	1.15e+07	0.45 y	45:03	0.85	82.4					82.4
13C-OCDF	2.32e+07	0.93 y	50:04	1.17	120					59.9
37Cl-2,3,7,8-TCDD	9.44e+06		27:23	0.97	34.6					86.4
13C-1,2,3,4-TCDD	2.80e+07	0.72 y	26:47	-	107					
13C-1,2,3,4-TCDF	4.80e+07	0.84 y	25:31	-	104					
13C-1,2,3,7,8,9-HxCDD	1.65e+07	1.26 y	39:09	-	80.3					

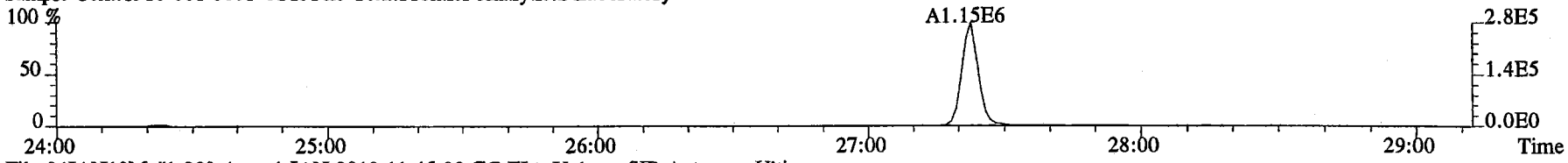
						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.18e+06		24:23	1.02	10.6	2.50	-	-	*		14
Total Penta-Dioxins	9.57e+06		31:26	0.96	50.2	2.50	-	-	*		5
Total Hexa-Dioxins	2.55e+07		38:33	1.36	145	2.50	-	-	*		15
Total Hepta-Dioxins	7.31e+06		42:47	1.17	51.9	2.50	-	-	*		19
Total Tetra-Furans	4.60e+06		24:10	1.29	10.3	2.50	-	-	*		9
1st Fn. Tot Penta-Furans	3.95e+04		23:41	0.90	0.146	2.50	-	-	*	PeCDF	22
Total Penta-Furans	2.78e+07		30:12	0.90	103	2.50	-	-	*	103	15
Total Hexa-Furans	4.60e+07		35:13	0.99	200	2.50	-	-	*		20
Total Hepta-Furans	1.93e+07		42:16	1.47	105	2.50	-	-	*		25

Analyst: _____ Date: 1/5/10

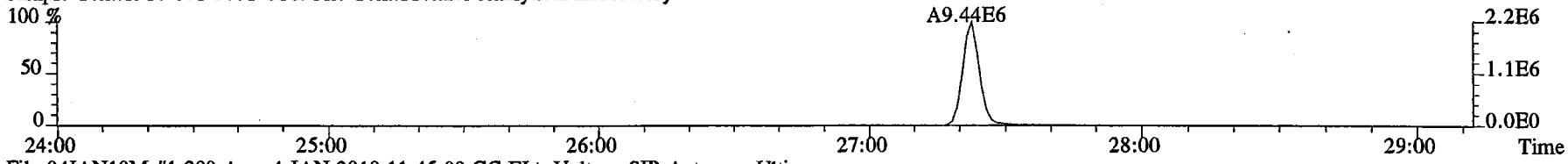
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



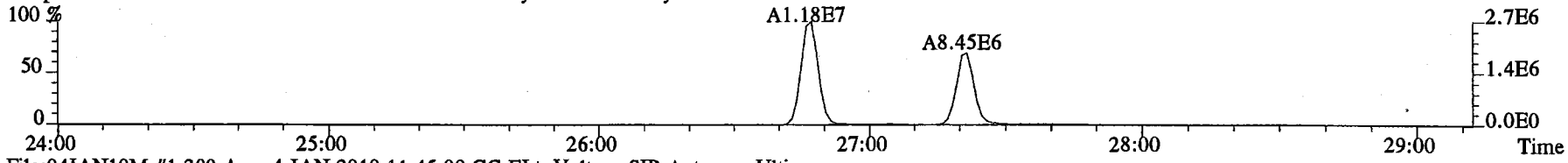
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



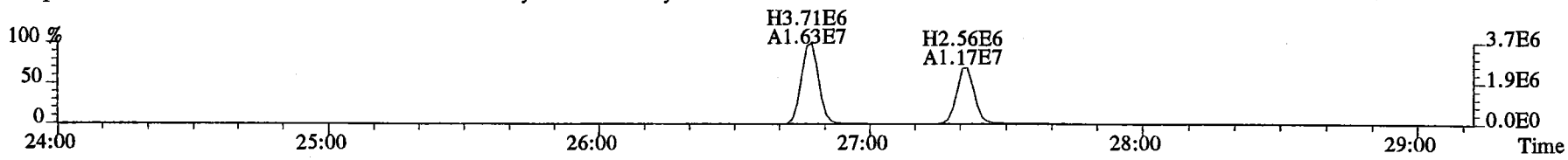
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



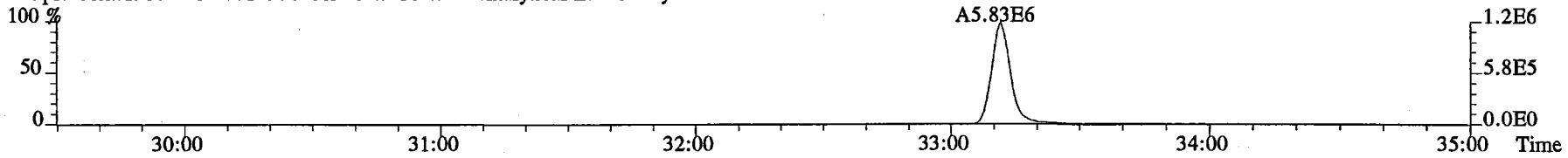
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



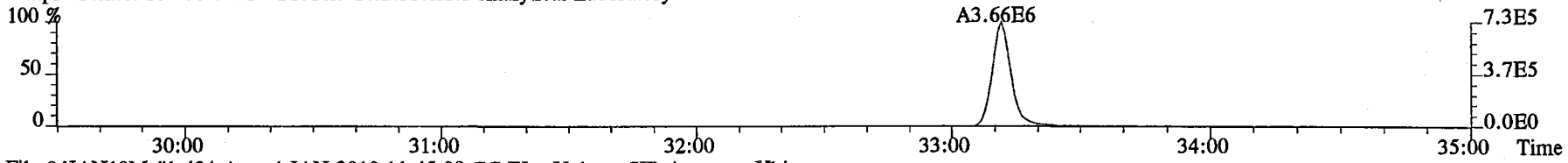
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



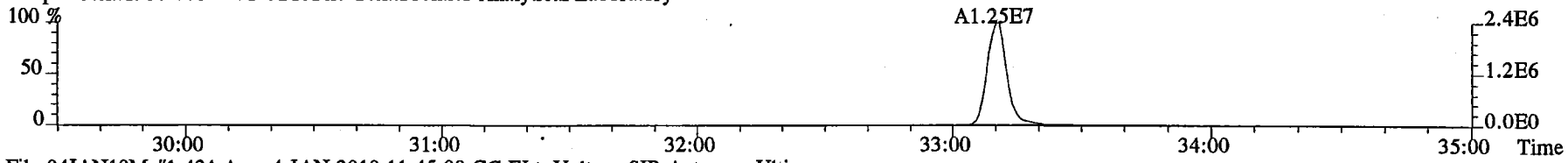
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



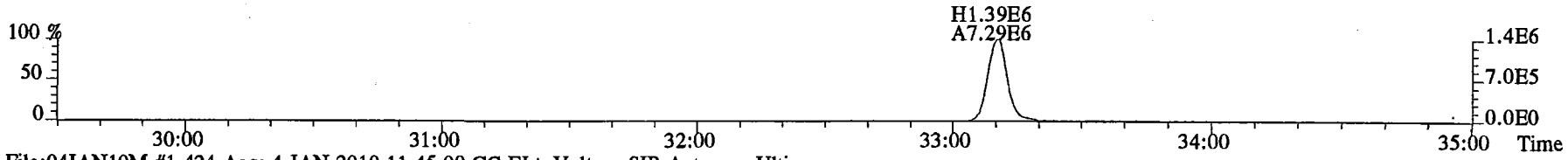
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



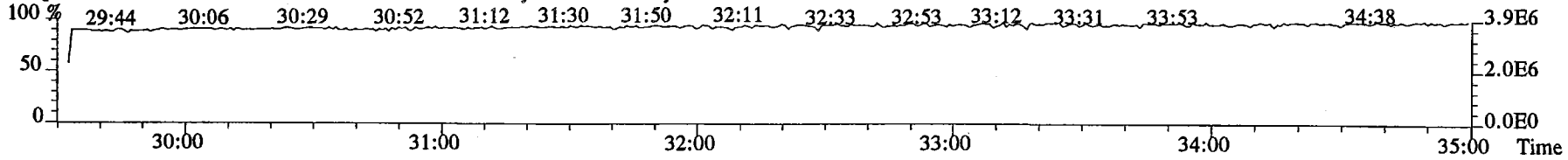
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



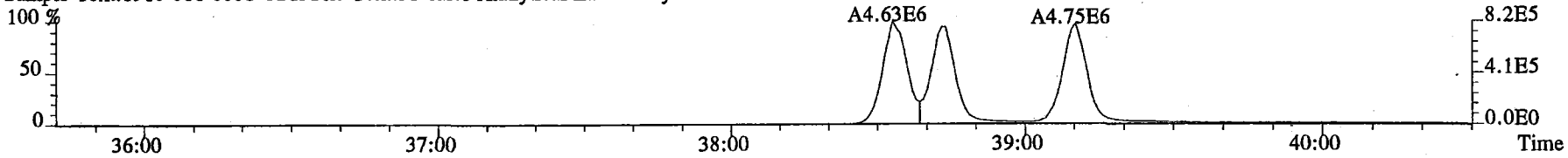
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



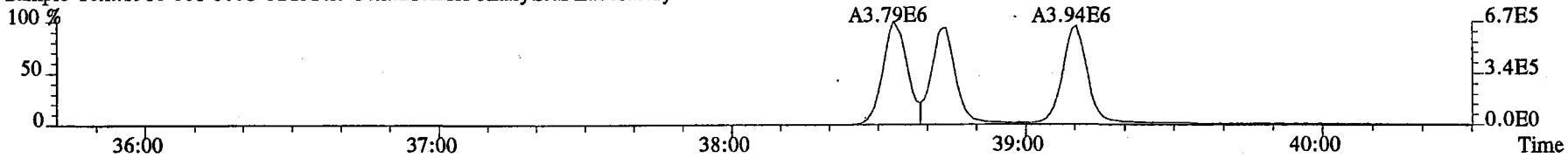
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



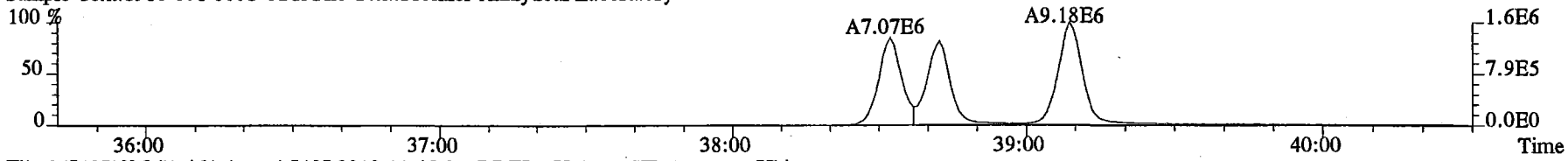
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



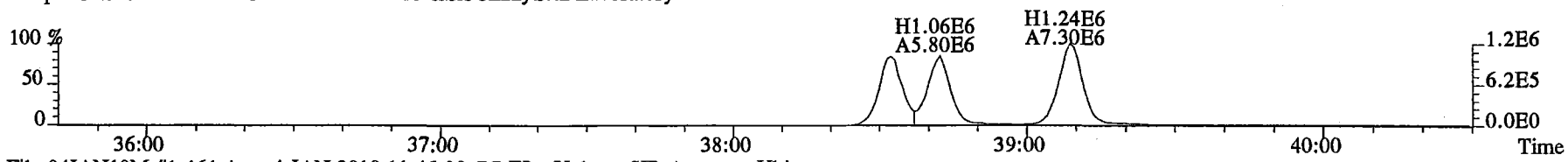
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



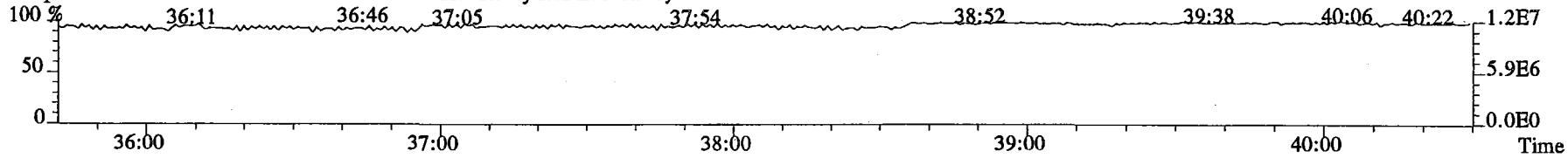
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



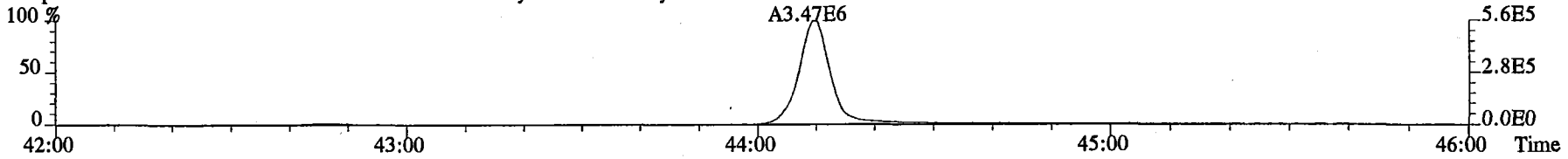
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



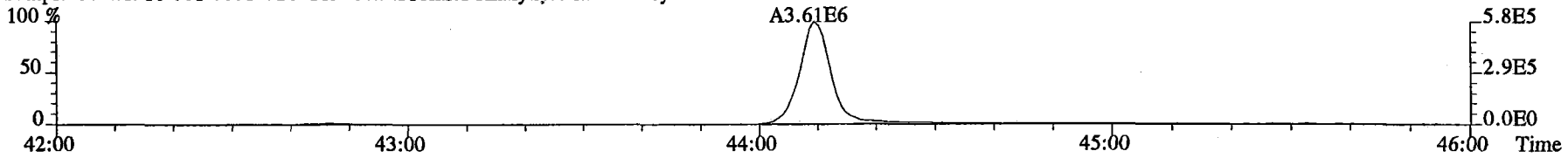
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



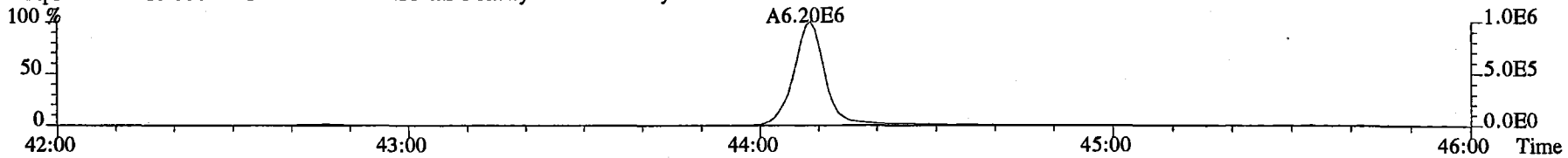
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



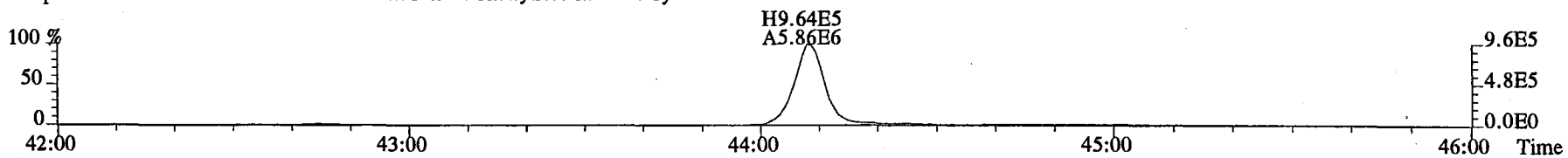
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



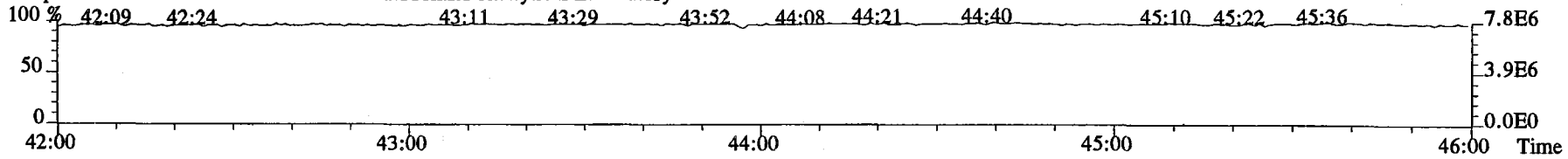
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



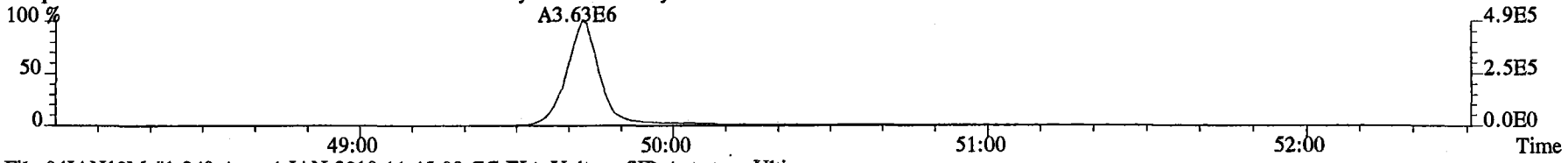
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



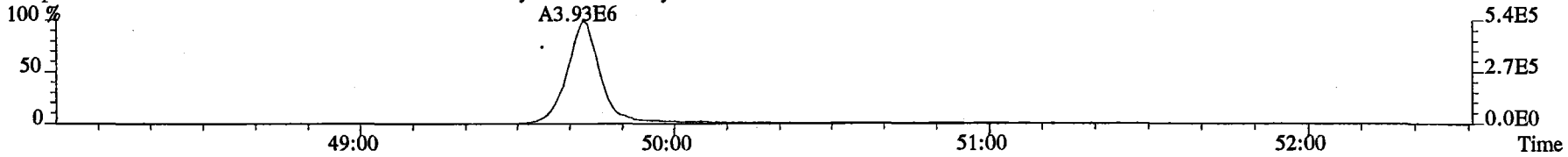
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



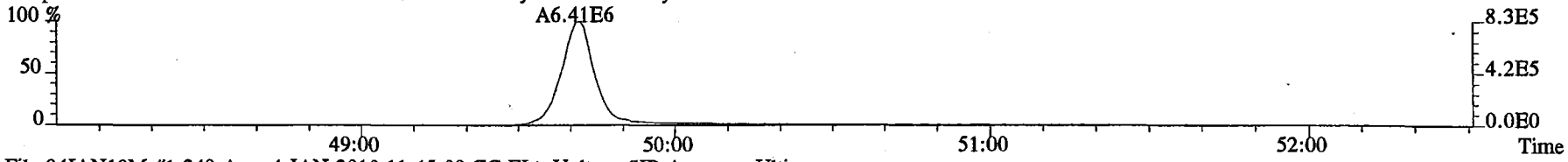
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



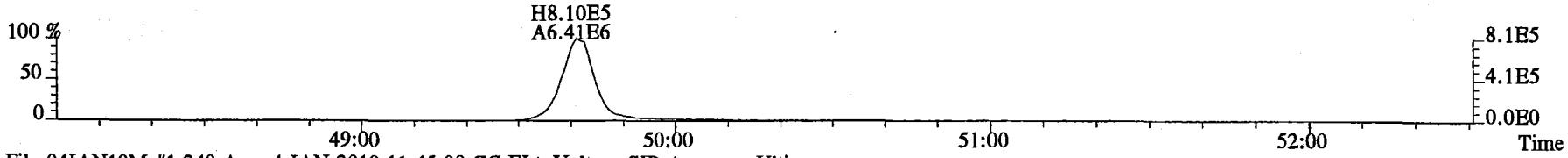
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



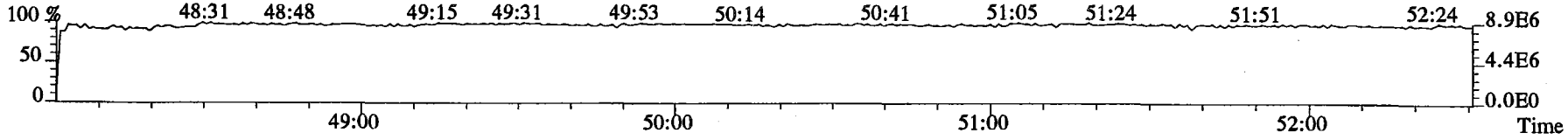
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



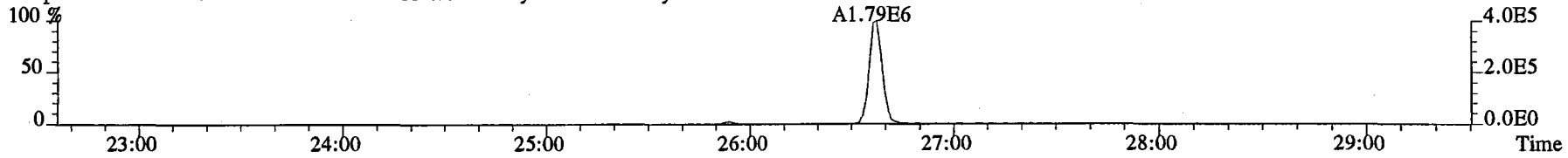
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



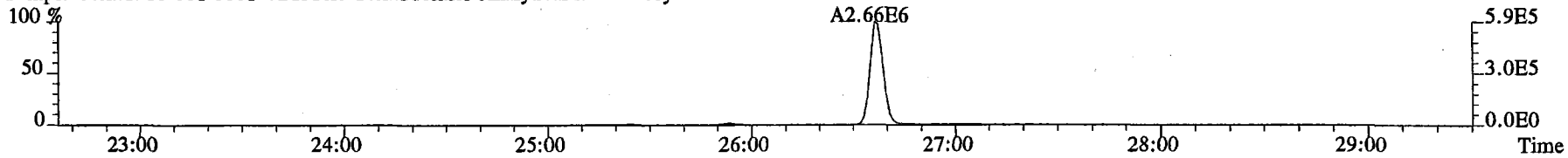
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



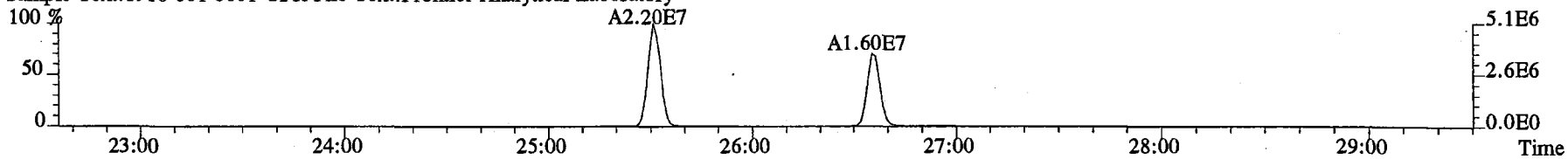
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



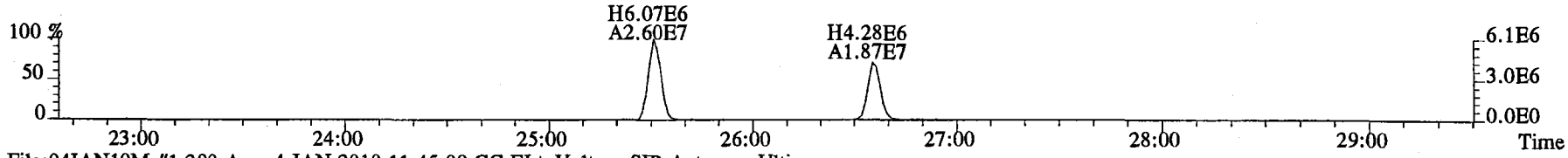
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



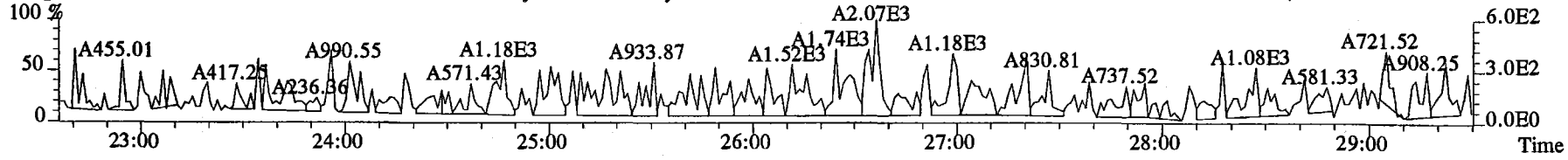
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



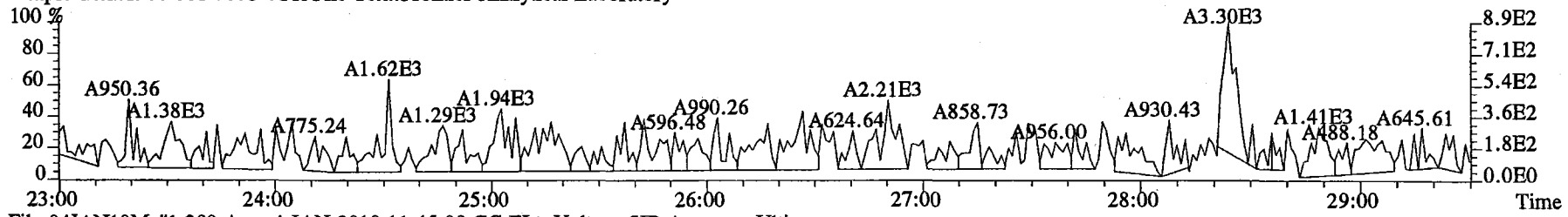
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



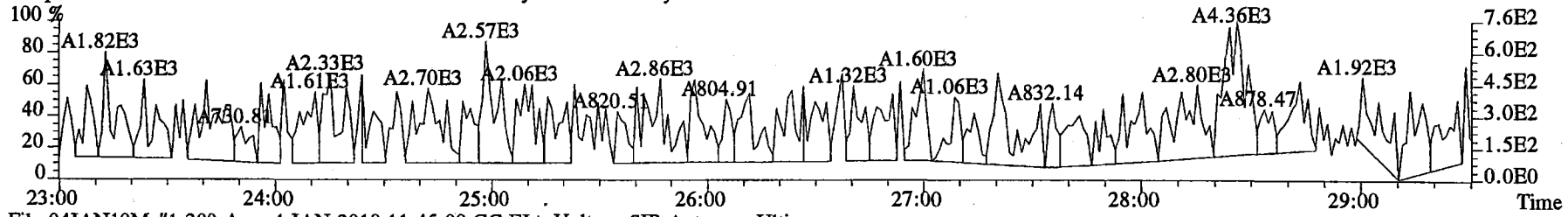
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



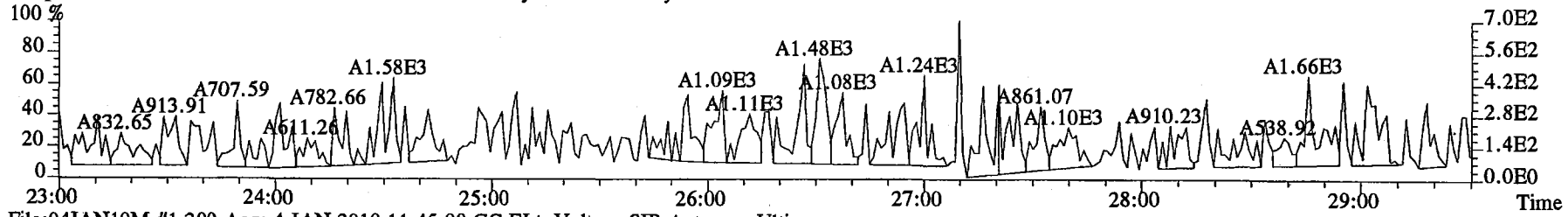
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



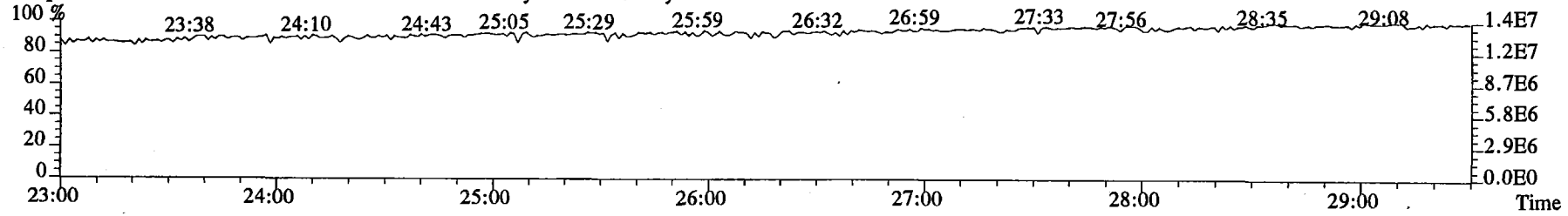
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



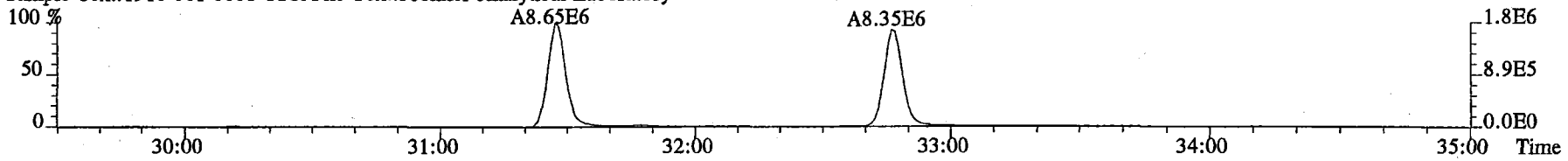
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



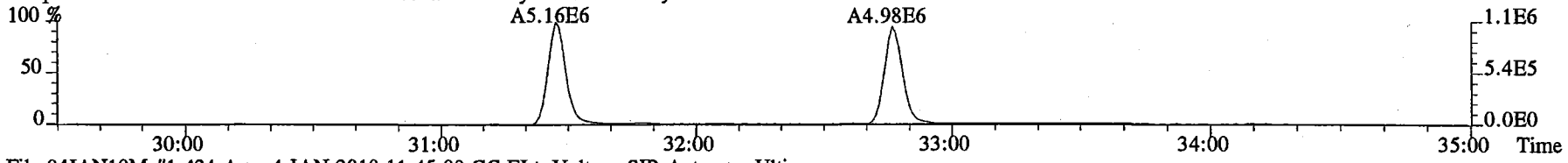
File:04JAN10M #1-390 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



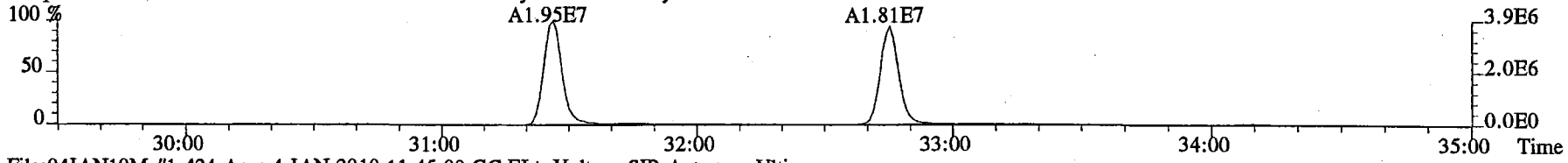
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



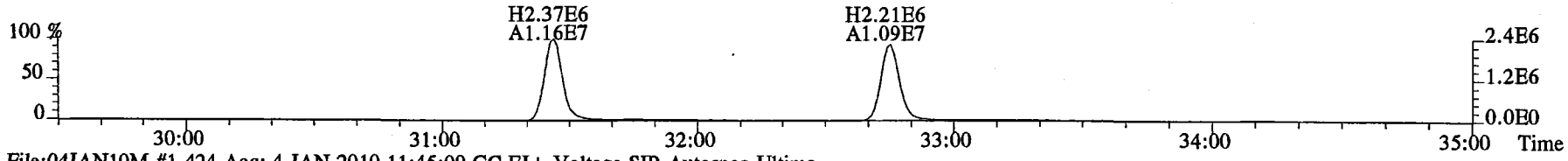
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



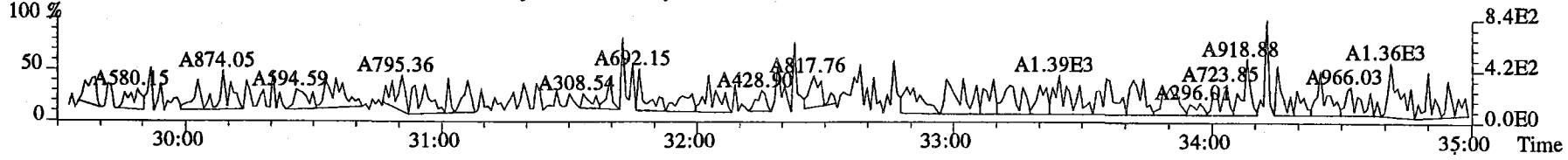
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



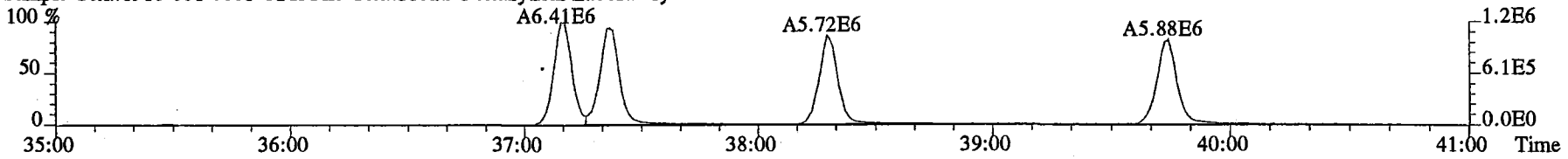
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



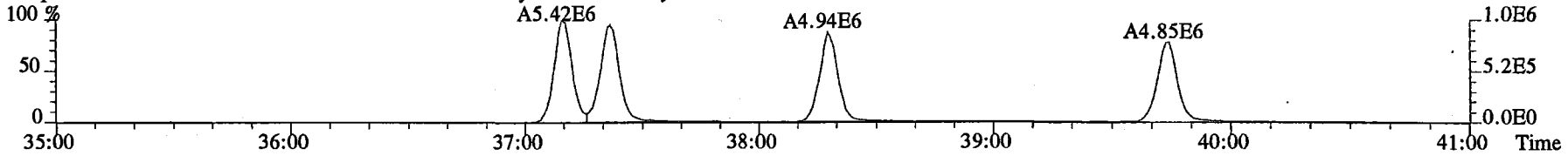
File:04JAN10M #1-424 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



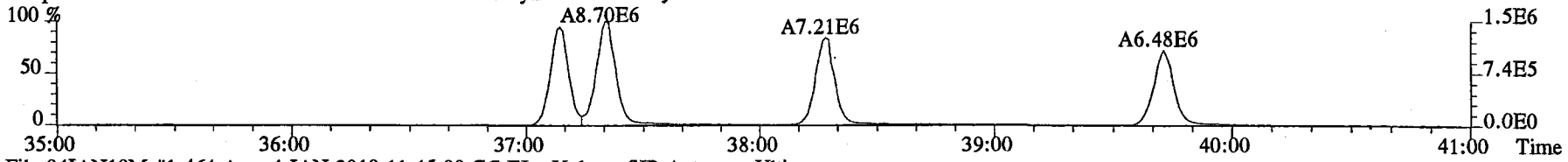
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



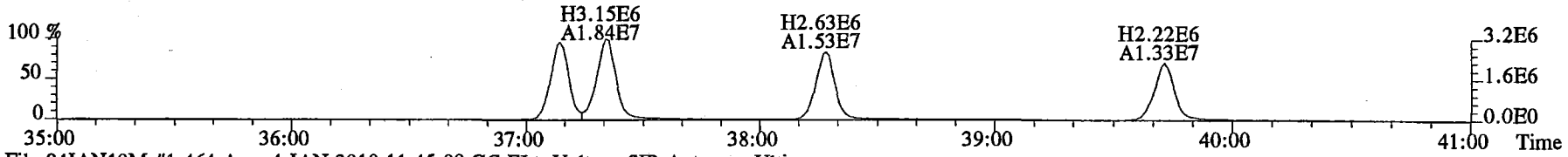
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



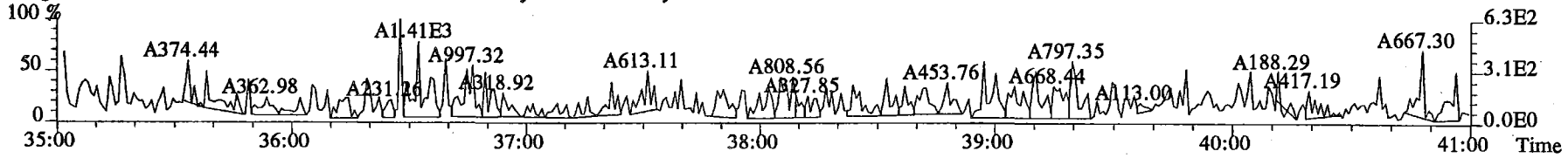
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



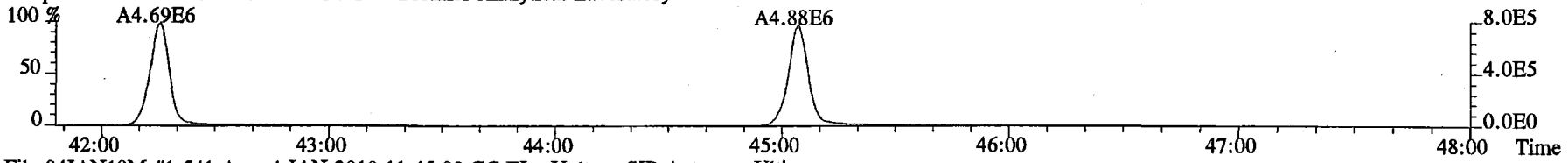
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



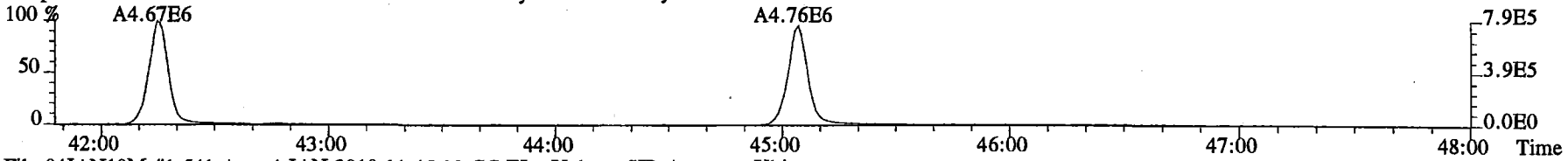
File:04JAN10M #1-464 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



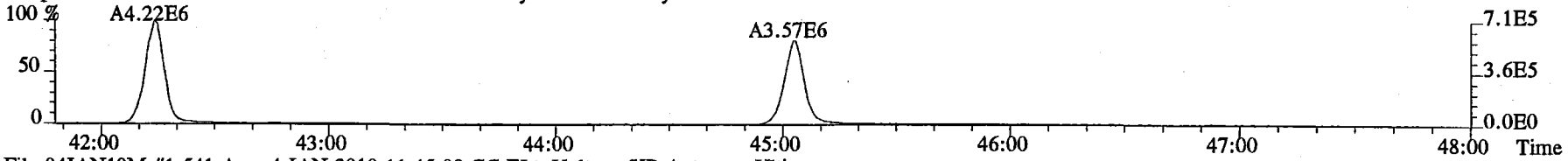
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



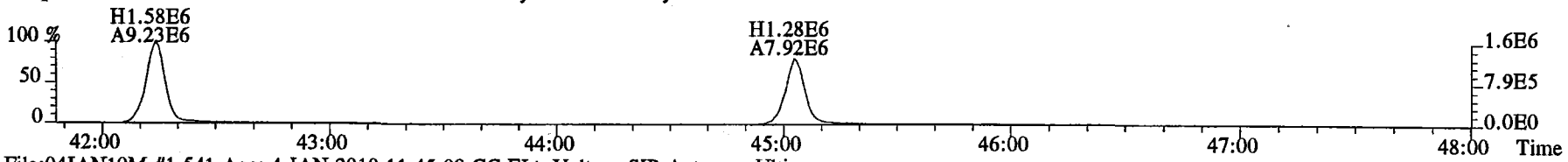
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



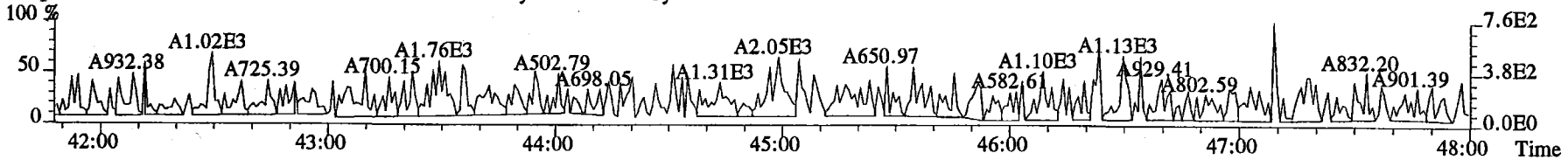
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



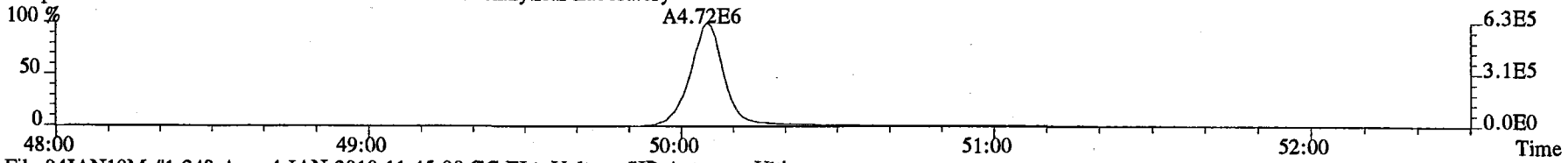
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



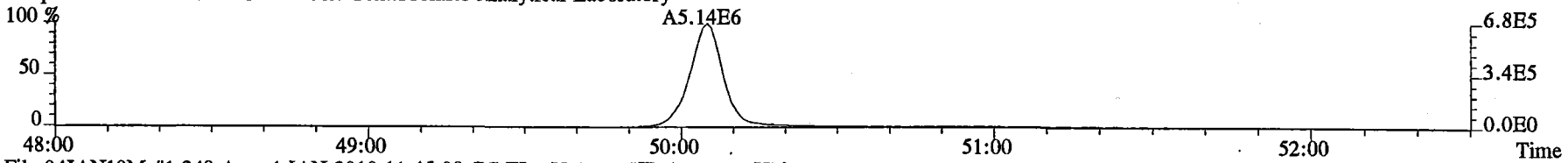
File:04JAN10M #1-541 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



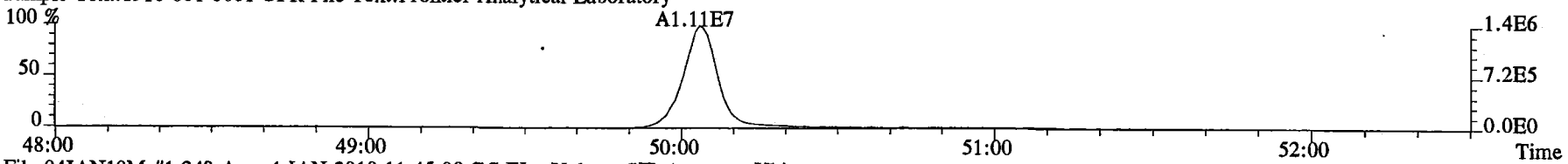
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



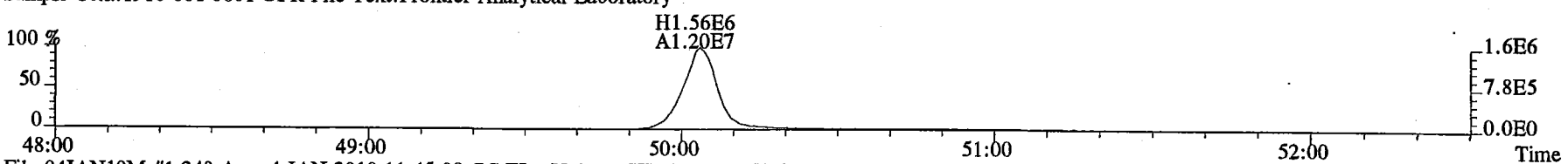
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



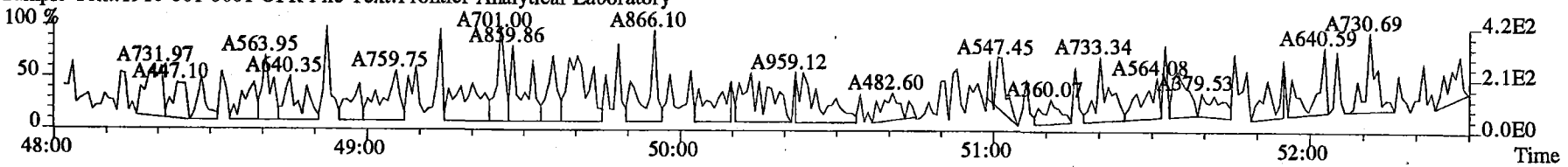
File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 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:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



File:04JAN10M #1-348 Acq: 4-JAN-2010 11:45:09 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:1910-001-0001-OPR File Text:Frontier Analytical Laboratory



FAL ID: 5887-001-0001-SA Filename: 04JAN10M Sam:6 Acquired: 4-JAN-10 14:39:41 ICal: PCDDFAL3-11-18-09
Client ID: CB4857-121009-SED ConCal: ST010410M1 EndCal: ST010410M2
Results: 5873 GC Column: DB5 Amount: 4.480 ✓ NATO 1989 Tox: 15.9
WHO 1998 Tox: 12.5 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	751	1040	0.472
1,2,3,7,8-PeCDD	6.73e+04	1.42	y	33:11	0.96	1.79	J	2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.11e+05	1.10	y	38:32	1.37	2.92	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	3.63e+05	1.34	y	38:43	1.34	10.3		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.92e+05	1.19	y	39:10	1.37	5.19	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.05e+07	0.96	y	44:09	1.17	353		2.50	-	-	*
OCDD	8.40e+07	0.92	y	49:43	1.21	4480		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	576	911	0.183
1,2,3,7,8-PeCDF	3.13e+04	1.42	y	31:27	0.89	0.586	J	2.50	-	-	*
2,3,4,7,8-PeCDF	6.79e+04	1.74	y	32:45	0.91	1.30	J	2.50	-	-	*
1,2,3,4,7,8-HxCDF	9.41e+05	1.19	y	37:10	1.00	19.6		2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.49e+05	1.32	y	37:21	0.92	5.05	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	2.78e+05	1.16	y	38:18	0.99	6.22		2.50	-	-	*
1,2,3,7,8,9-HxCDF	8.15e+04	1.21	y	39:46	1.09	1.99	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	3.17e+06	1.02	y	42:15	1.36	82.0		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	3.51e+05	0.91	y	45:04	1.61	9.51		2.50	-	-	*
OCDF	5.08e+06	0.91	y	50:06	0.84	243		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	1.87e+07	0.73	y	27:20	0.94	335					75.0
13C-1,2,3,7,8-PeCDD	1.75e+07	1.68	y	33:09	1.02	289					64.8
13C-1,2,3,4,7,8-HxCDD	1.24e+07	1.26	y	38:32	0.98	352					78.8
13C-1,2,3,6,7,8-HxCDD	1.17e+07	1.27	y	38:42	0.94	351					78.7
13C-1,2,3,4,6,7,8-HpCDD	1.14e+07	1.07	y	44:09	0.90	356					79.7
13C-OCDD	1.38e+07	1.01	y	49:41	0.67	580					64.9
13C-2,3,7,8-TCDF	3.13e+07	0.83	y	26:36	0.88	349					78.1
13C-1,2,3,7,8-PeCDF	2.68e+07	1.67	y	31:25	0.88	298					66.8
13C-2,3,4,7,8-PeCDF	2.58e+07	1.71	y	32:45	0.85	297					66.5
13C-1,2,3,4,7,8-HxCDF	2.15e+07	0.48	y	37:08	1.72	350					78.3
13C-1,2,3,6,7,8-HxCDF	2.41e+07	0.49	y	37:20	2.00	336					75.3
13C-2,3,4,6,7,8-HxCDF	2.02e+07	0.50	y	38:16	1.74	326					73.1
13C-1,2,3,7,8,9-HxCDF	1.68e+07	0.49	y	39:42	1.51	312					69.9
13C-1,2,3,4,6,7,8-HpCDF	1.27e+07	0.46	y	42:14	1.10	324					72.5
13C-1,2,3,4,7,8,9-HpCDF	1.03e+07	0.47	y	45:03	0.85	339					76.0
13C-OCDF	2.22e+07	0.93	y	50:04	1.17	529					59.3
37Cl-2,3,7,8-TCDD	7.26e+06			27:22	0.97	126					70.4
13C-1,2,3,4-TCDD	2.65e+07	0.73	y	26:46	-	22.6					
13C-1,2,3,4-TCDF	4.56e+07	0.85	y	25:31	-	22.0					
13C-1,2,3,7,8,9-HxCDD	1.59e+07	1.25	y	39:09	-	17.3					

								Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	2.82e+04			24:21	1.02	0.661	J	2.50	-	-	*		1
Total Penta-Dioxins	2.73e+05			30:12	0.96	7.27		2.50	-	-	*		7
Total Hexa-Dioxins	1.75e+06			36:05	1.36	47.9		2.50	-	-	*		6
Total Hepta-Dioxins	1.75e+07			42:46	1.17	588		2.50	-	-	*		2
Total Tetra-Furans	4.88e+05			23:47	1.29	5.42	D,M	2.50	-	-	*		9
1st Fn. Tot Penta-Furans	5.74e+05			28:24	0.90	10.9	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	7.97e+05			30:11	0.90	15.1	D,M	2.50	-	-	*	26.0 ✓	6
Total Hexa-Furans	7.08e+06			35:13	0.99	154	D,M	2.50	-	-	*		8
Total Hepta-Furans	1.17e+07			42:15	1.47	309		2.50	-	-	*		3

Analyst: _____ Date: 1/5/10

Totals class: Total Tetra-Dioxins Entry #: 38

Run: 10 File: 04JAN10M S: 6 I: 1 F: 1
Acquired: 4-JAN-10 14:39:41

Total Concentration: 0.661 Unnamed Concentration: 0.661

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
24:21	1.22e+04	1.59e+04	0.77	y	2.82e+04	0.661	

Totals class: Total Penta-Dioxins Entry #: 39

Run: 10 File: 04JAN10M S: 6 I: 1 F: 2
Acquired: 4-JAN-10 14:39:41

Total Concentration: 7.27 Unnamed Concentration: 5.475

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:12	3.99e+04	2.53e+04	1.58	y	6.53e+04	1.74	
30:48	7.83e+03	5.84e+03	1.34	y	1.37e+04	0.364	
31:26	1.75e+04	1.09e+04	1.62	y	2.84e+04	0.755	
31:40	2.84e+04	1.84e+04	1.54	y	4.68e+04	1.24	
31:48	1.58e+04	9.50e+03	1.67	y	2.53e+04	0.674	
32:06	1.64e+04	1.01e+04	1.63	y	2.64e+04	0.703	
33:11	3.95e+04	2.79e+04	1.42	y	6.73e+04	1.79	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 10 File: 04JAN10M S: 6 I: 1 F: 3
Acquired: 4-JAN-10 14:39:41

Total Concentration: 47.9 Unnamed Concentration: 29.527

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
36:05	1.93e+05	1.61e+05	1.20	y	3.54e+05	9.64	
37:01	4.63e+04	3.96e+04	1.17	y	8.59e+04	2.34	
37:27	3.67e+05	2.78e+05	1.32	y	6.45e+05	17.5	
38:32	5.81e+04	5.29e+04	1.10	y	1.11e+05	2.92	1,2,3,4,7,8-HxCDD
38:43	2.07e+05	1.55e+05	1.34	y	3.63e+05	10.3	1,2,3,6,7,8-HxCDD
39:10	1.04e+05	8.76e+04	1.19	y	1.92e+05	5.19	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 10 File: 04JAN10M S: 6 I: 1 F: 4
Acquired: 4-JAN-10 14:39:41

Total Concentration: 588 Unnamed Concentration: 234.873

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:46	3.41e+06	3.60e+06	0.95 y	7.01e+06	235	
44:09	5.15e+06	5.39e+06	0.96 y	1.05e+07	353	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 10 File: 04JAN10M S: 6 I: 1 F: 1
Acquired: 4-JAN-10 14:39:41

Total Concentration: 5.42 Unnamed Concentration: 5.421

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
23:47	3.36e+04	4.97e+04	0.67	y	8.33e+04	0.925	
24:09	1.63e+04	2.11e+04	0.77	y	3.73e+04	0.414	
24:23	1.66e+04	2.47e+04	0.67	y	4.13e+04	0.459	
24:42	2.20e+04	2.99e+04	0.74	y	5.19e+04	0.576	
25:24	1.73e+04	2.49e+04	0.69	y	4.22e+04	0.469	
25:31	1.76e+04	2.63e+04	0.67	y	4.38e+04	0.487	
27:51	2.90e+04	4.42e+04	0.66	y	7.32e+04	0.812	
28:04	3.16e+04	4.69e+04	0.67	y	7.84e+04	0.871	
28:25	1.70e+04	1.99e+04	0.85	y	3.69e+04	0.409	

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

Run: 10 File: 04JAN10M S: 6 I: 1 F: 1
Acquired: 4-JAN-10 14:39:41

Total Concentration: 10.9 Unnamed Concentration: 10.880

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:24	3.50e+05	2.25e+05	1.56 y	5.74e+05	10.9	

Totals class: Total Penta-Furans Entry #: 44

Run: 10 File: 04JAN10M S: 6 I: 1 F: 2
Acquired: 4-JAN-10 14:39:41

Total Concentration: 15.1 Unnamed Concentration: 13.220

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
30:11	2.98e+05	1.81e+05	1.64 y	4.80e+05	9.09	
30:53	4.04e+04	2.69e+04	1.50 y	6.73e+04	1.28	
31:27	1.83e+04	1.29e+04	1.42 y	3.13e+04	0.586	1,2,3,7,8-PeCDF
31:45	6.27e+04	3.76e+04	1.67 y	1.00e+05	1.90	
32:45	4.31e+04	2.47e+04	1.74 y	6.79e+04	1.30	2,3,4,7,8-PeCDF
32:49	3.14e+04	1.89e+04	1.66 y	5.03e+04	0.953	

Totals class: Total Hexa-Furans Entry #: 45

Run: 10 File: 04JAN10M S: 6 I: 1 F: 3
Acquired: 4-JAN-10 14:39:41

Total Concentration: 154 Unnamed Concentration: 120.881

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
35:13	1.97e+05	1.73e+05	1.14	y	3.70e+05	8.08	
35:29	9.91e+05	8.35e+05	1.19	y	1.83e+06	39.9	
36:23	1.78e+06	1.46e+06	1.22	y	3.23e+06	70.7	
37:10	5.12e+05	4.29e+05	1.19	y	9.41e+05	19.6	1,2,3,4,7,8-HxCDF
37:21	1.42e+05	1.07e+05	1.32	y	2.49e+05	5.05	1,2,3,6,7,8-HxCDF
38:05	5.60e+04	4.73e+04	1.18	y	1.03e+05	2.26	
38:18	1.49e+05	1.28e+05	1.16	y	2.78e+05	6.22	2,3,4,6,7,8-HxCDF
39:46	4.46e+04	3.69e+04	1.21	y	8.15e+04	1.99	1,2,3,7,8,9-HxCDF

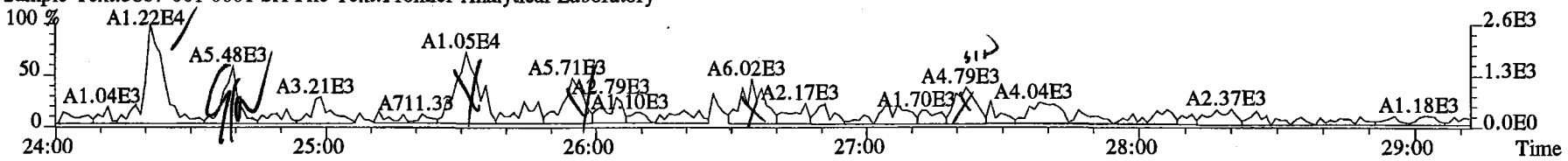
Totals class: Total Hepta-Furans Entry #: 46

Run: 10 File: 04JAN10M S: 6 I: 1 F: 4
Acquired: 4-JAN-10 14:39:41

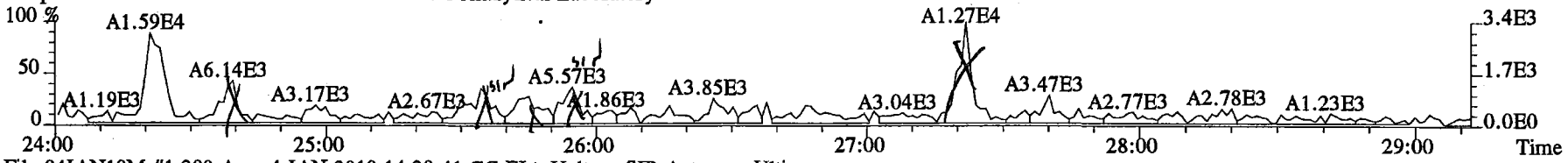
Total Concentration: 309 Unnamed Concentration: 217.933

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:15	1.60e+06	1.57e+06	1.02 y	3.17e+06	82.0	1,2,3,4,6,7,8-HpCDF
43:04	4.17e+06	4.06e+06	1.03 y	8.22e+06	218	
45:04	1.67e+05	1.83e+05	0.91 y	3.51e+05	9.51	1,2,3,4,7,8,9-HpCDF

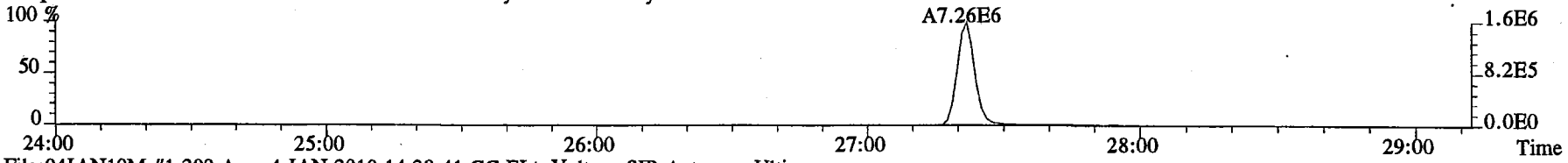
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



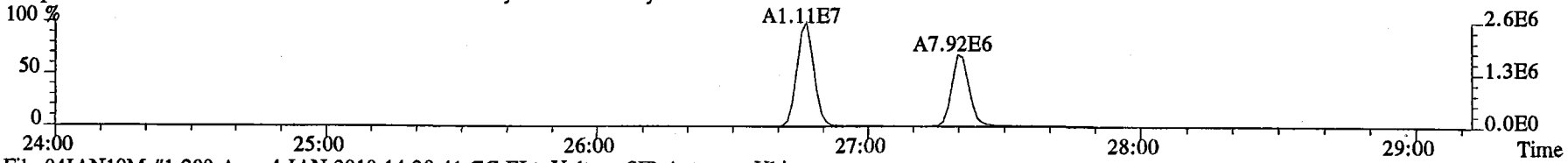
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



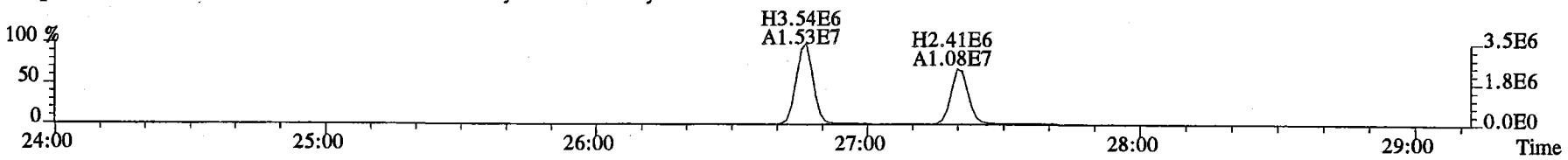
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



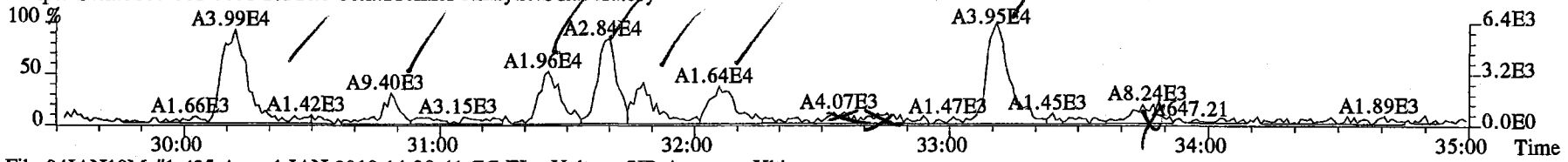
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



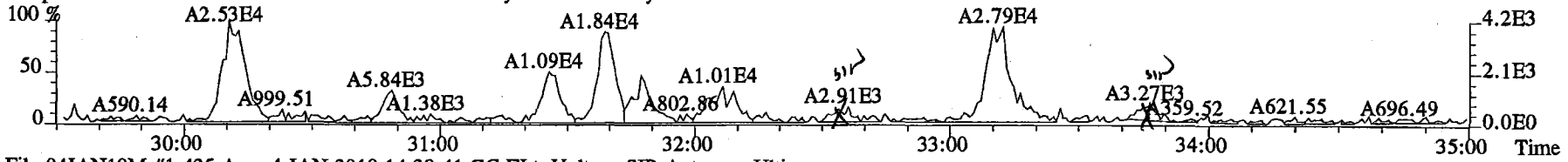
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



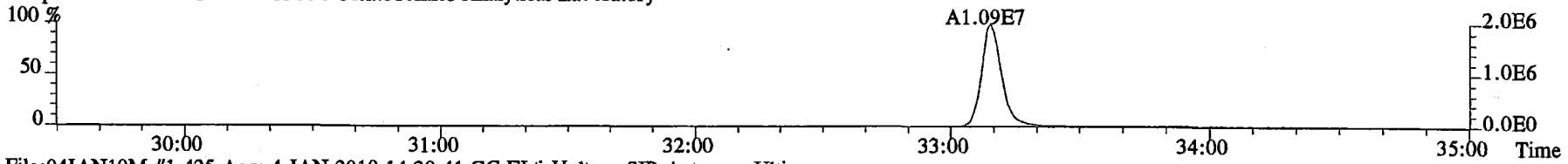
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



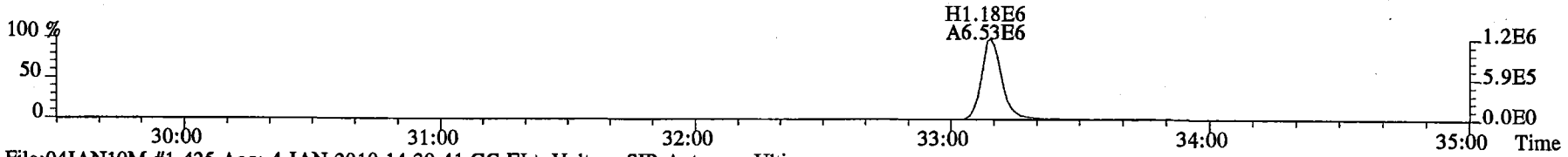
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



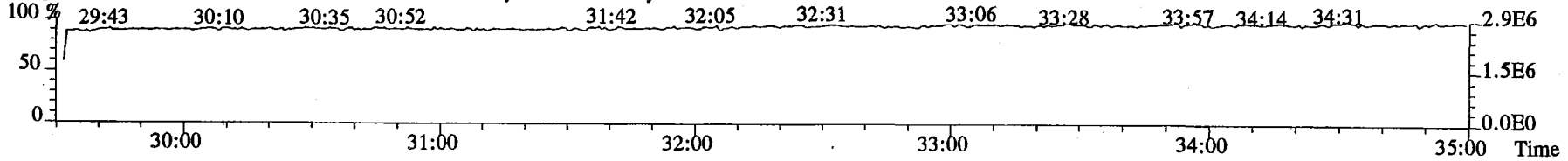
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



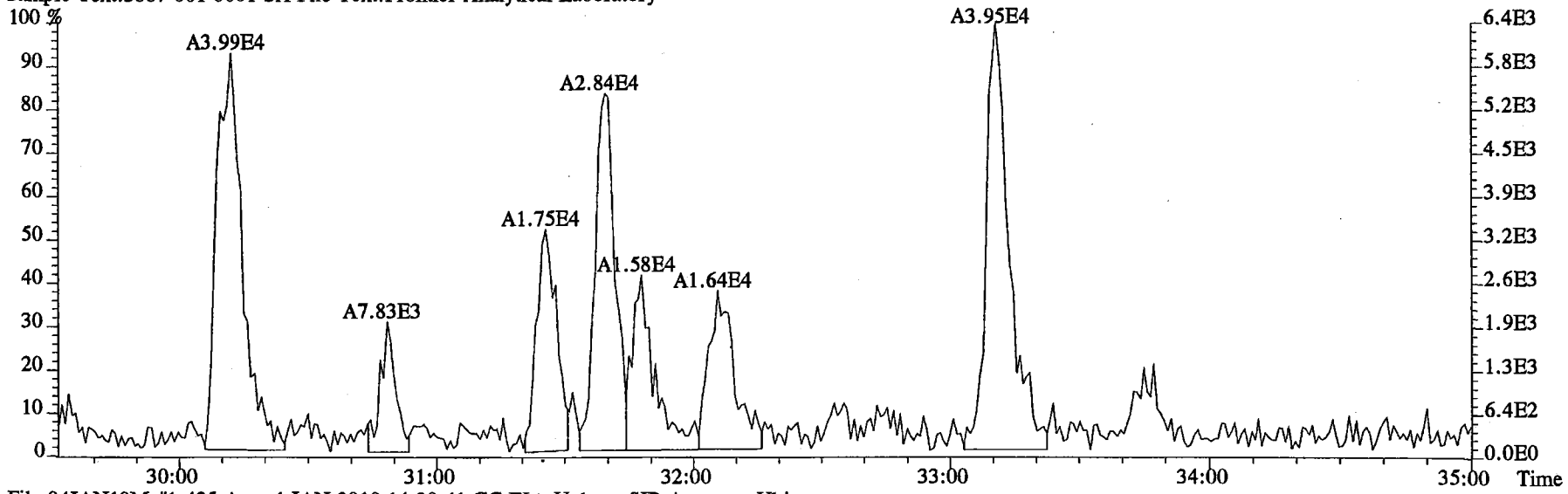
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



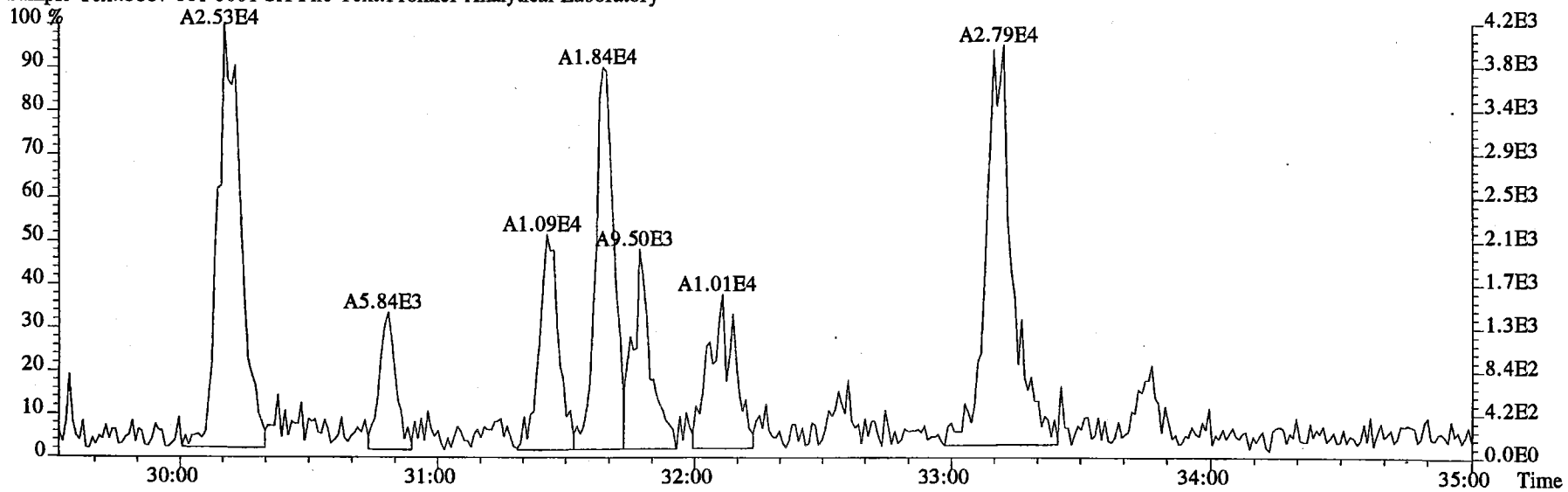
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



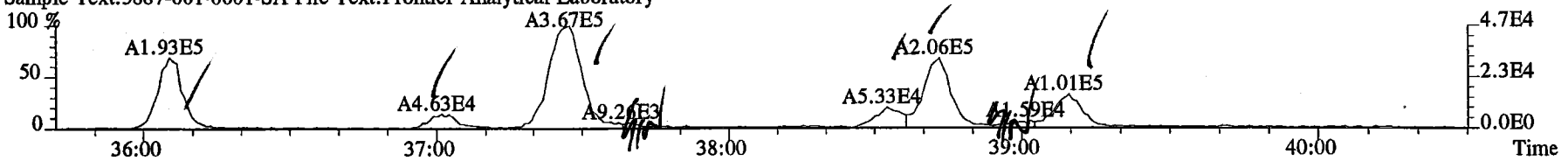
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



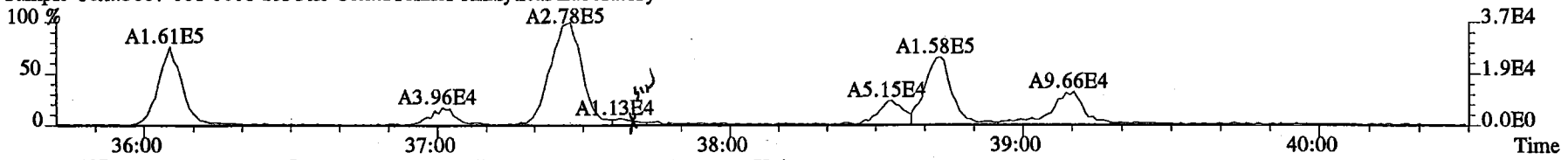
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



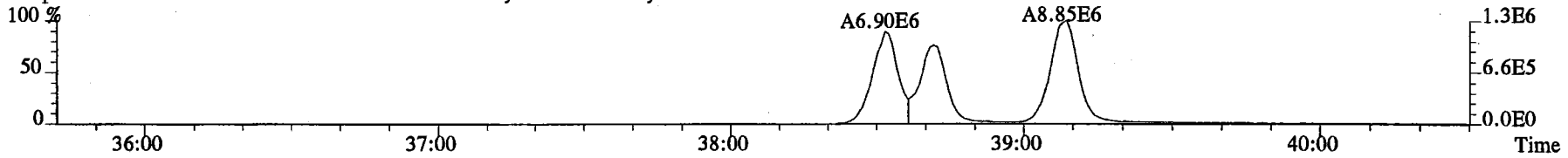
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



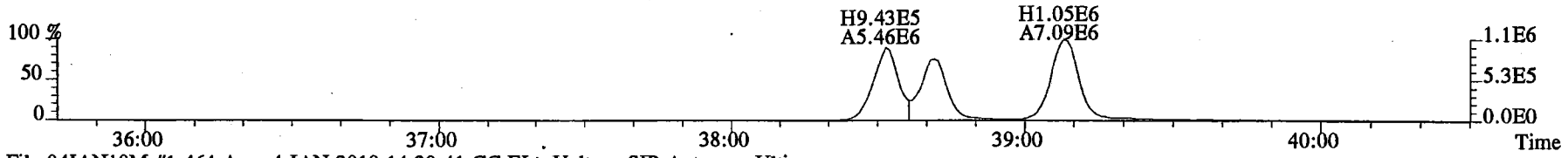
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



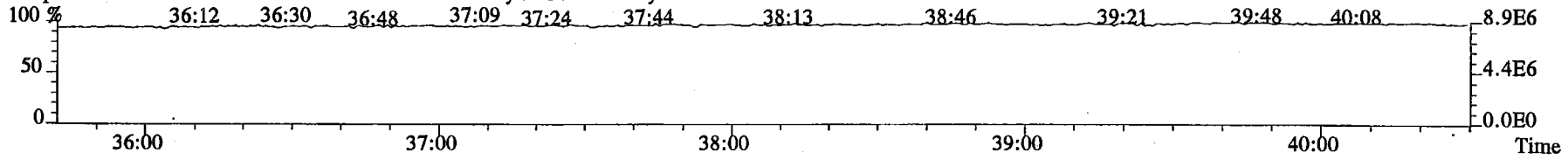
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



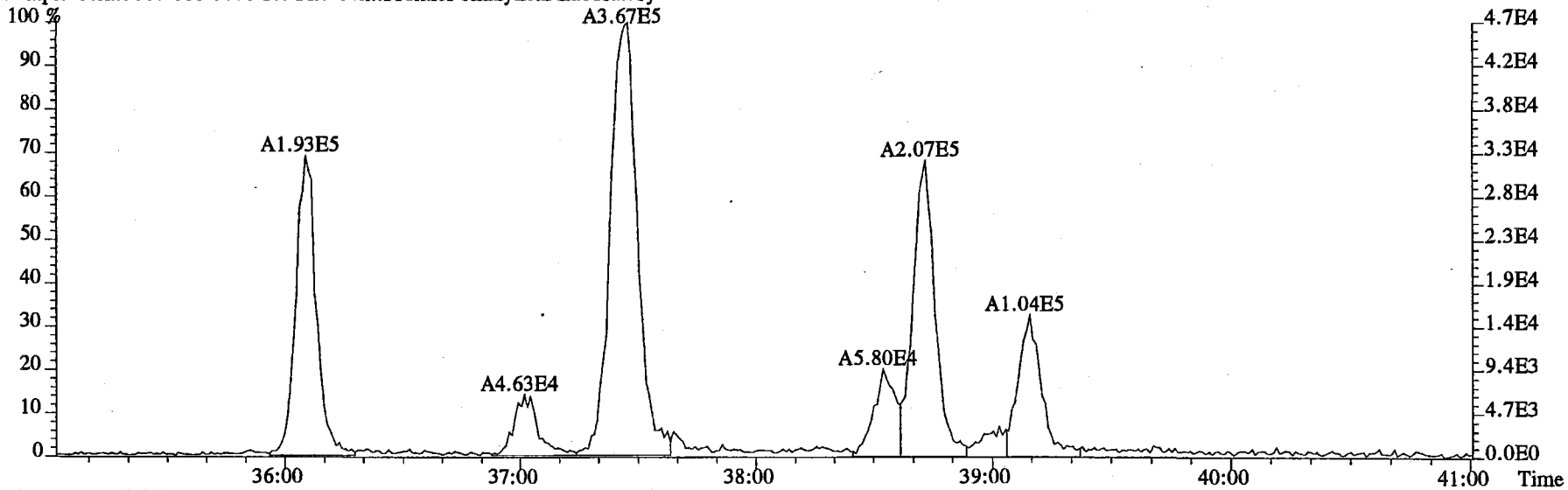
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



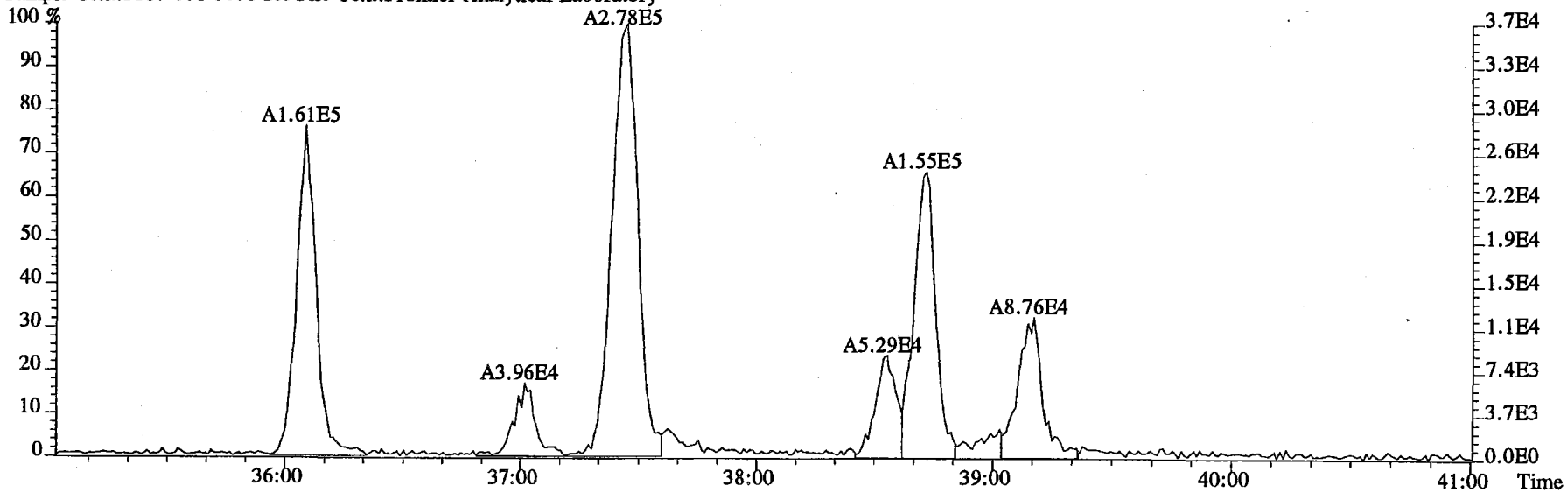
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



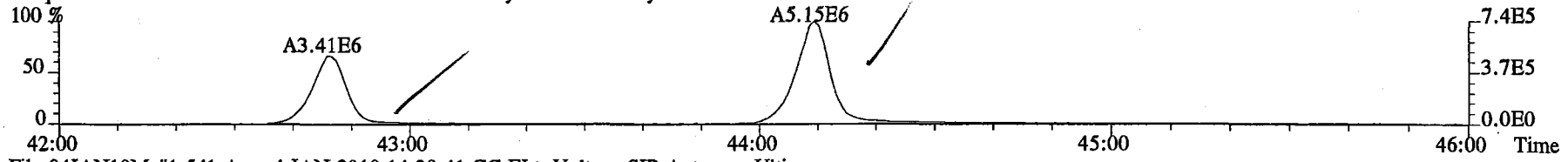
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



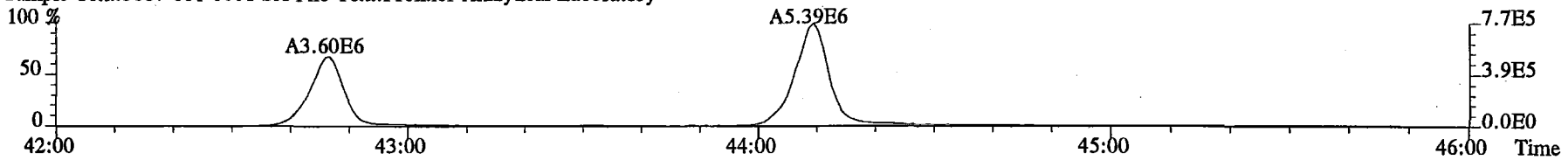
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



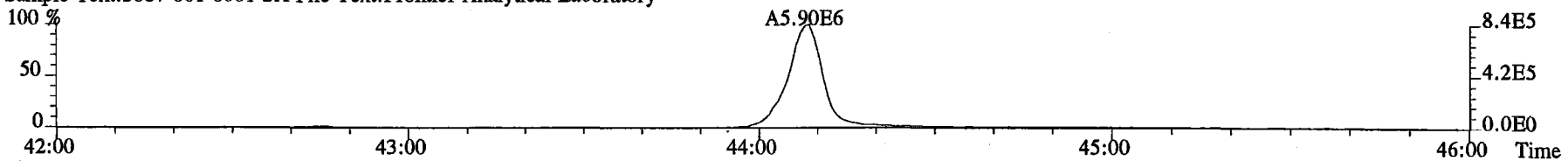
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



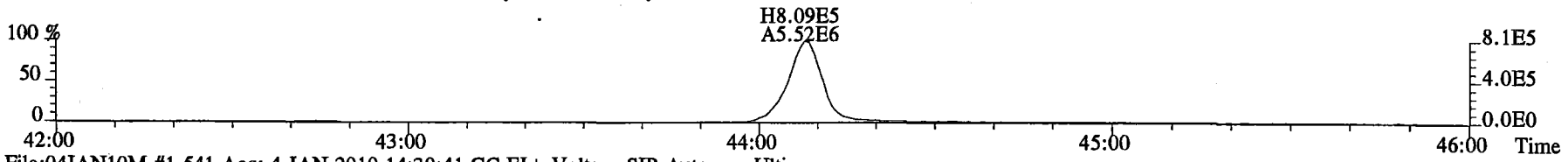
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



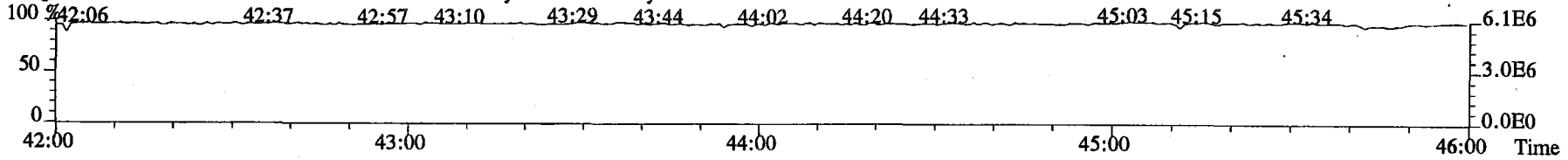
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



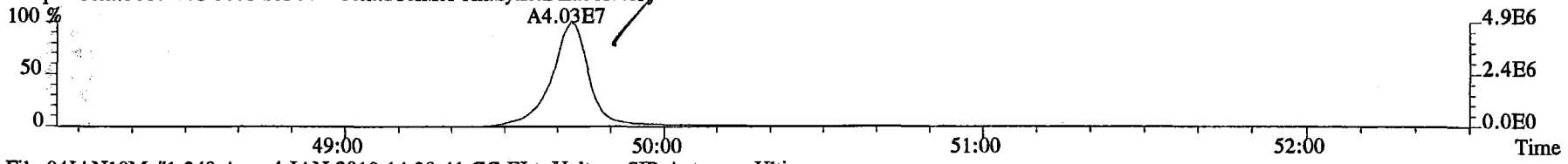
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



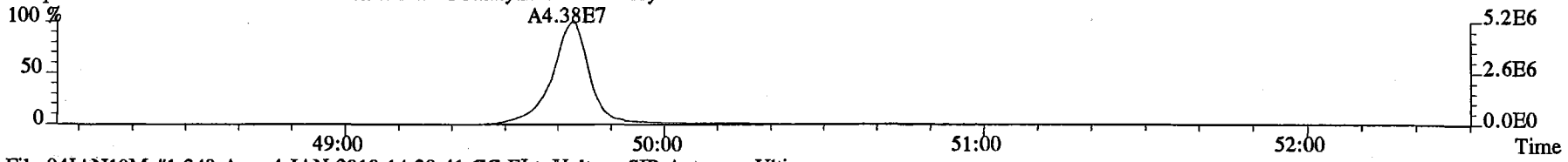
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



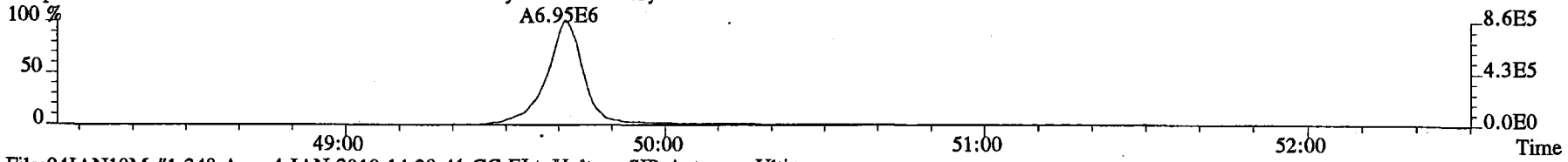
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



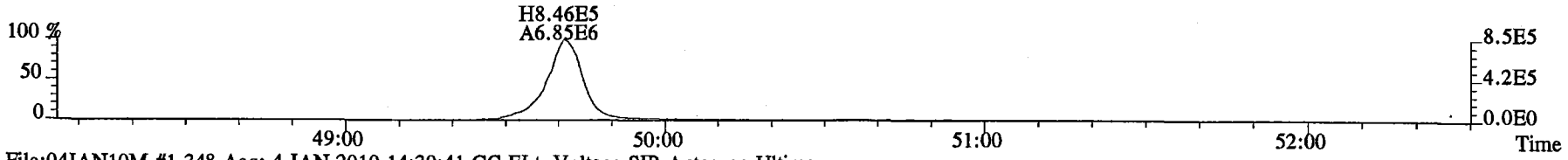
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



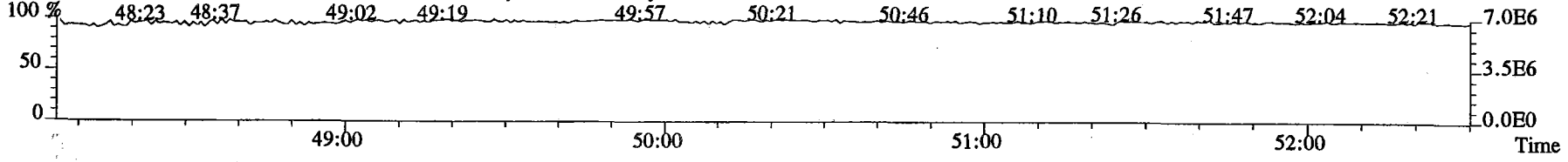
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



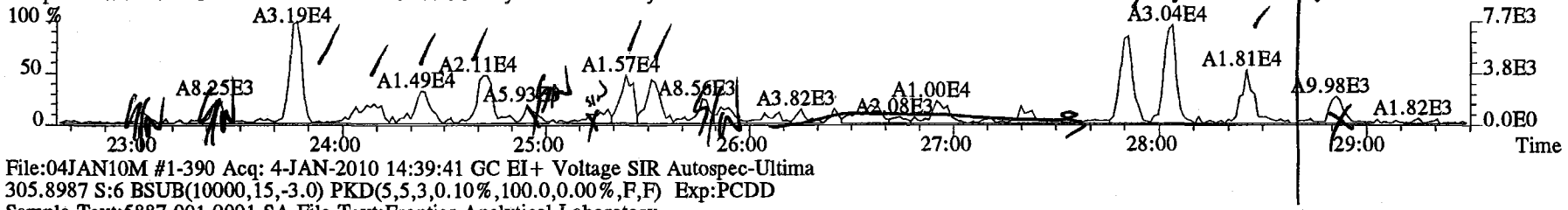
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



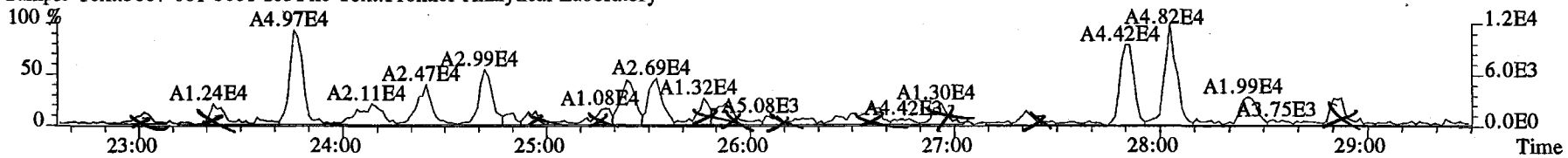
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



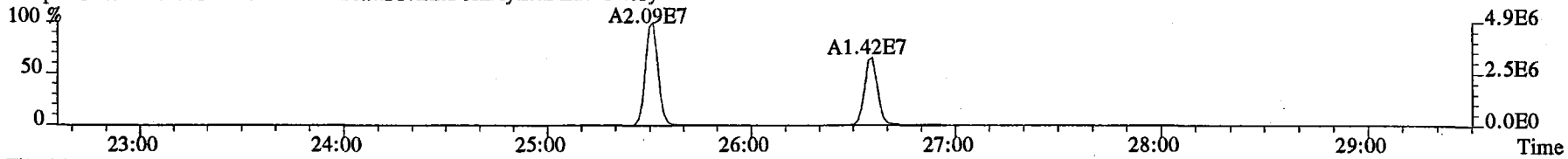
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



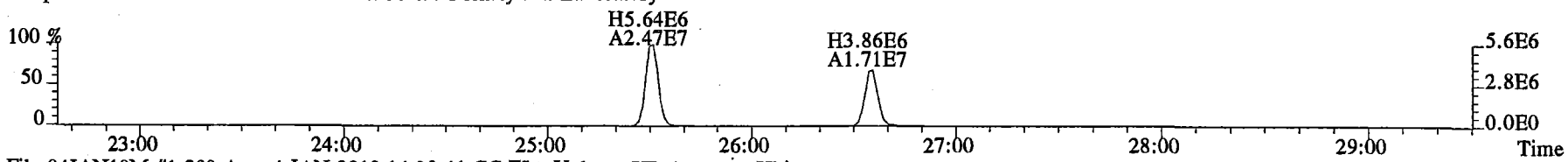
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



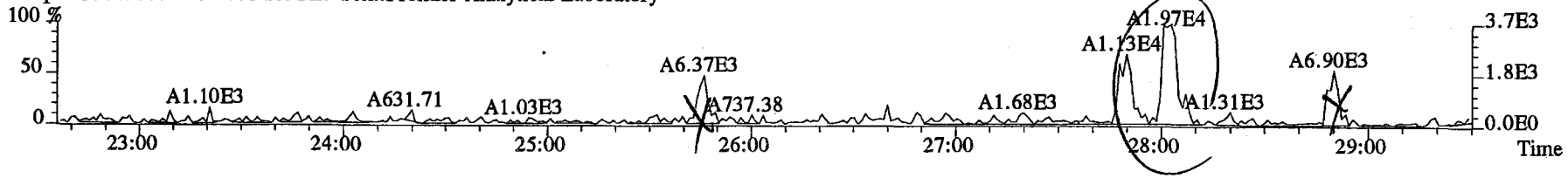
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



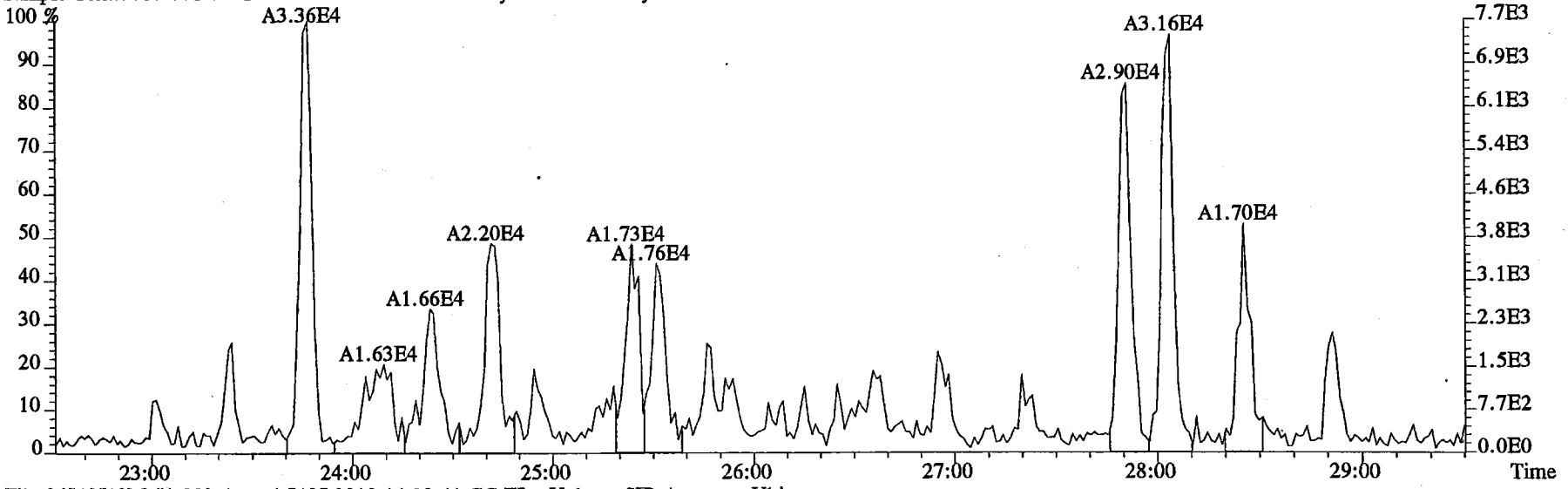
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



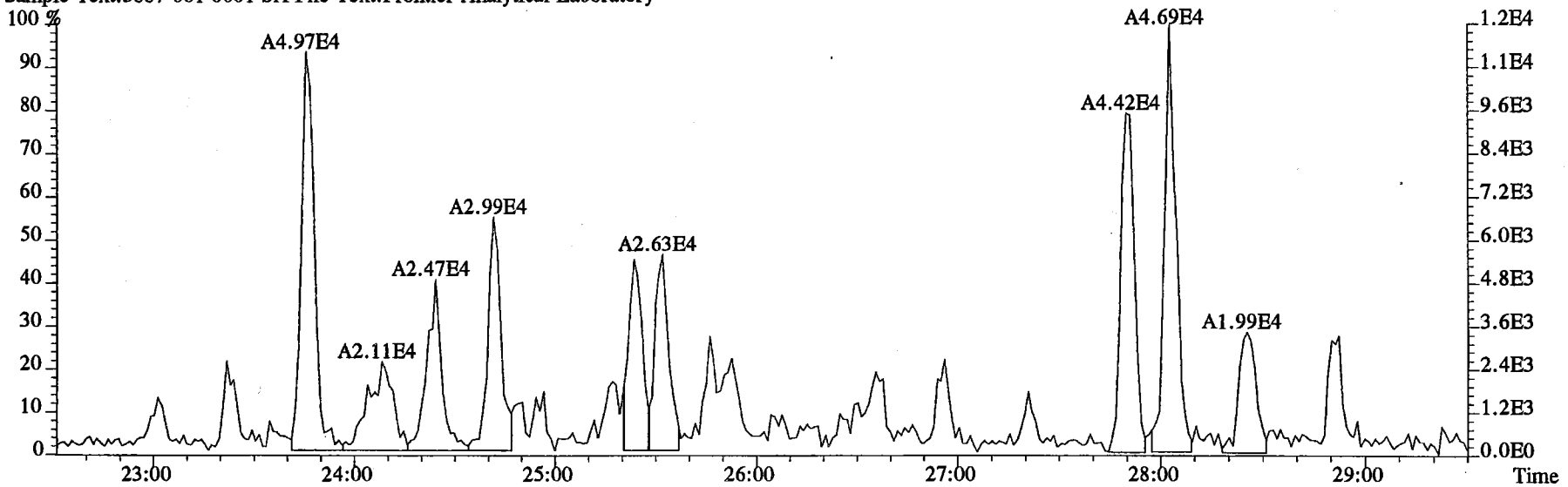
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



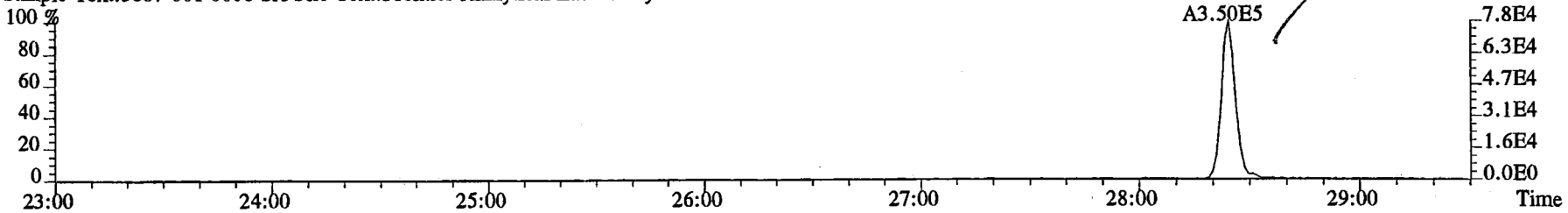
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



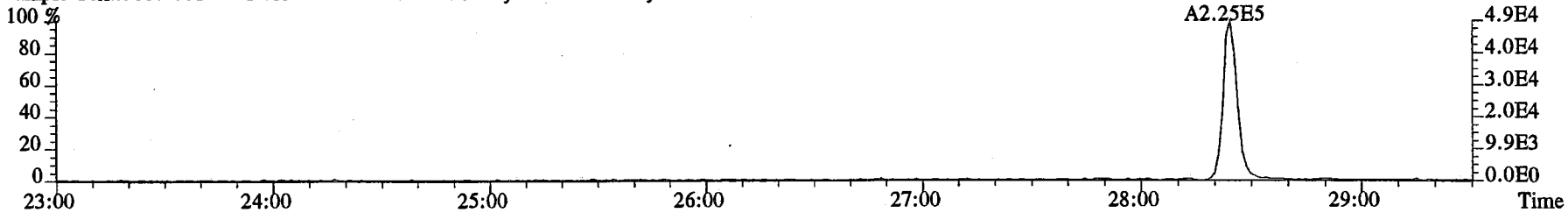
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



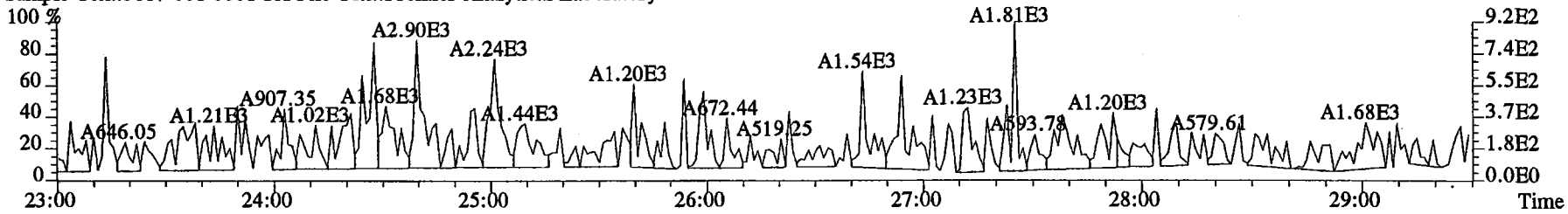
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



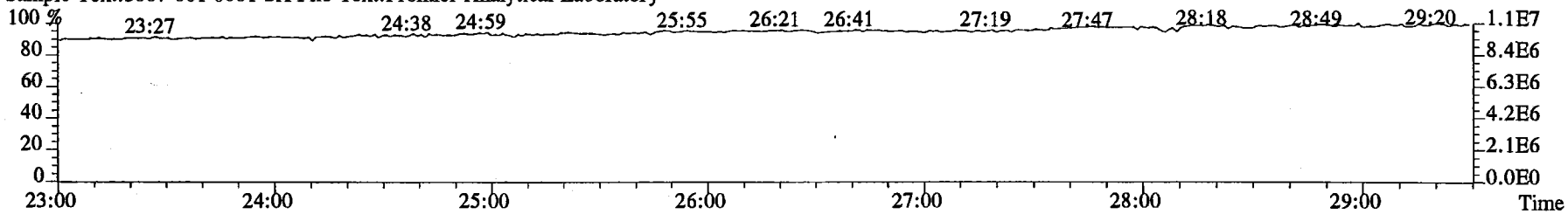
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



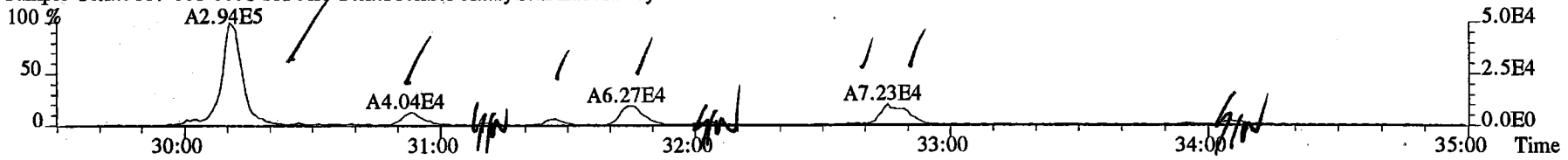
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



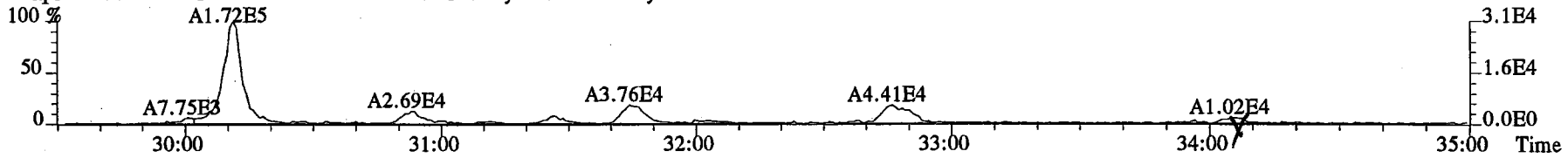
File:04JAN10M #1-390 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



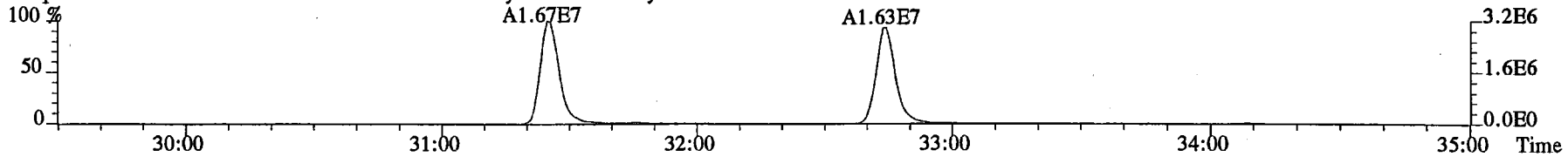
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



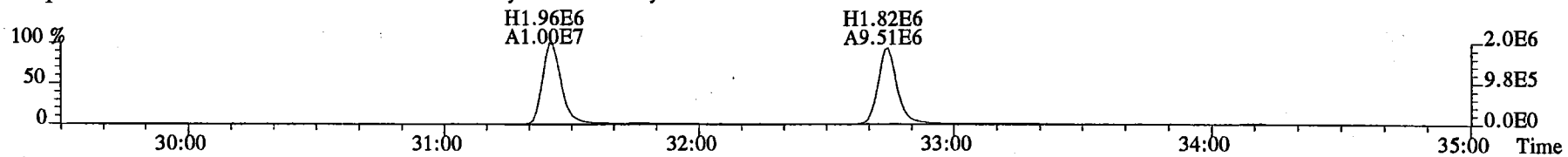
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



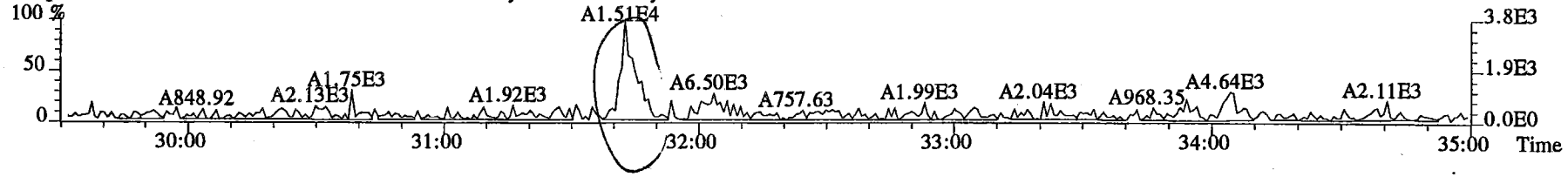
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



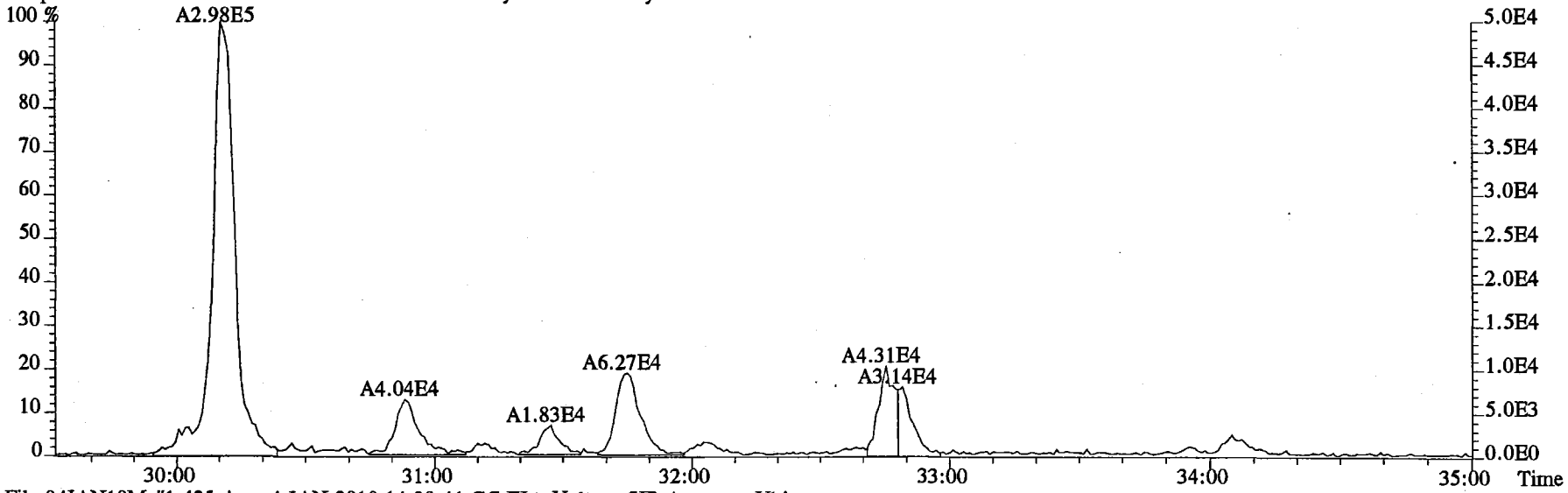
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



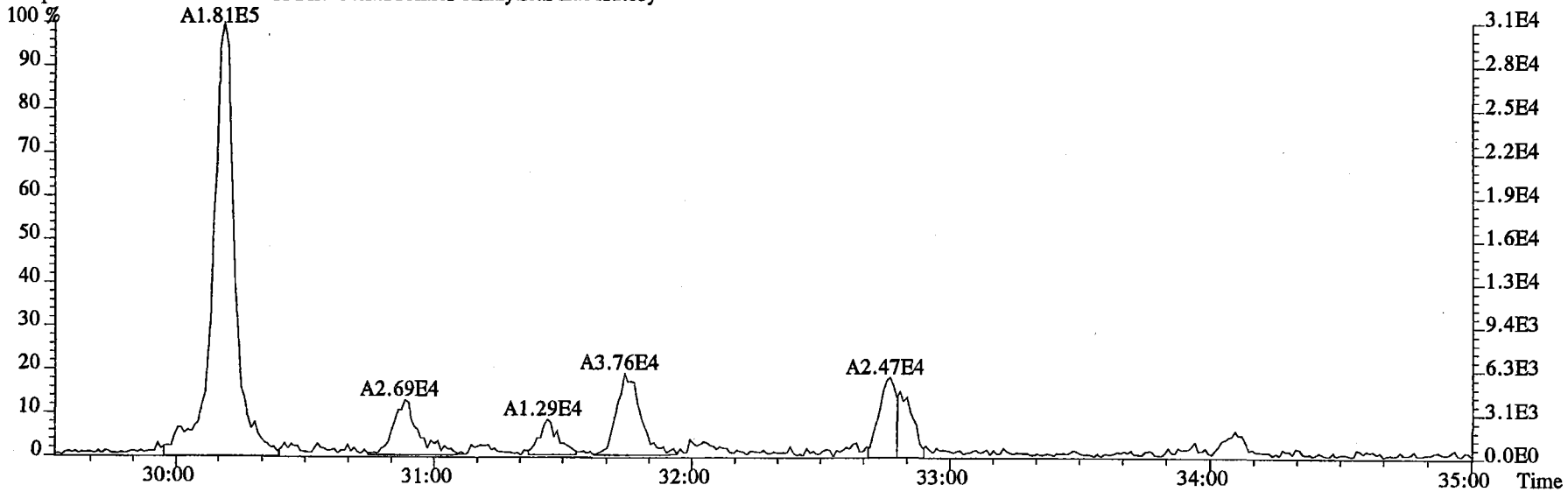
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



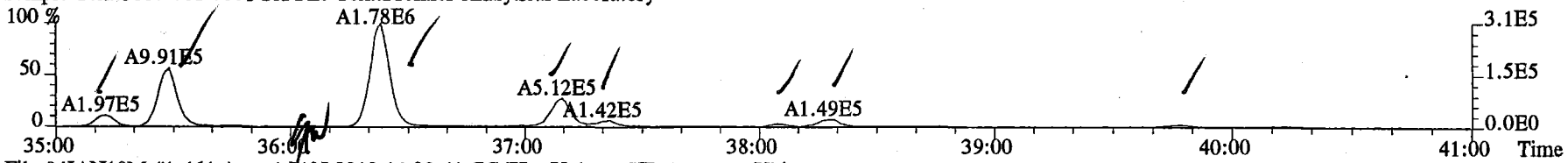
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



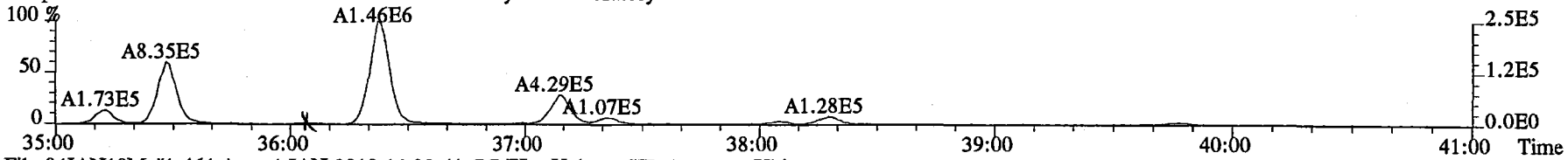
File:04JAN10M #1-425 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



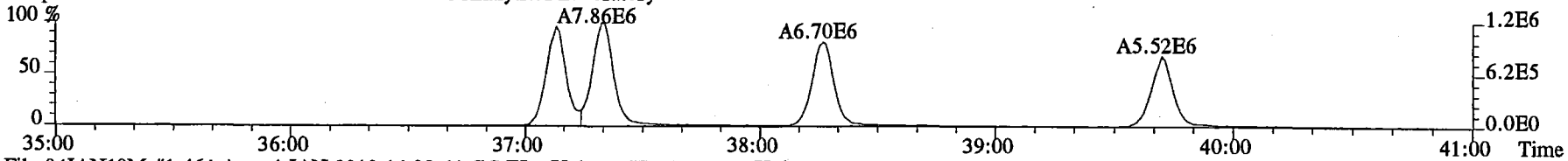
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



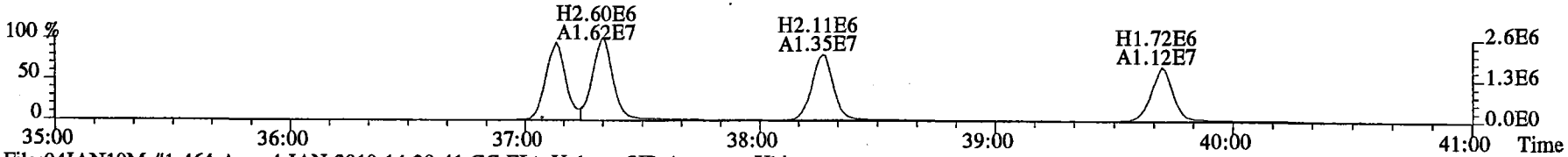
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



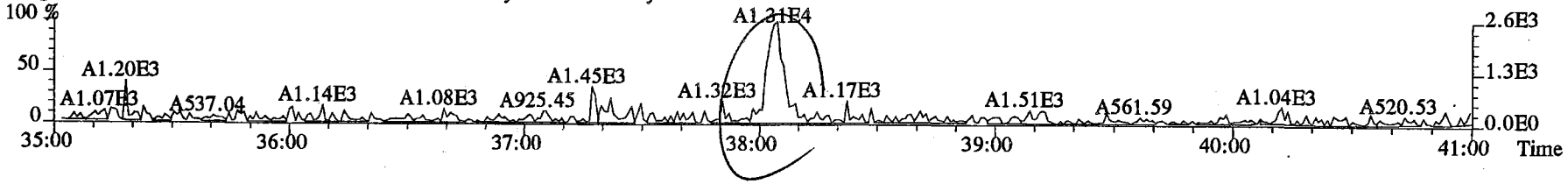
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



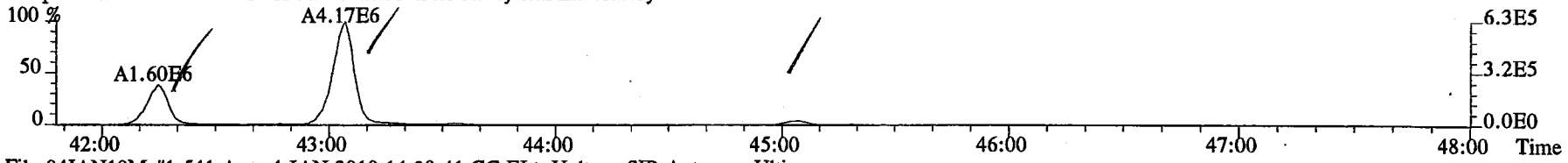
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



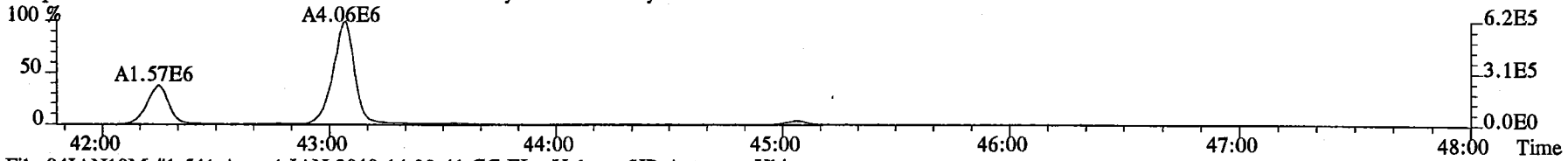
File:04JAN10M #1-464 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



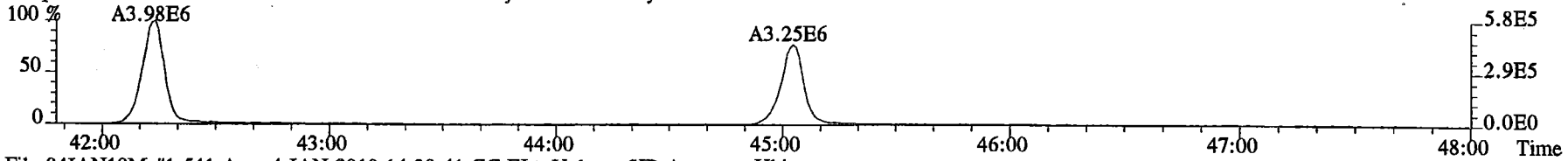
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



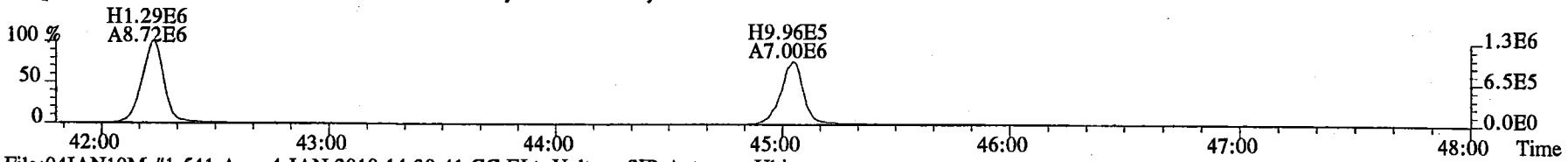
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



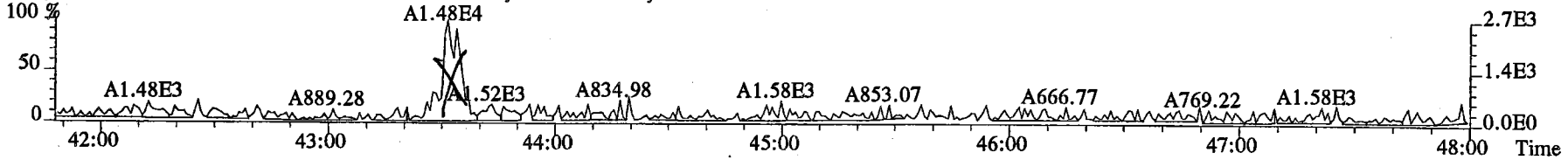
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



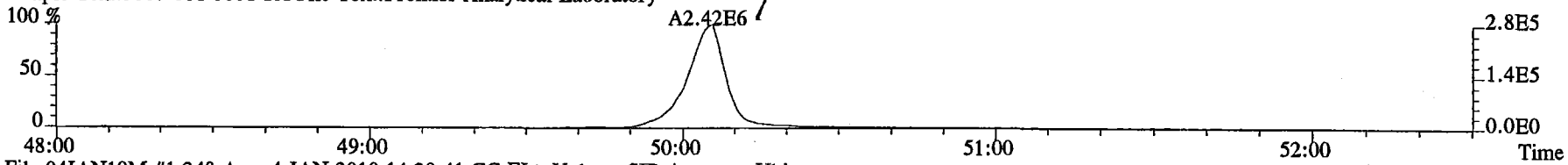
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



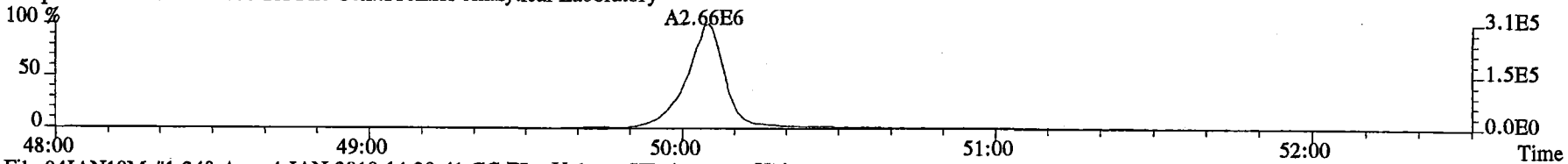
File:04JAN10M #1-541 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



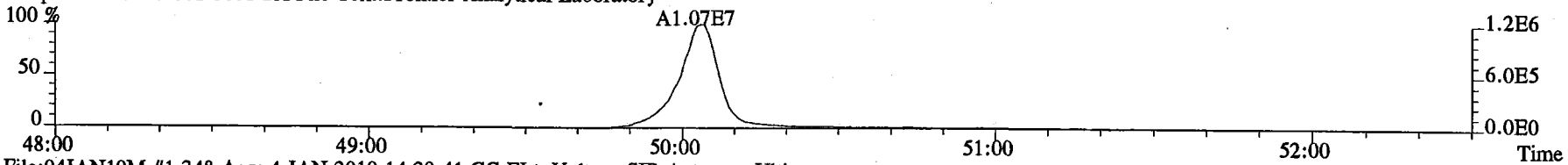
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



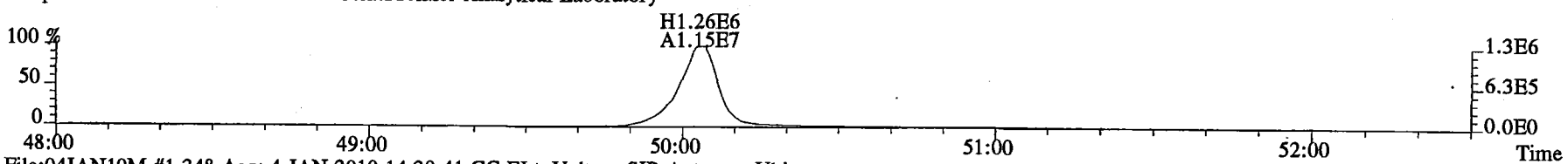
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



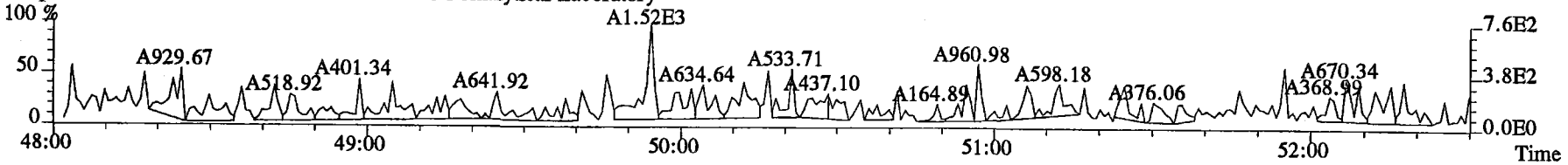
File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5887-001-0001-SA File Text:Frontier Analytical Laboratory



File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 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:5887-001-0001-SA File Text:Frontier Analytical Laboratory



File:04JAN10M #1-348 Acq: 4-JAN-2010 14:39:41 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:5887-001-0001-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

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
NATIVE ANALYTES								
2,3,7,8-TCDD	M/M+2	0.72	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

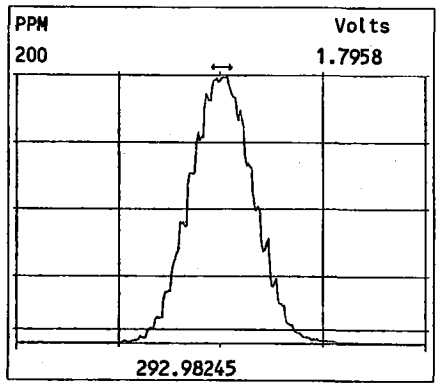
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
18NOV09M	1	ST111809M3	1613 CS3 090918J	18-NOV-09 13:45:10	ST111809M3	ST111809M6	BS
18NOV09M	2	ST111809M0	1613 CS0 090918G	18-NOV-09 14:40:53	ST111809M3	ST111809M6	BS
18NOV09M	3	ST111809M1	1613 CS1 090918H	18-NOV-09 15:36:11	ST111809M3	ST111809M6	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

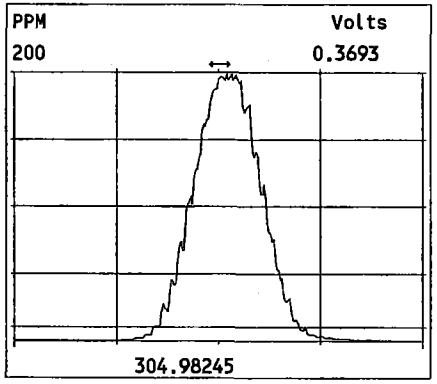
DN 11/19/09

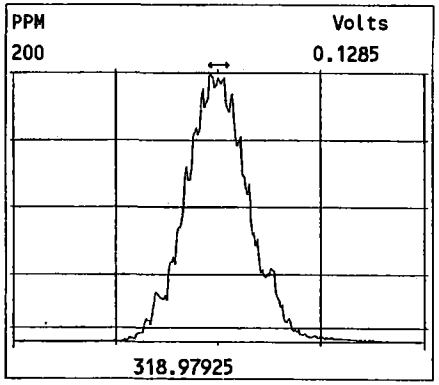
Data Backed Up:_____

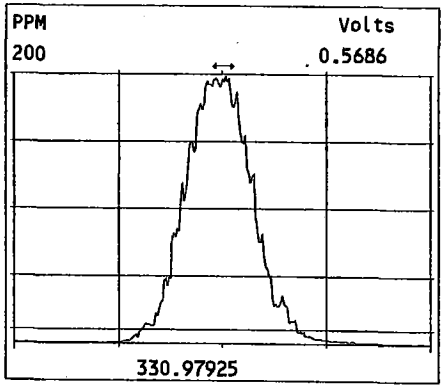
Date:_____

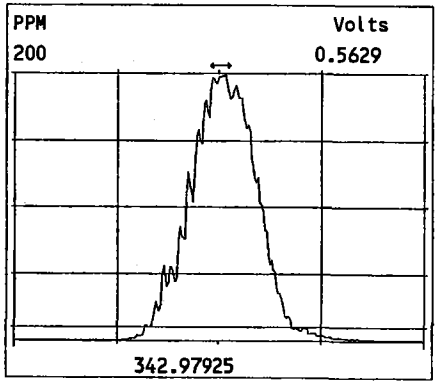
Peak Locate Examination:18-NOV-2009:13:42 File:18NOV09M
Experiment:PCDD Function:1 Reference:PFK

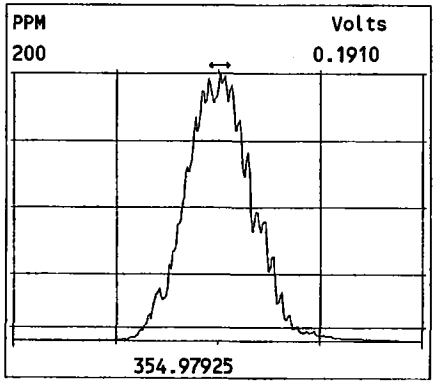


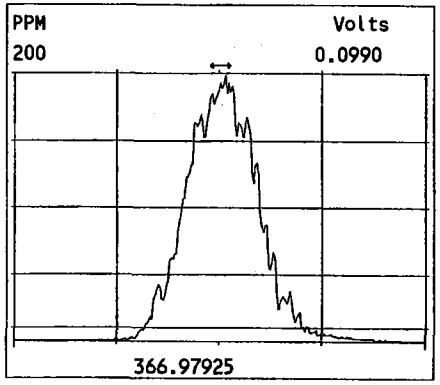


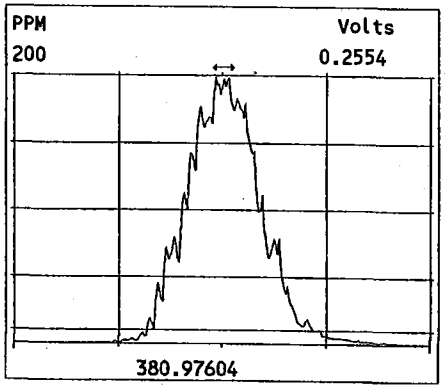


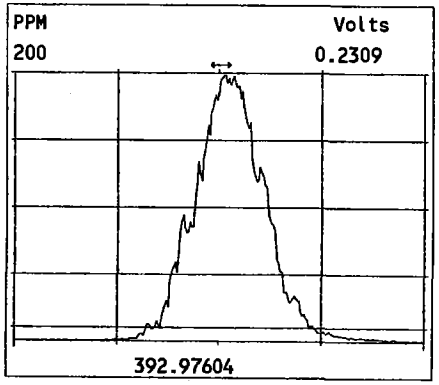


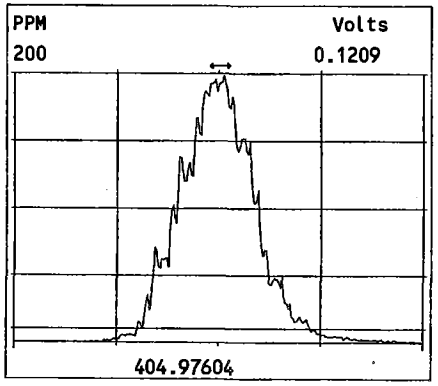


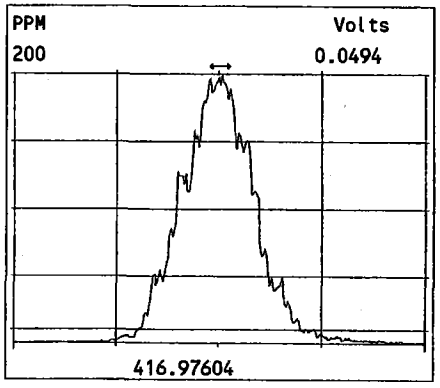




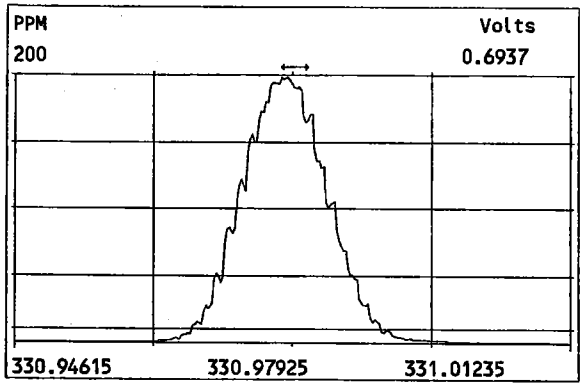


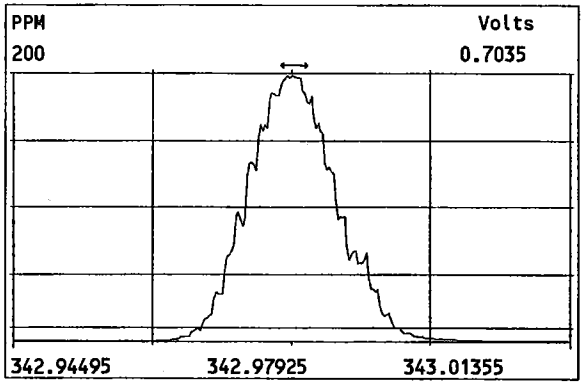


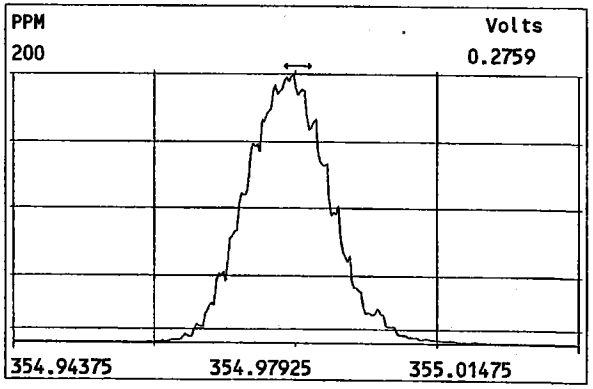


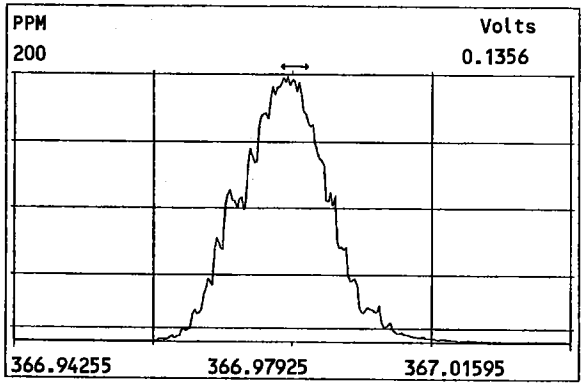


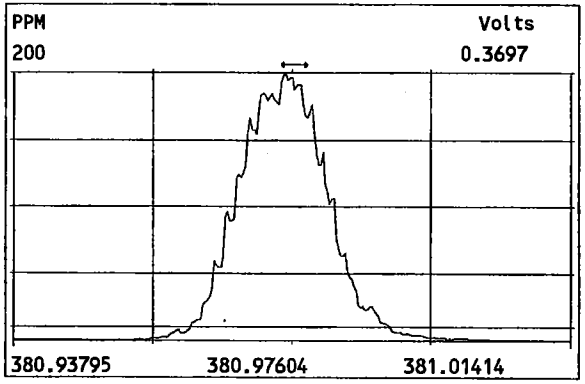
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:2 Reference:PFK

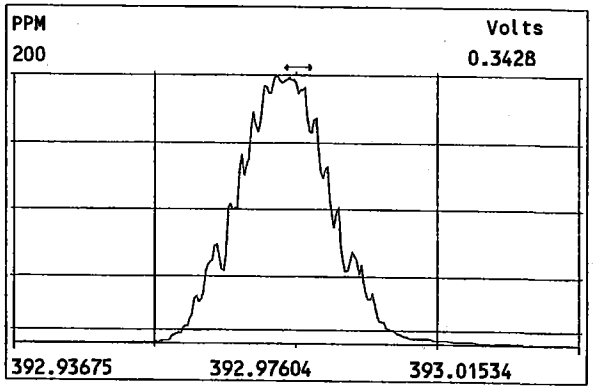


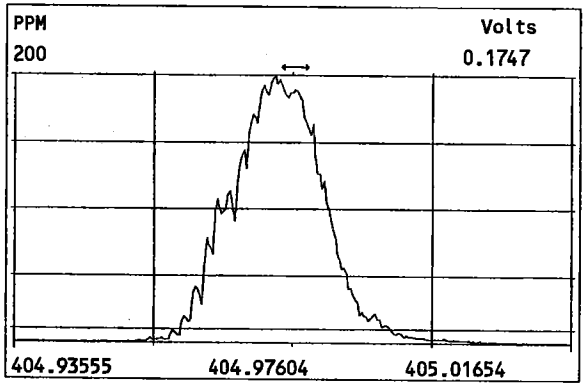


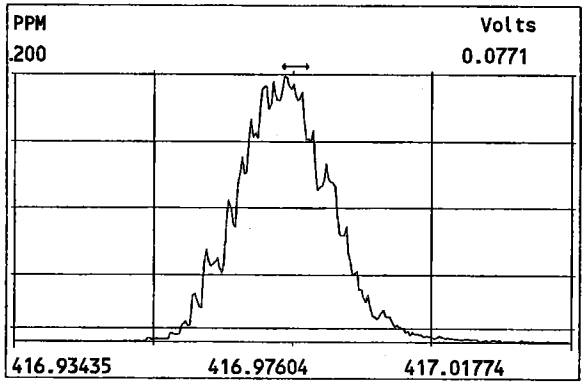




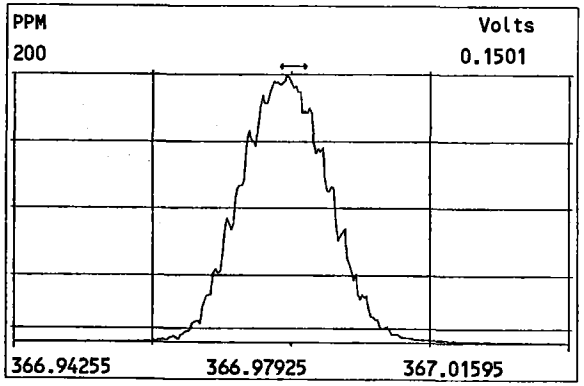


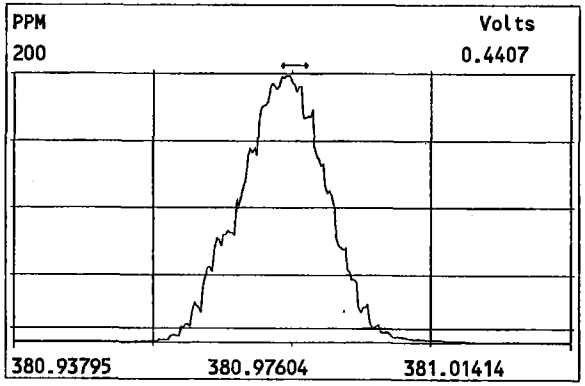


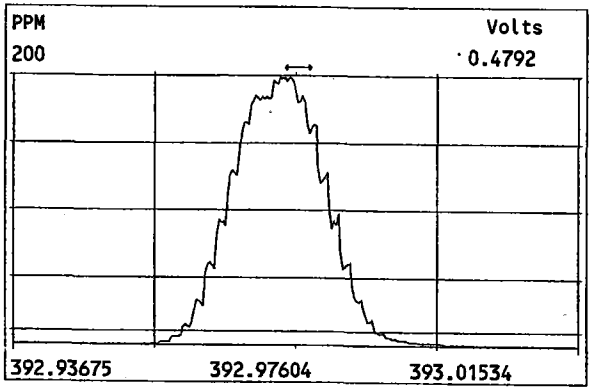


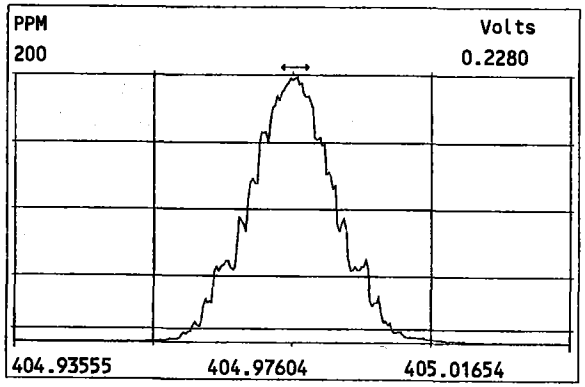


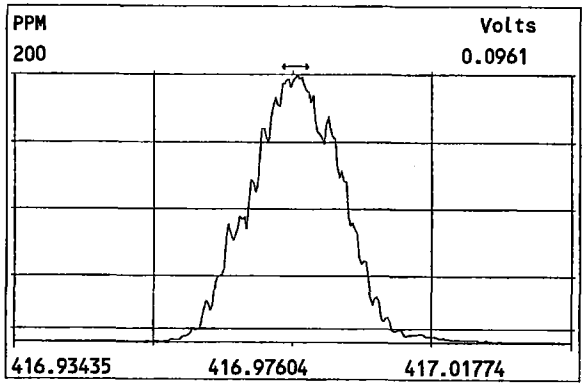
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:3 Reference:PFK

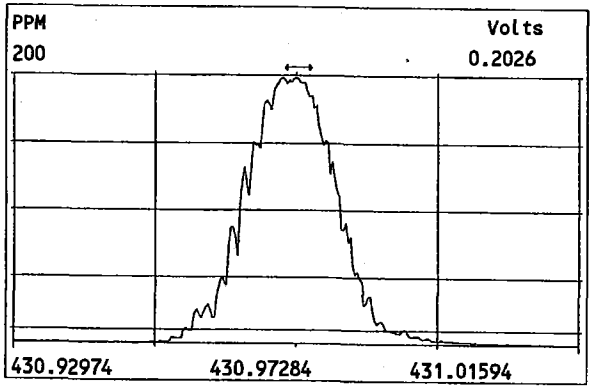


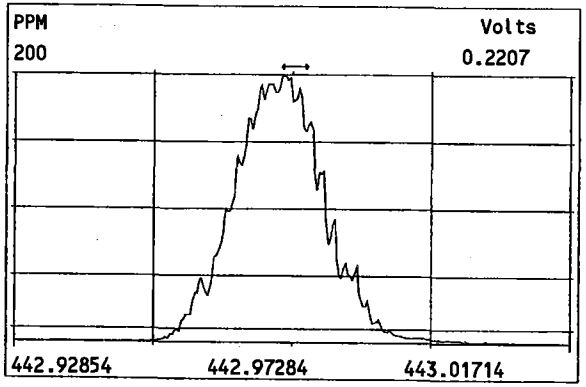


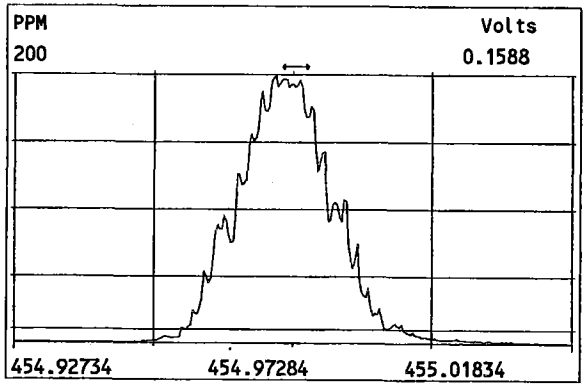




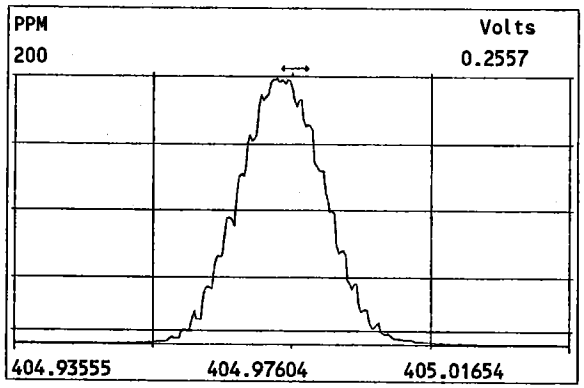


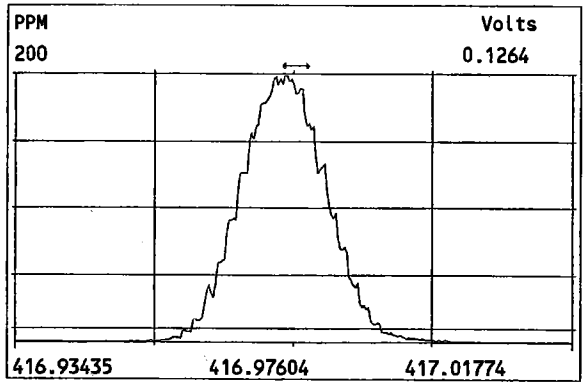


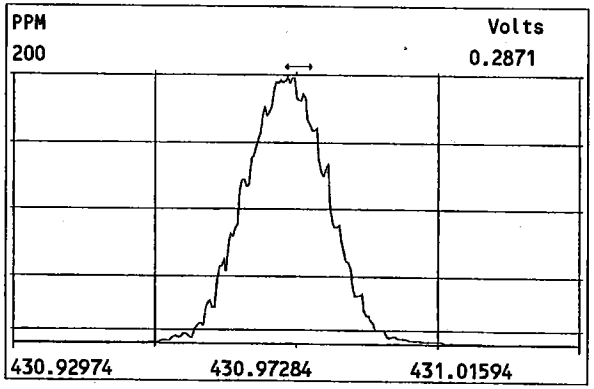


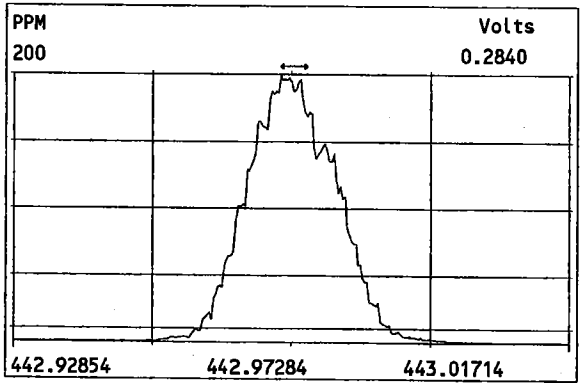


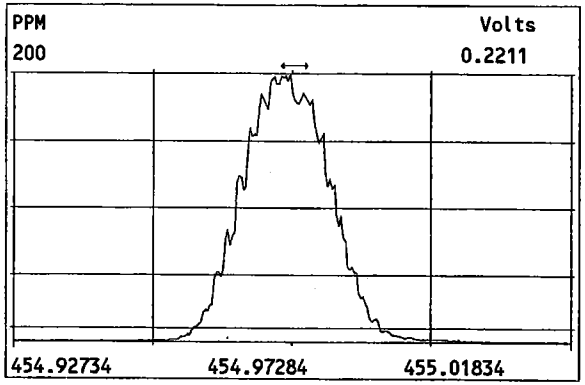
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:4 Reference:PFK

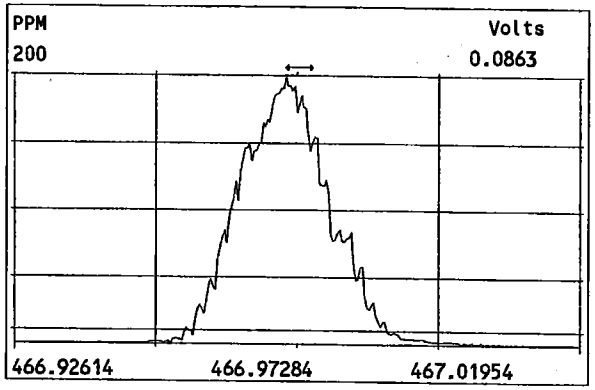


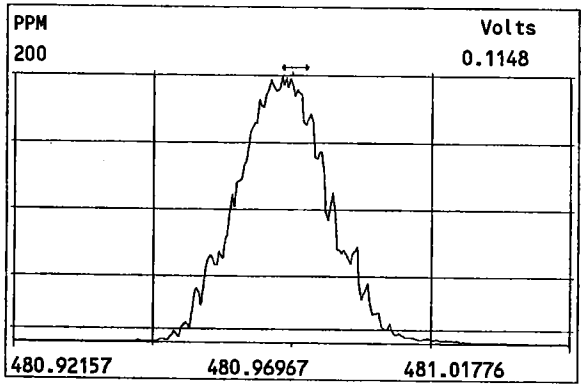




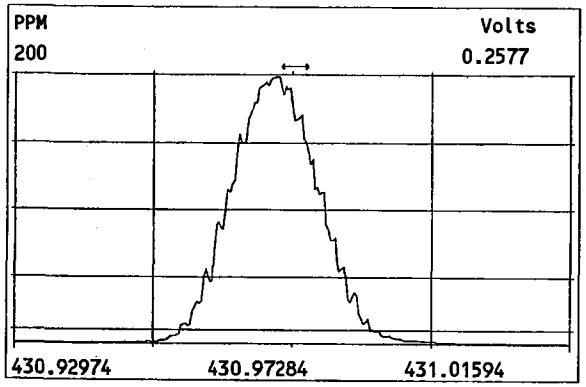


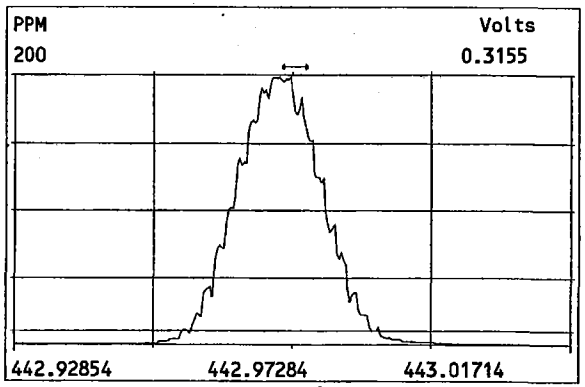


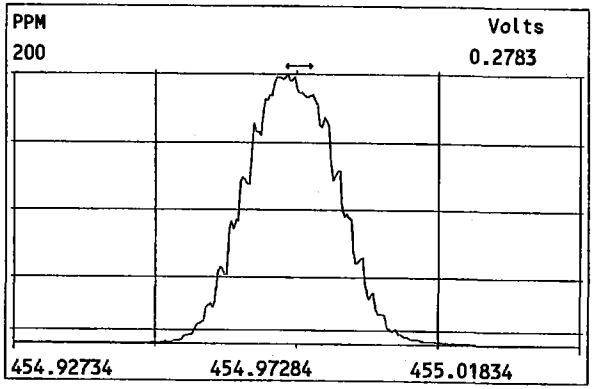


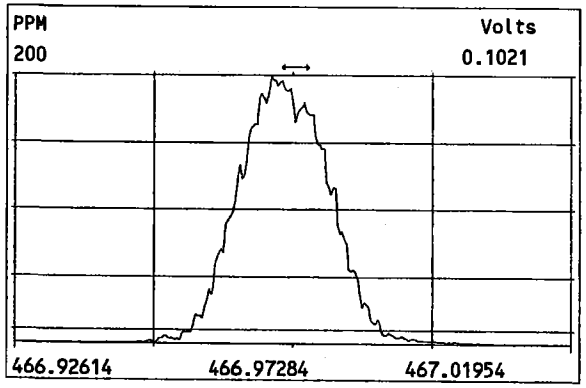


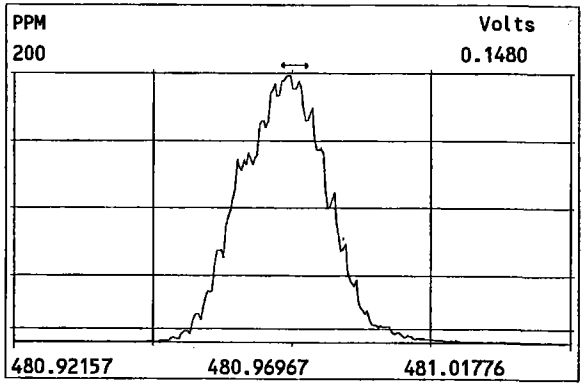
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:5 Reference:PFK

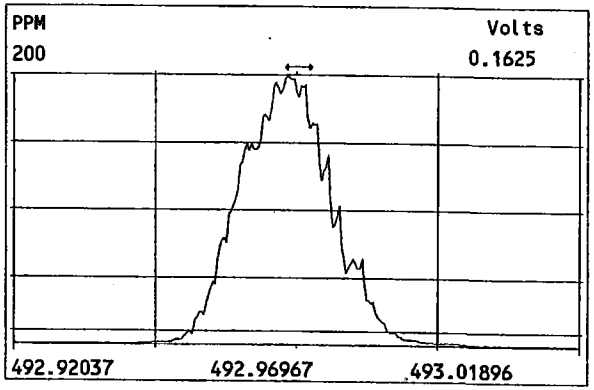


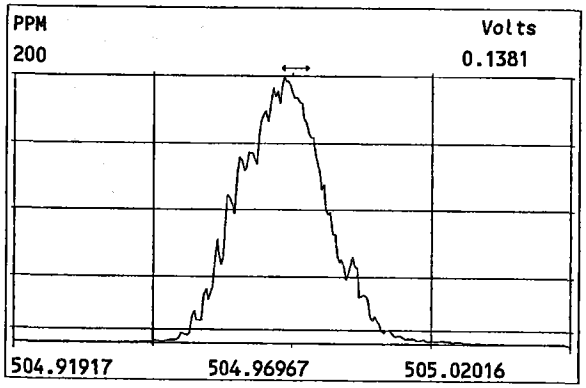


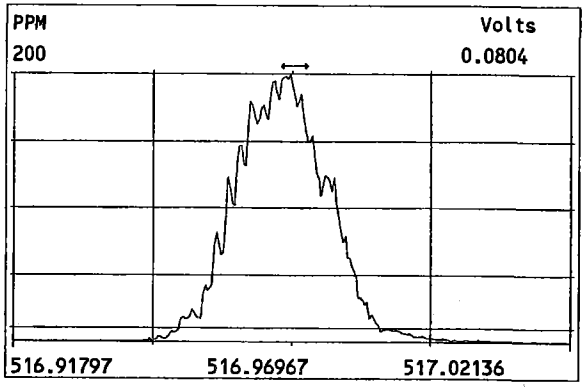




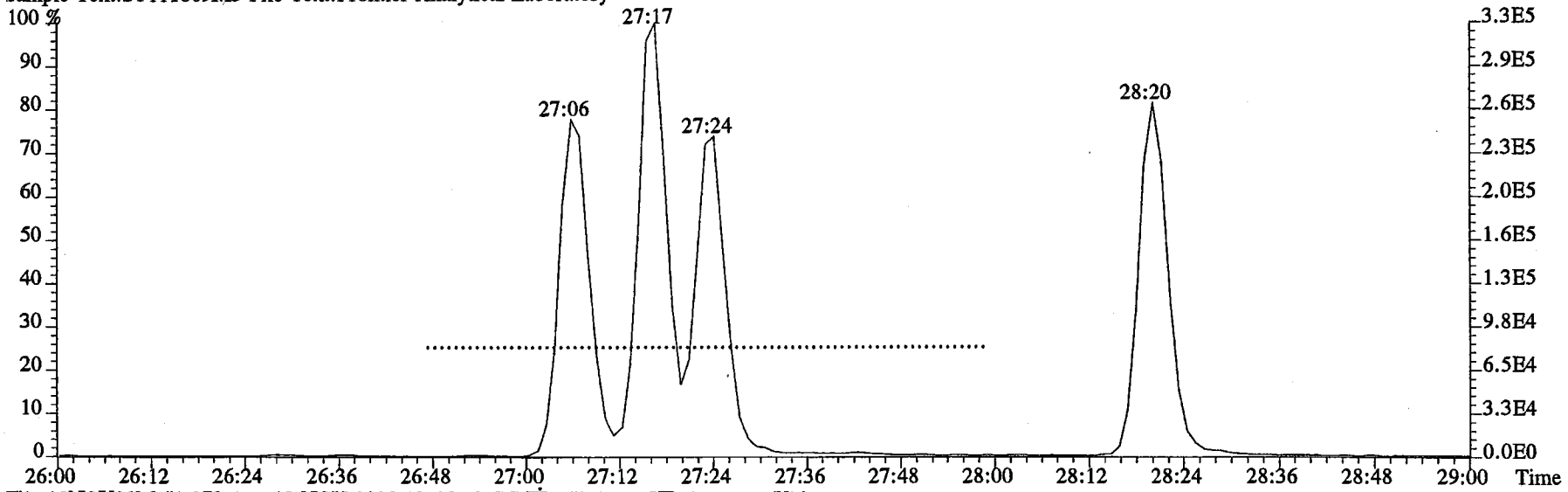




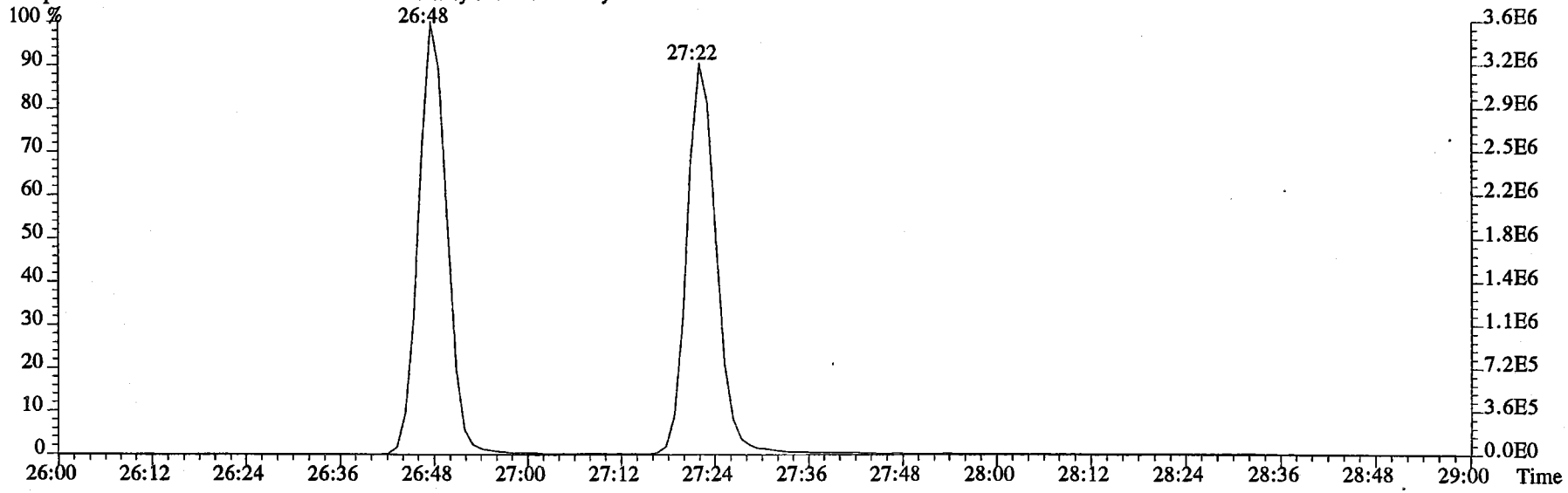




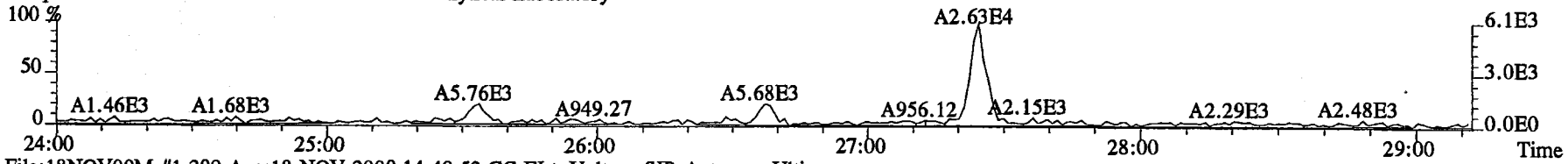
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



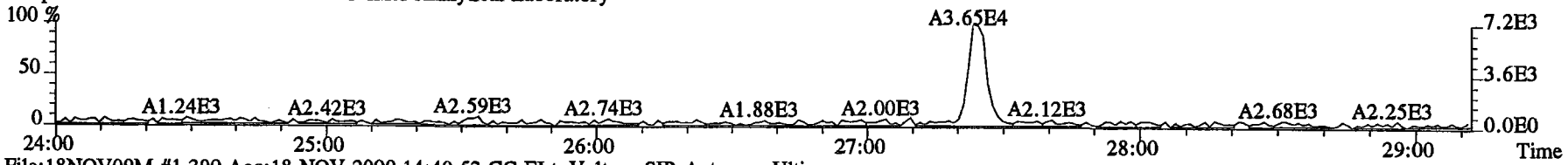
File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



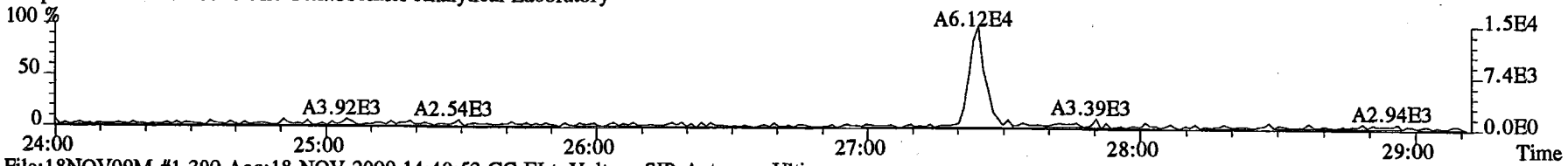
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



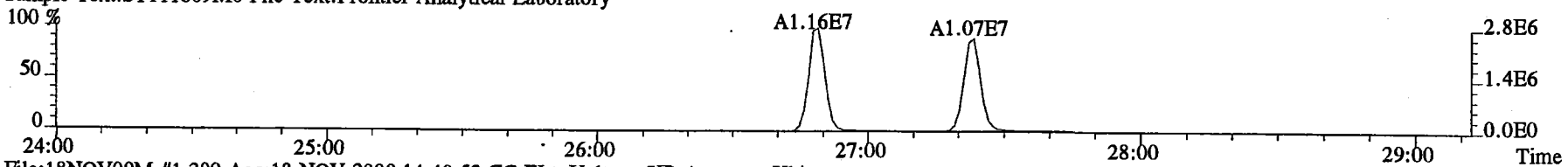
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



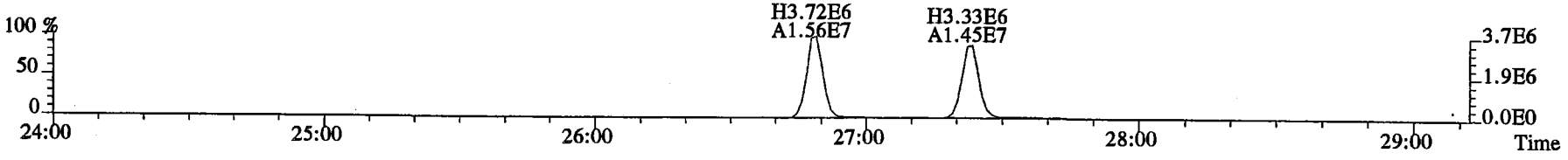
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



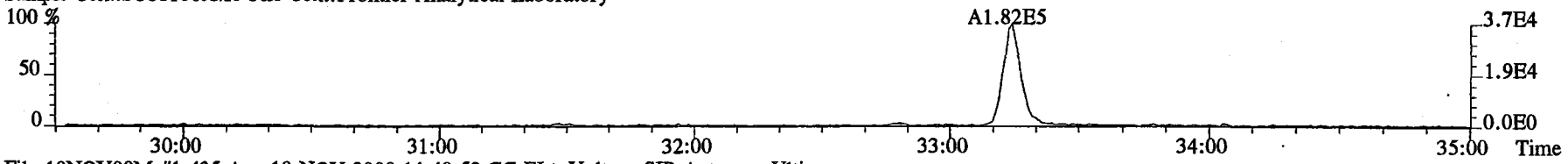
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



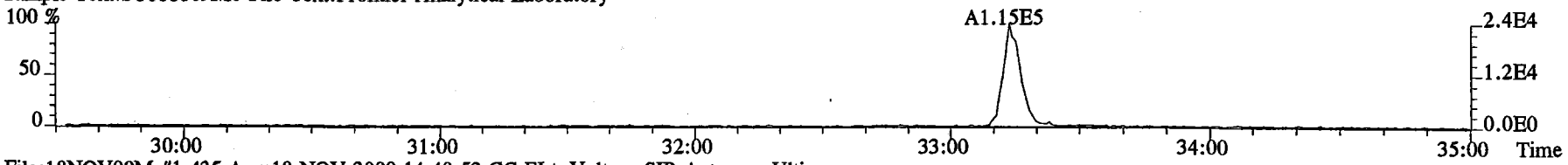
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



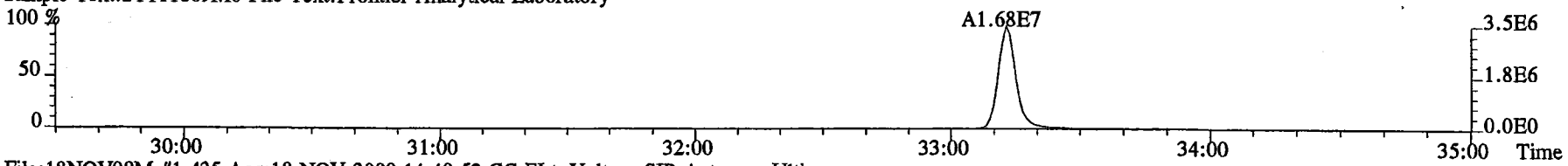
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



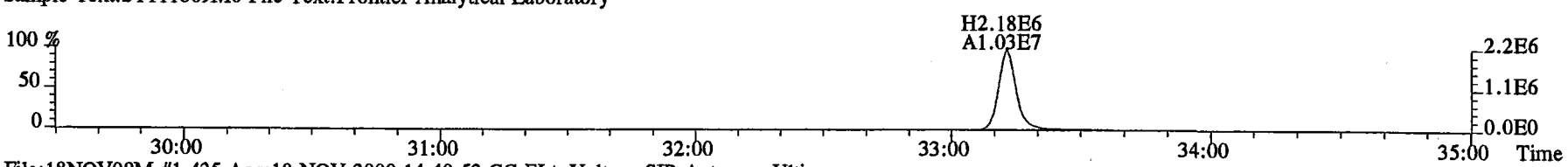
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



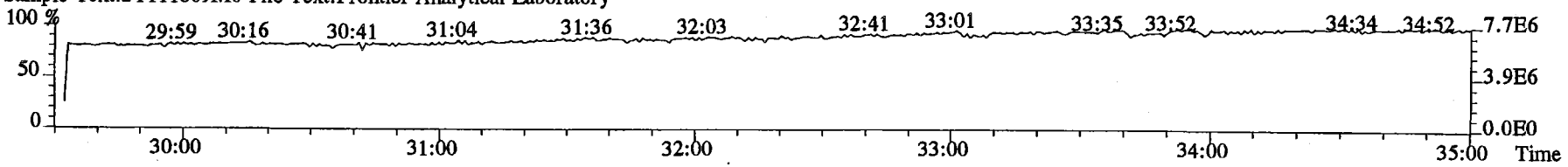
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



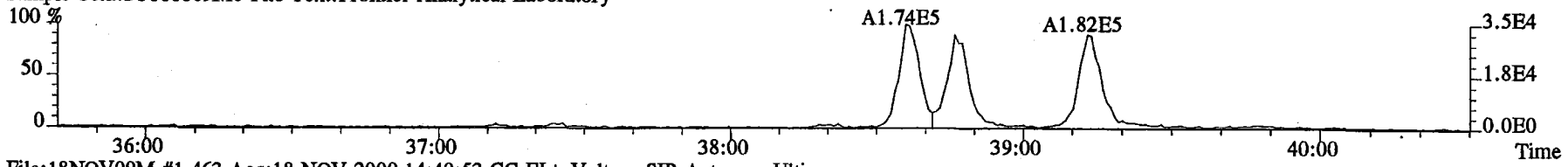
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



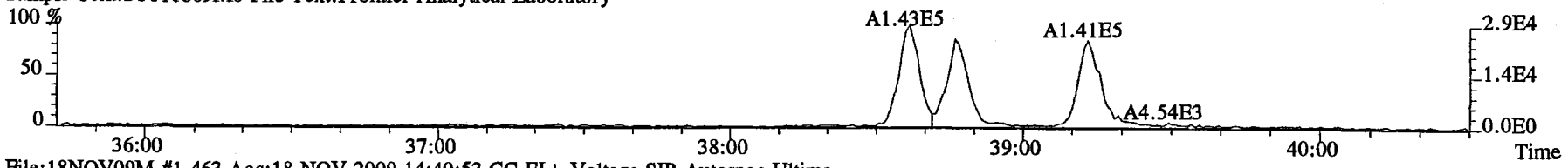
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



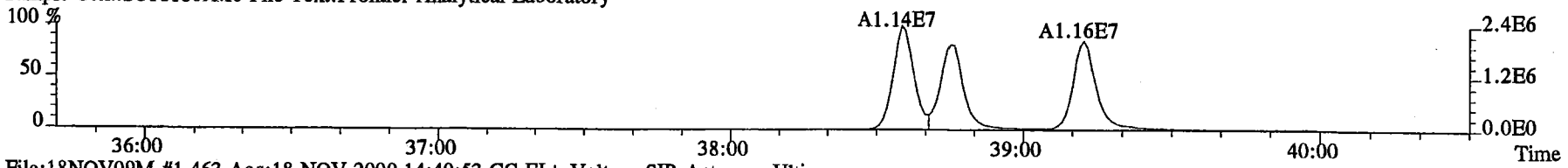
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



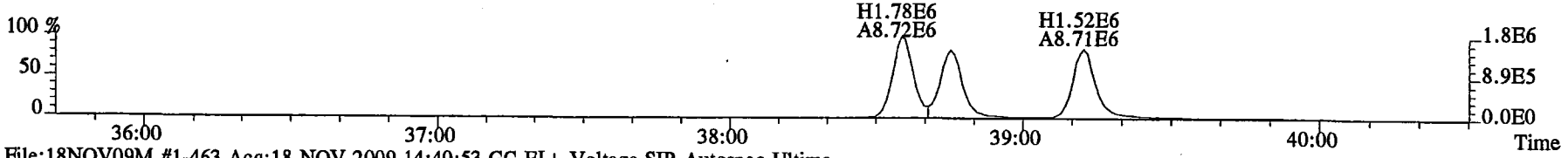
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



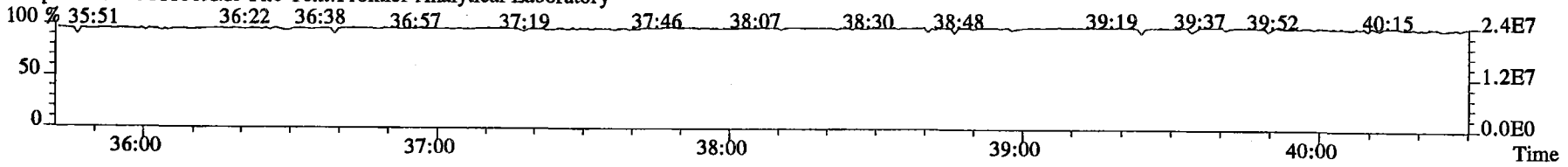
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



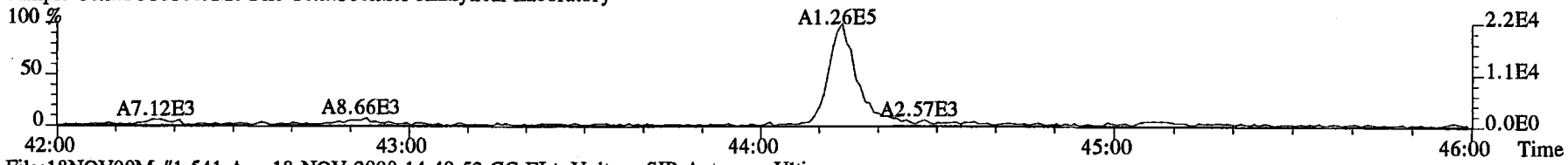
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



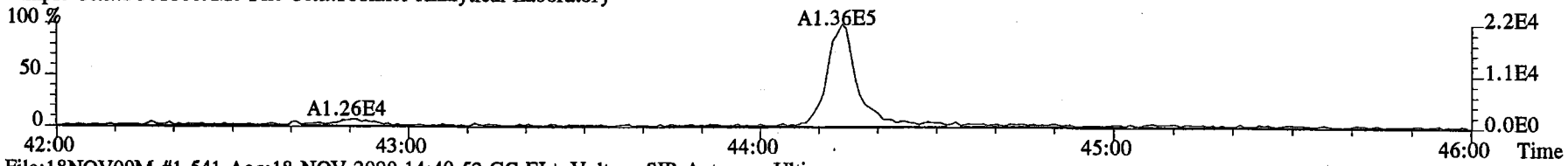
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



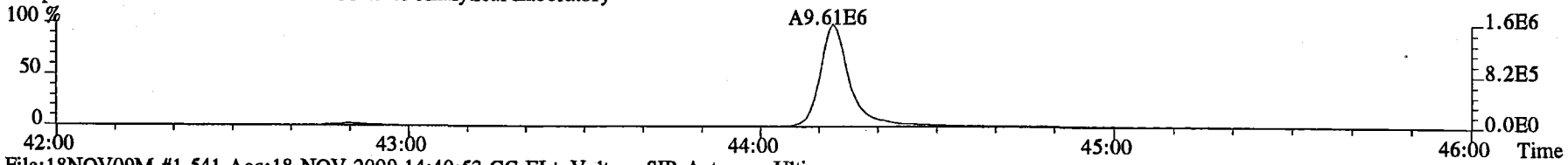
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



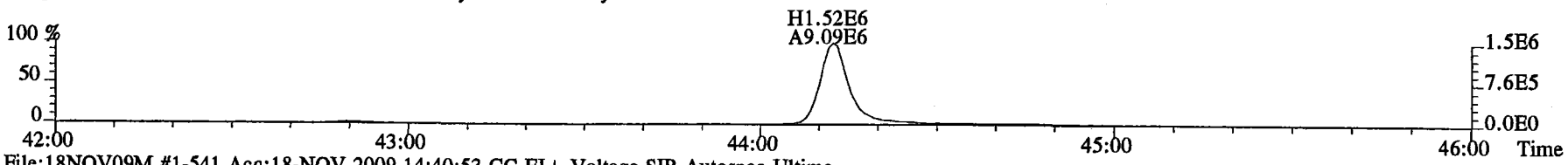
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



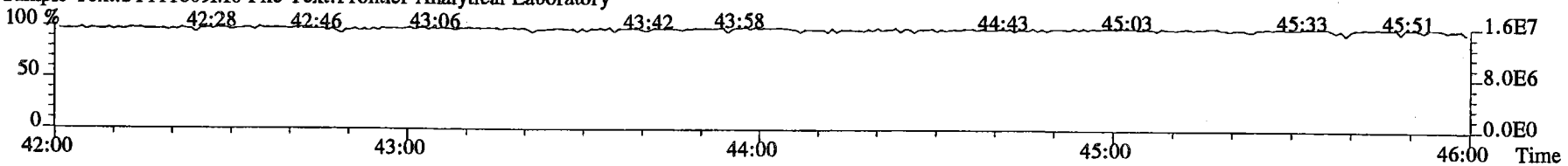
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



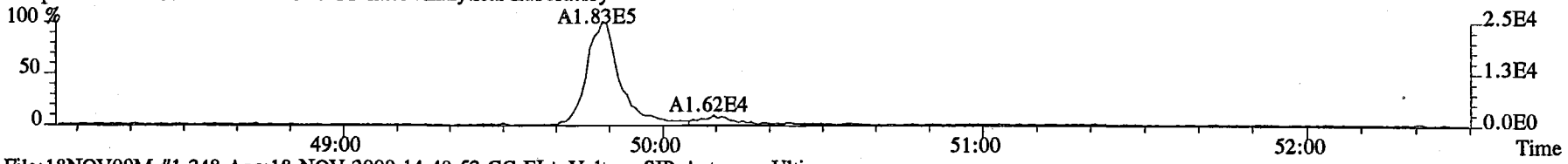
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



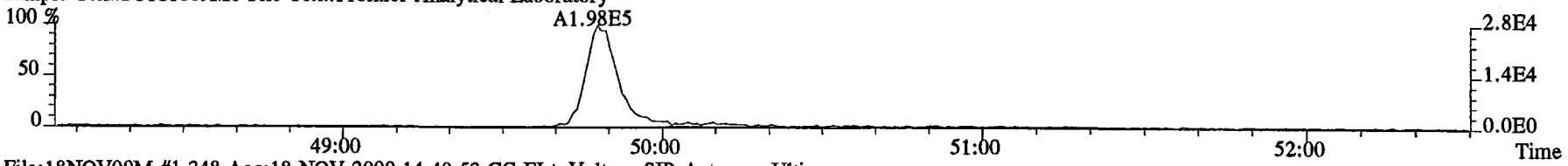
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



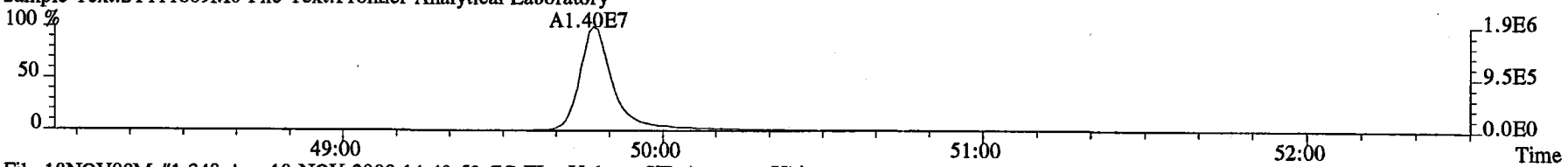
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



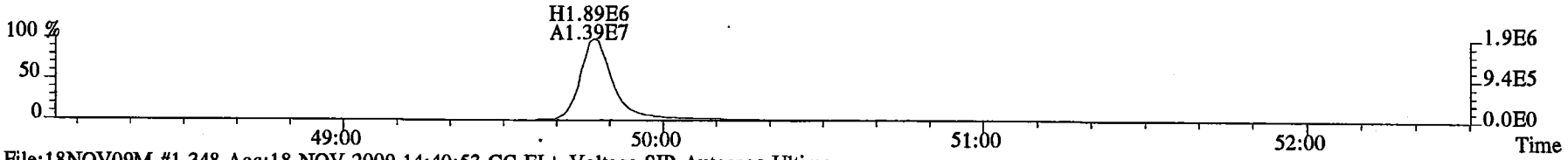
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



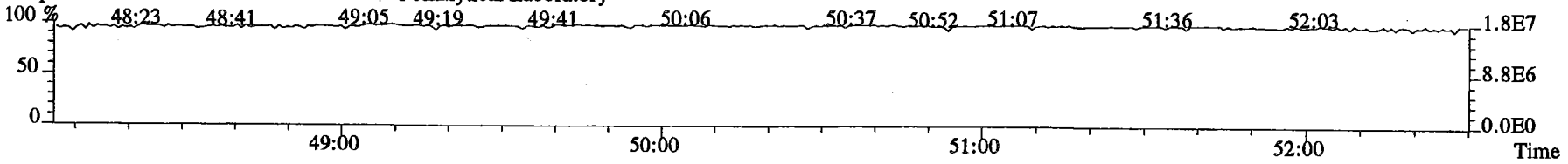
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



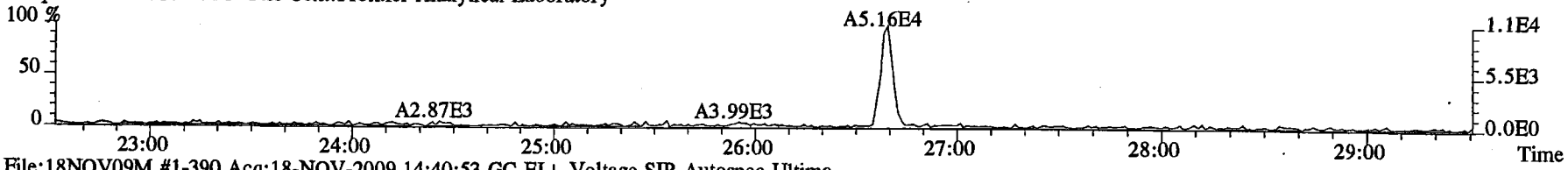
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



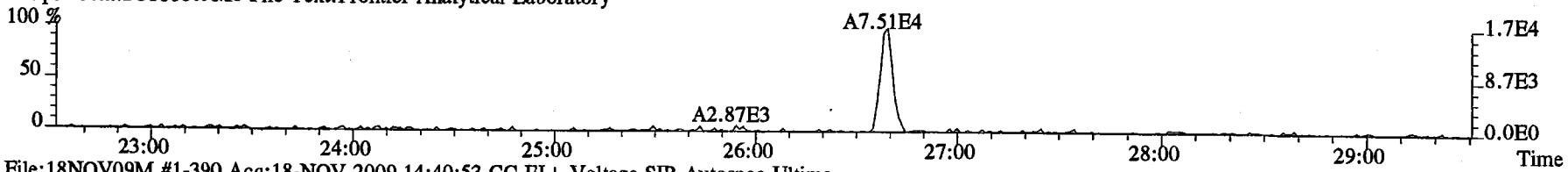
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



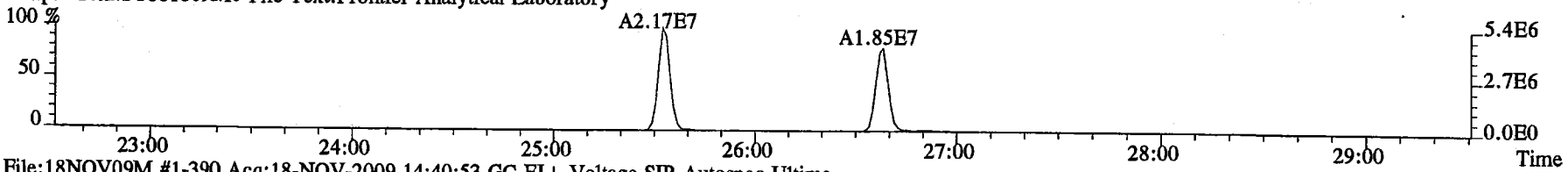
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



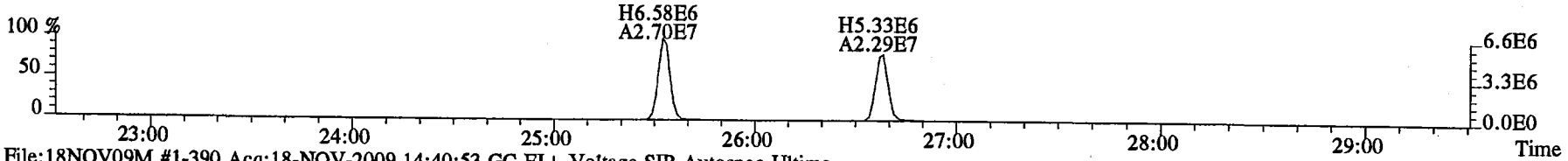
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,0.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



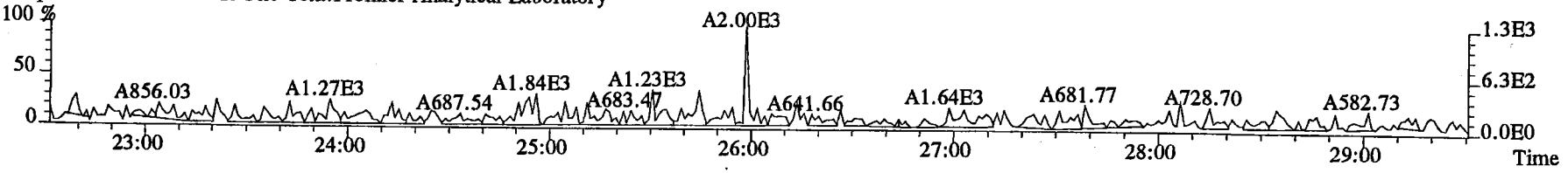
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



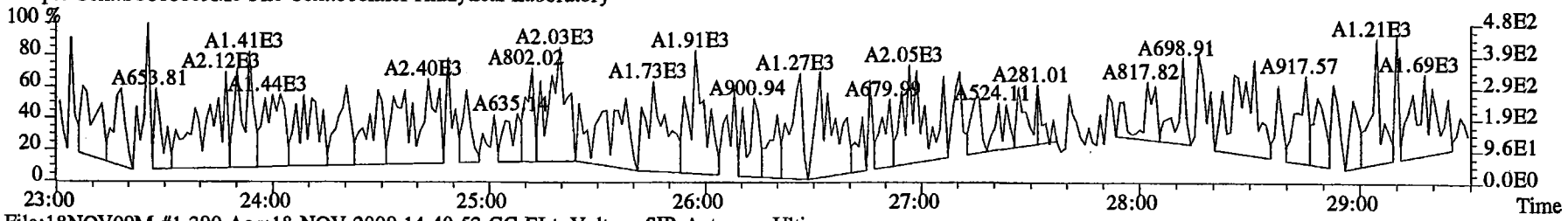
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



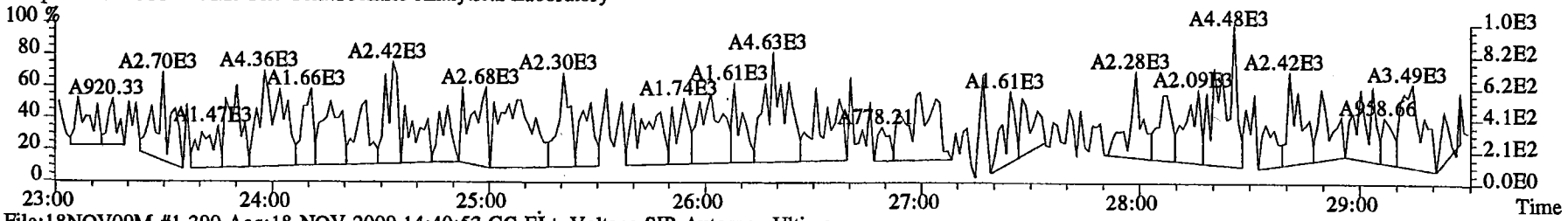
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



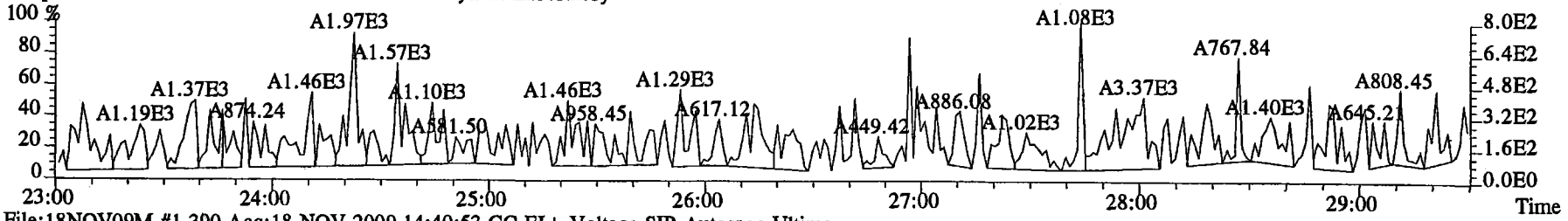
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



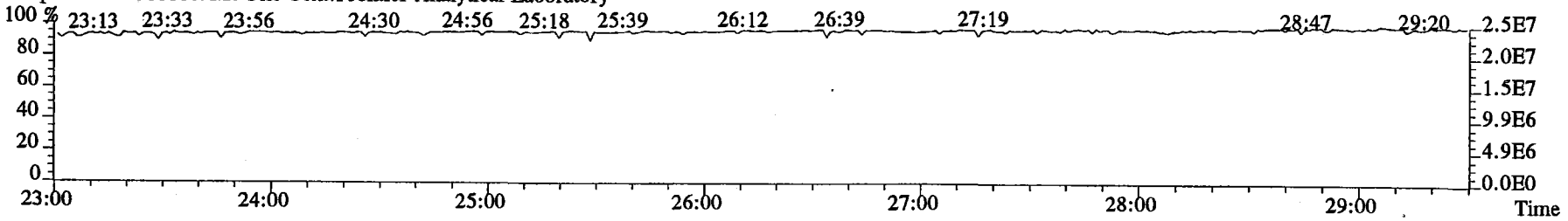
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



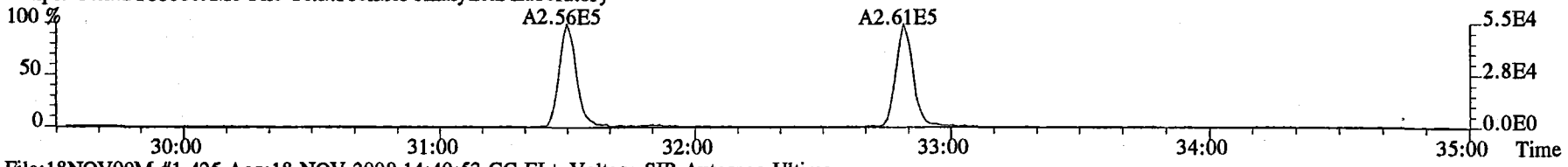
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



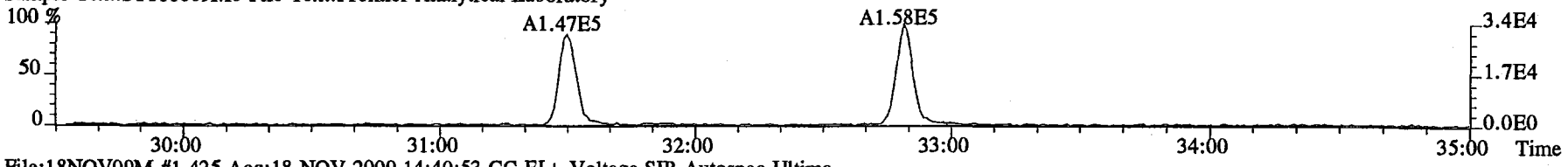
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



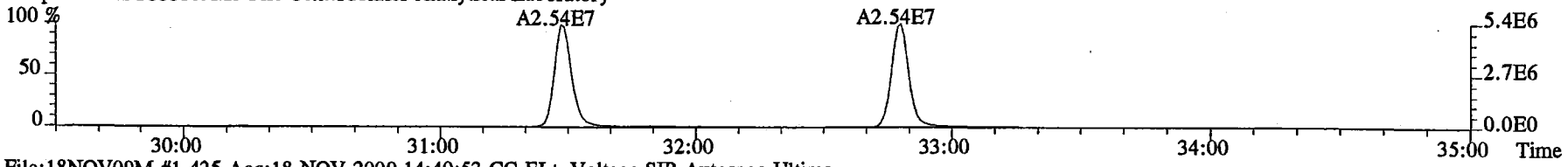
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



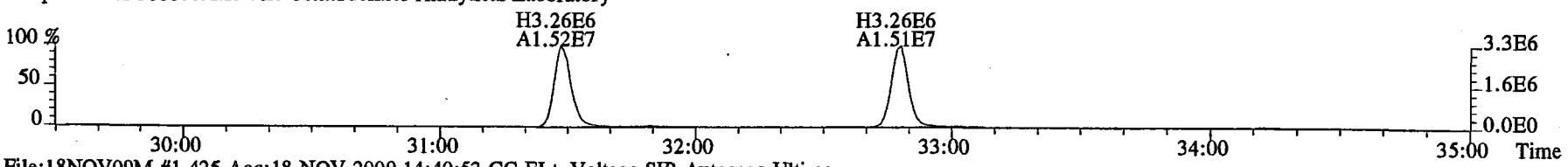
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



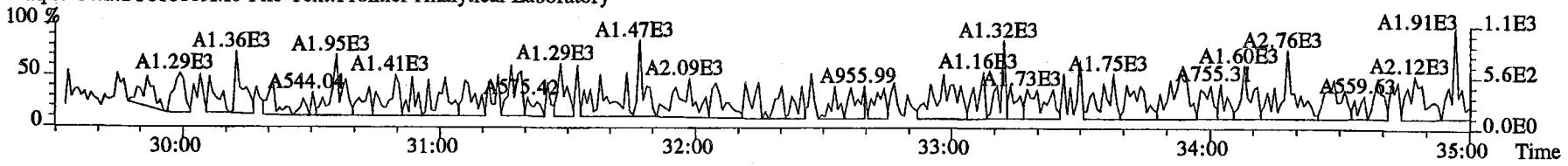
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



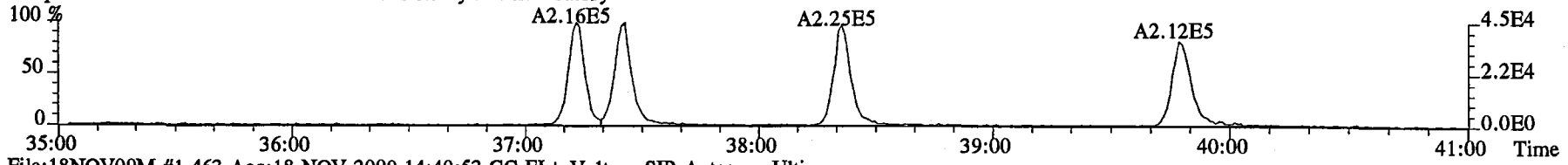
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



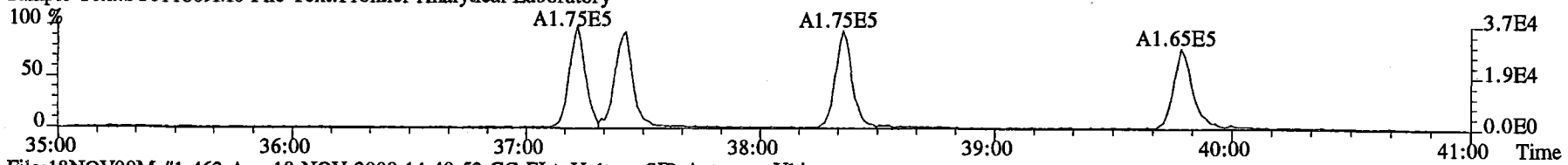
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



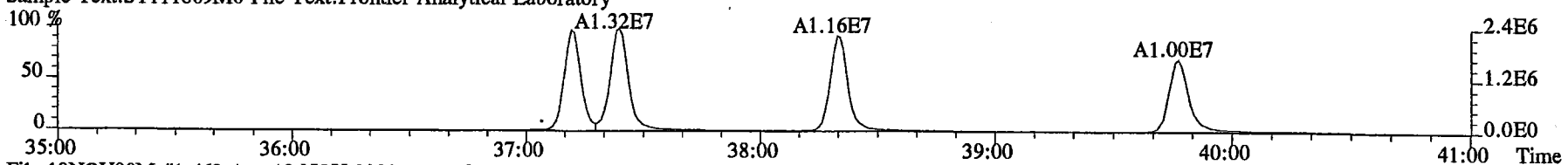
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



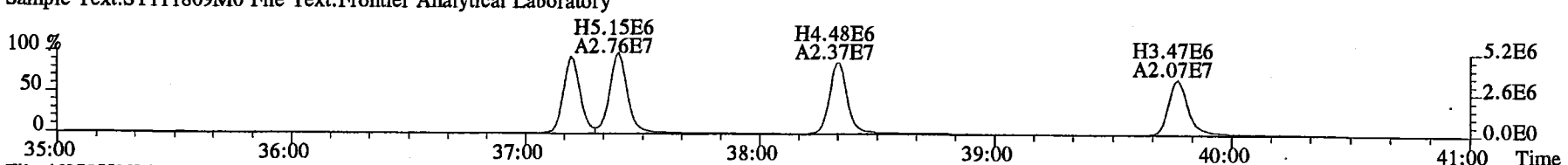
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



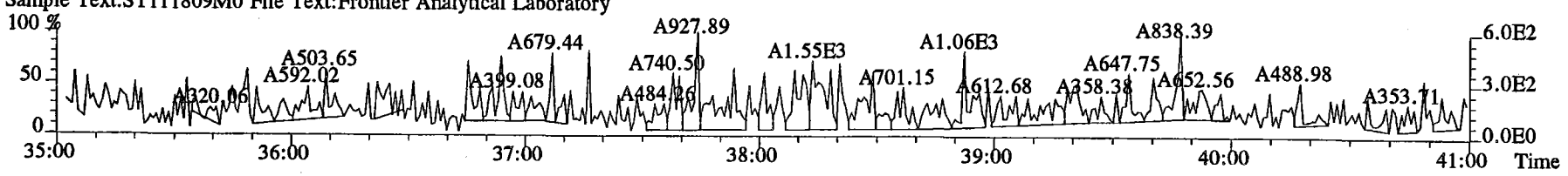
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



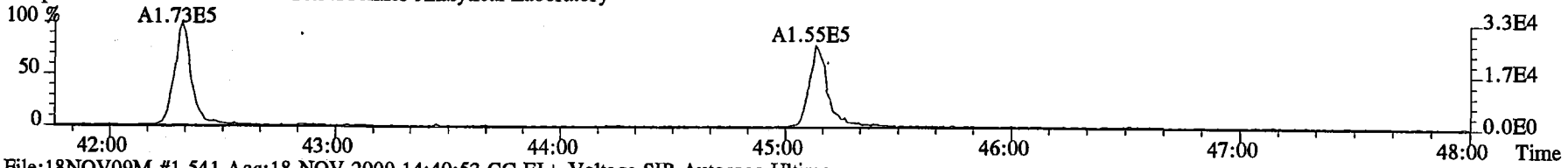
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



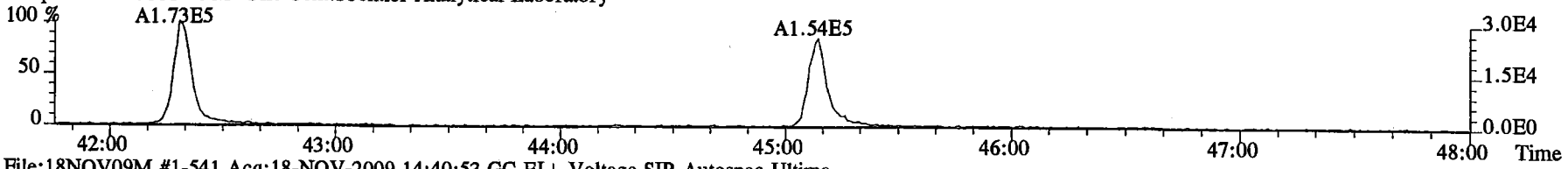
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



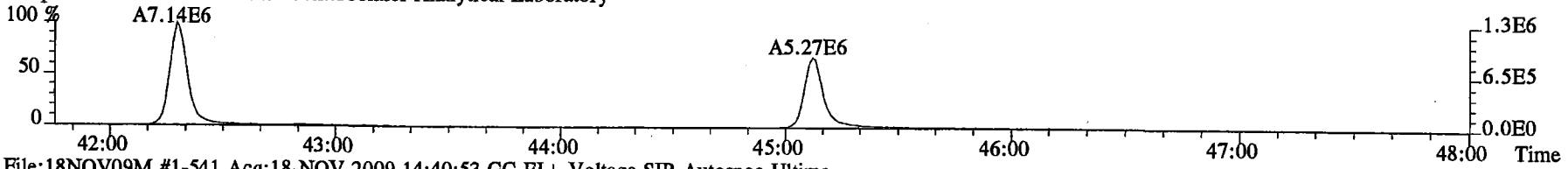
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



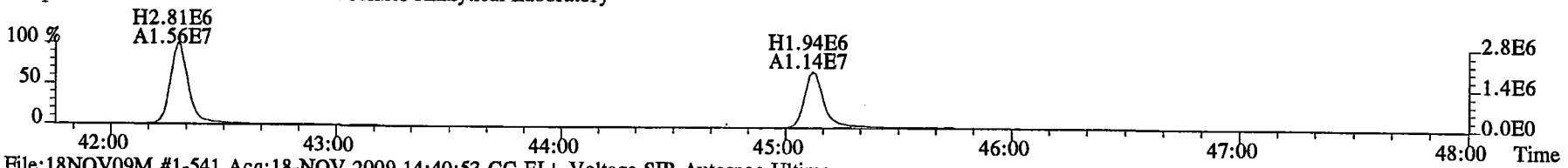
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



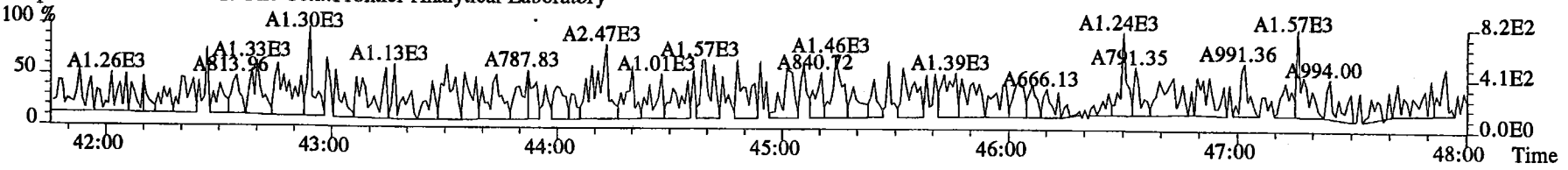
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



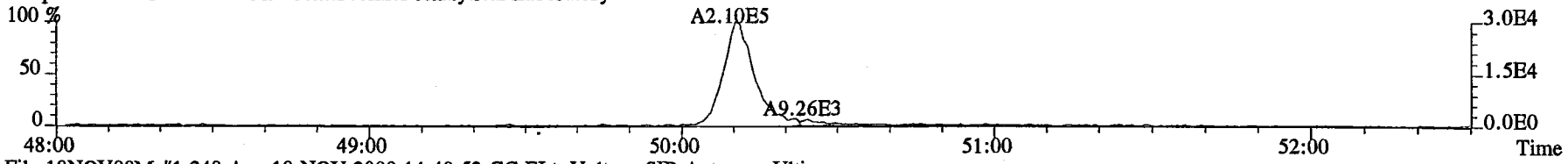
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



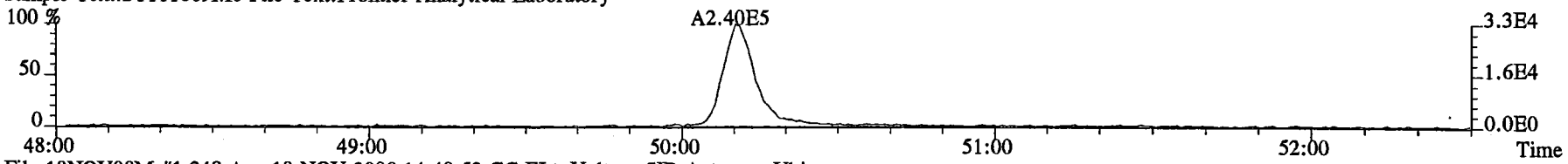
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



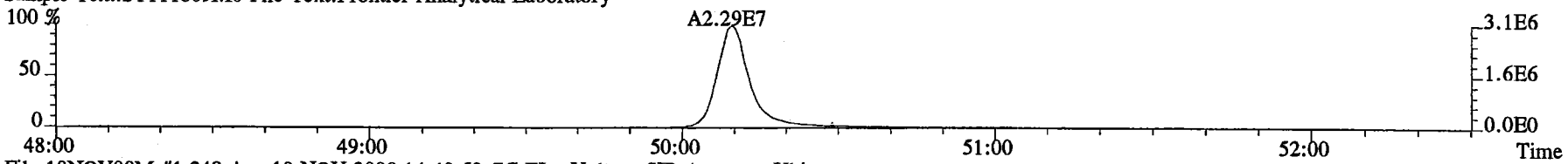
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



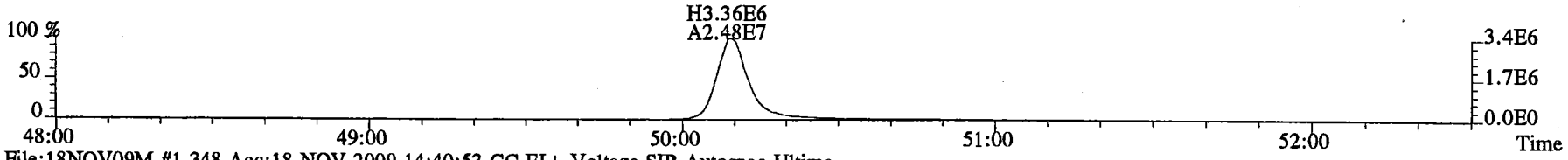
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



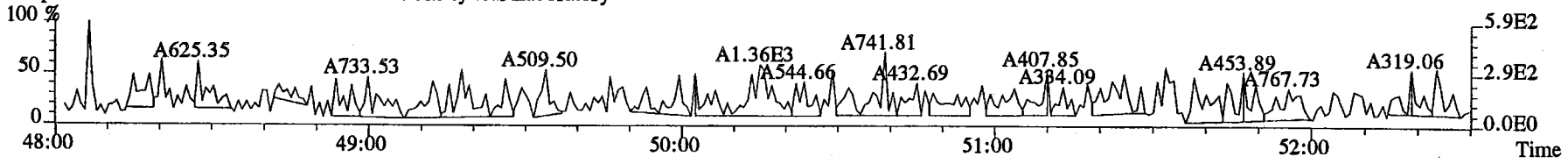
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



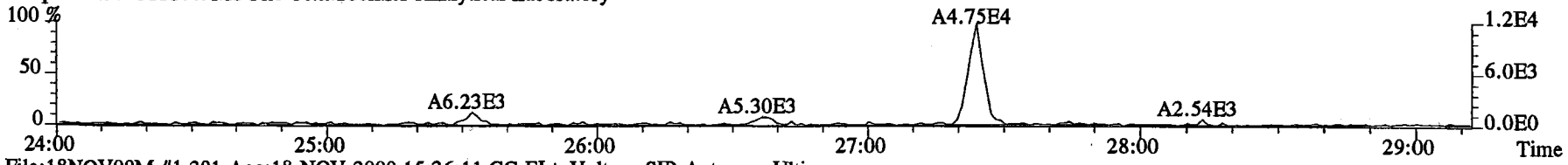
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



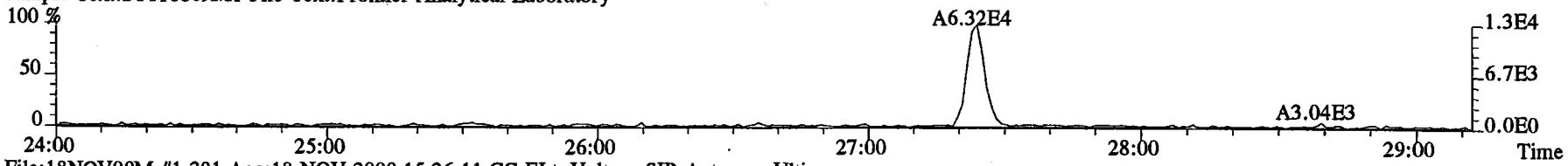
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



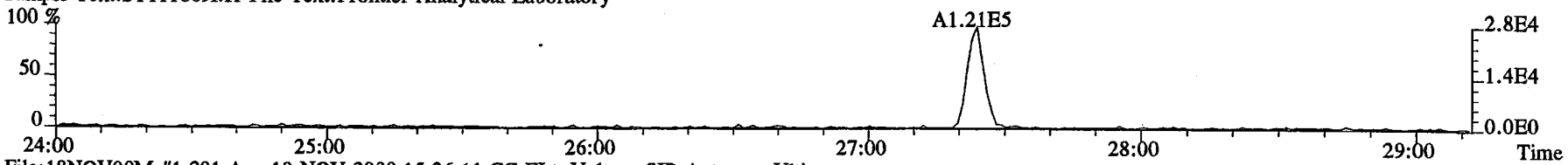
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



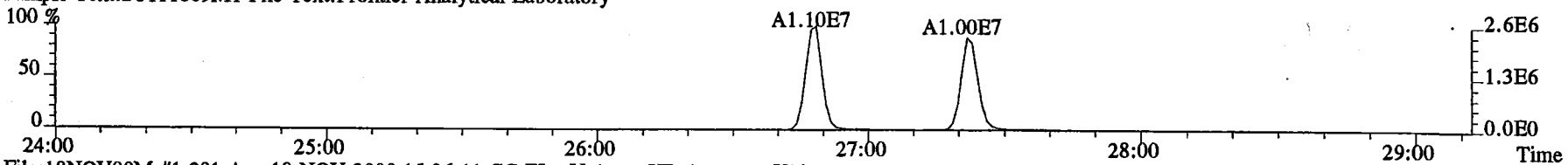
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



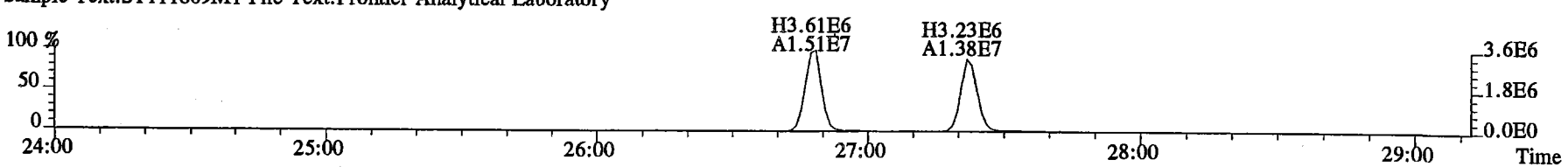
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



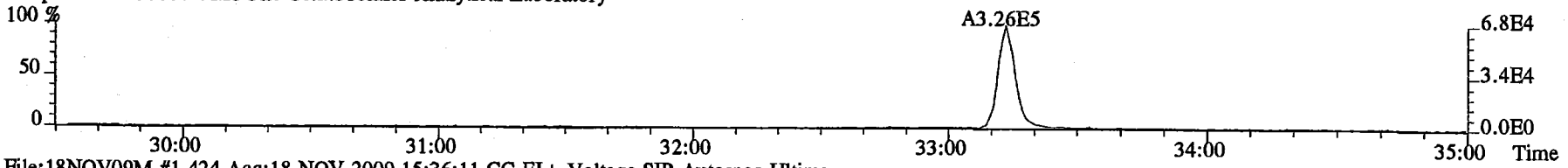
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



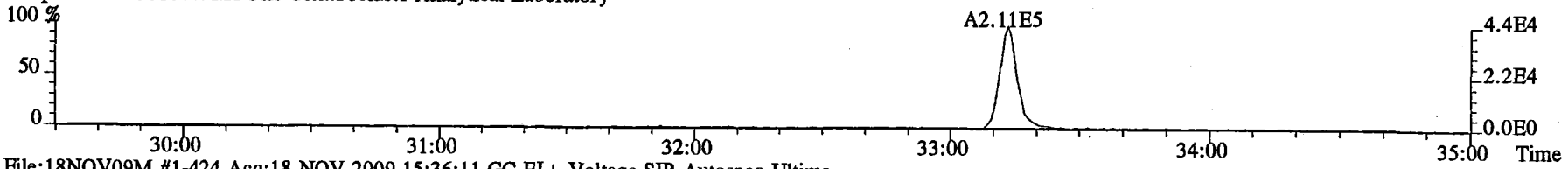
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



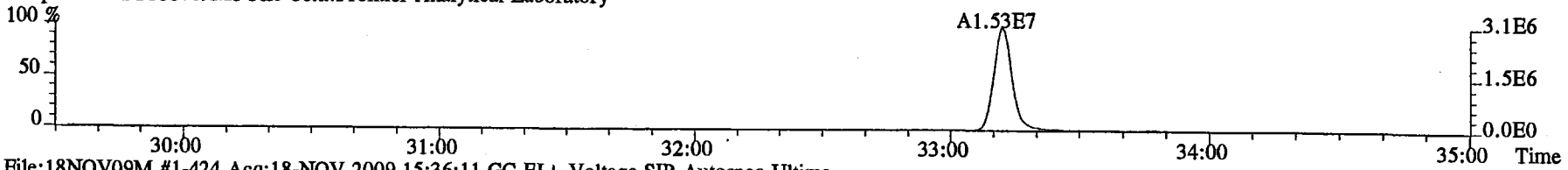
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



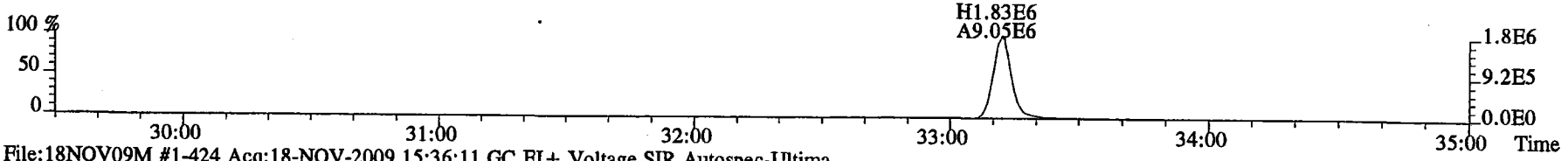
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



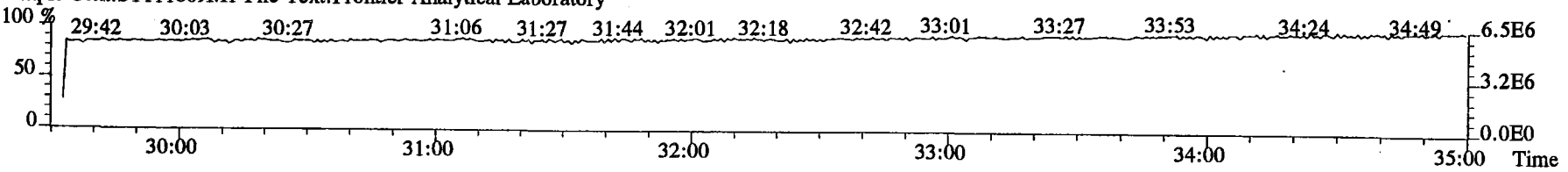
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



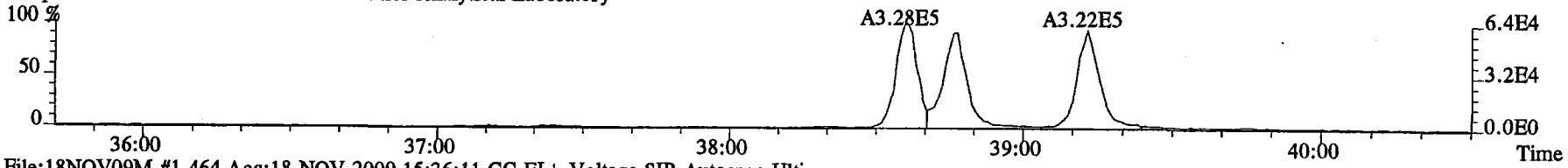
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



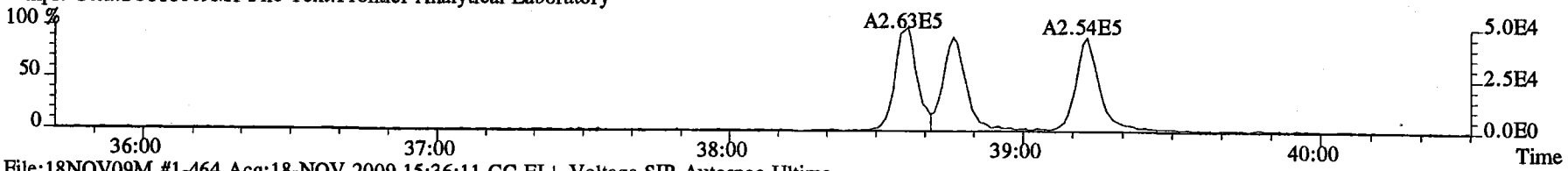
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



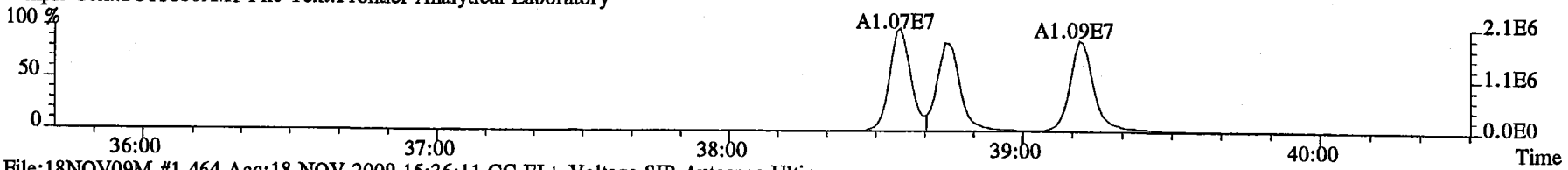
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



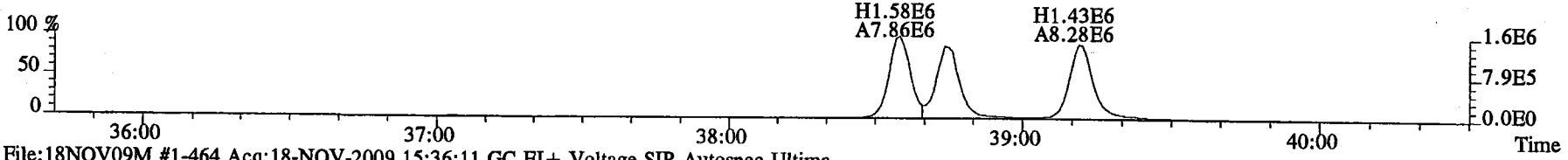
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



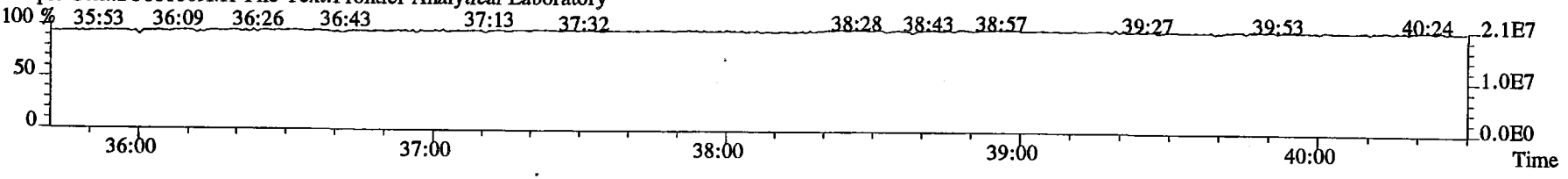
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



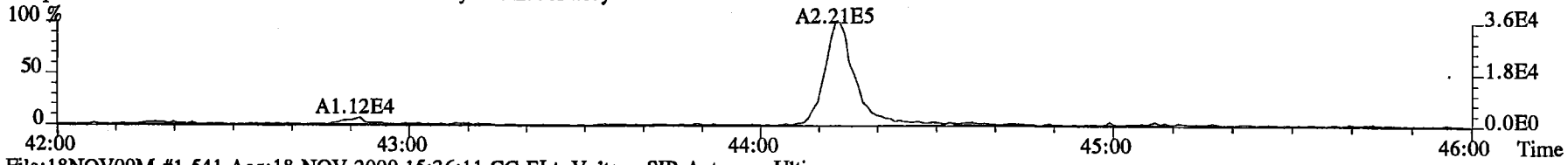
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



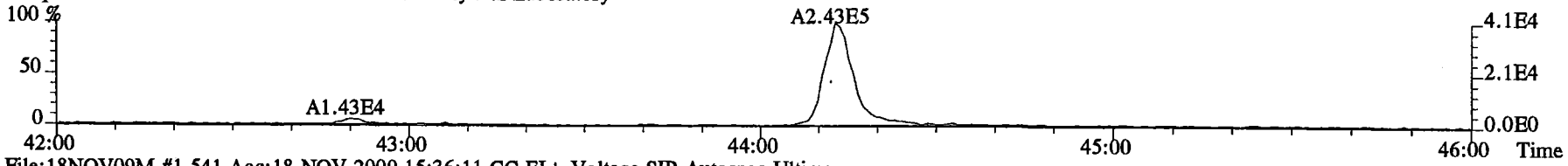
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



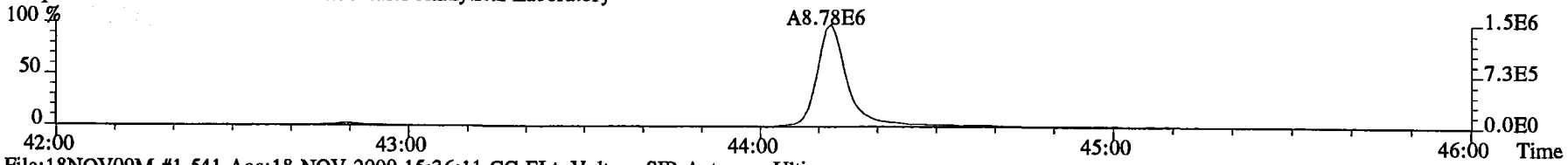
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



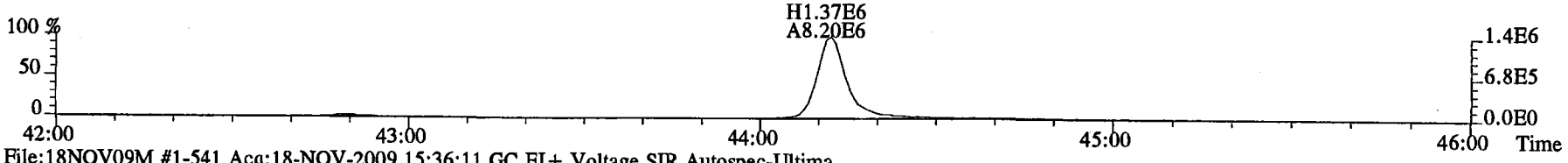
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



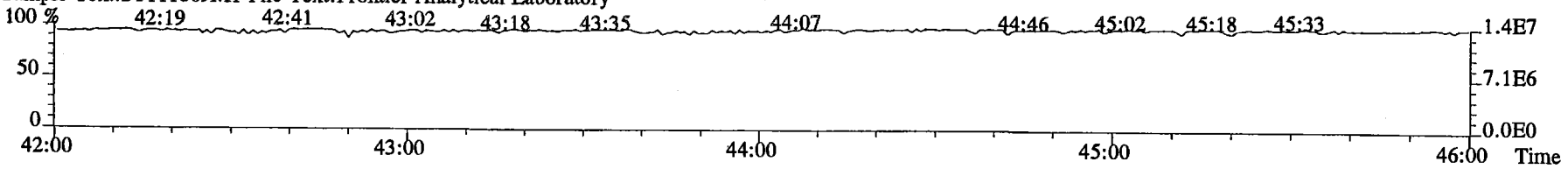
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



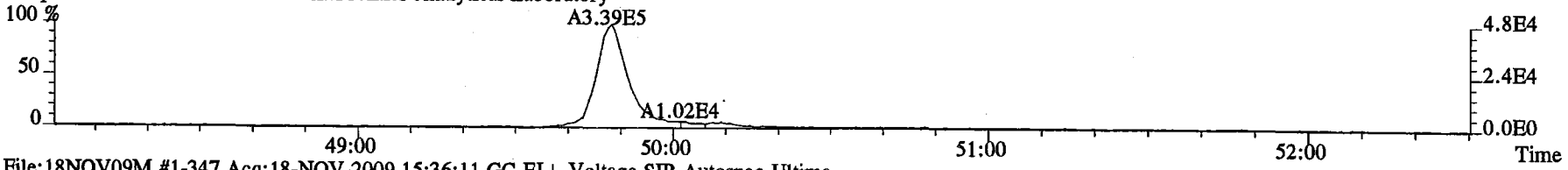
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



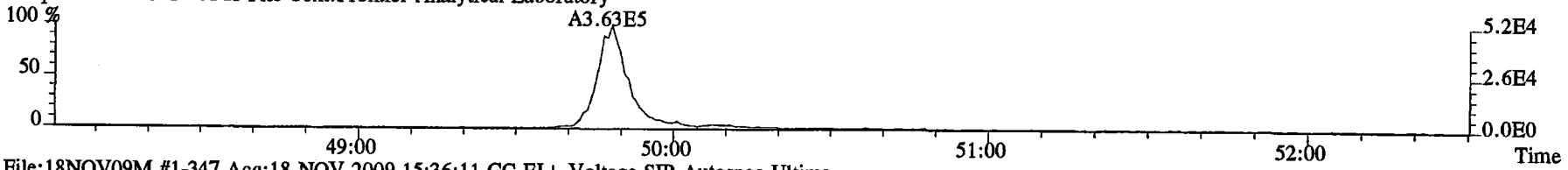
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



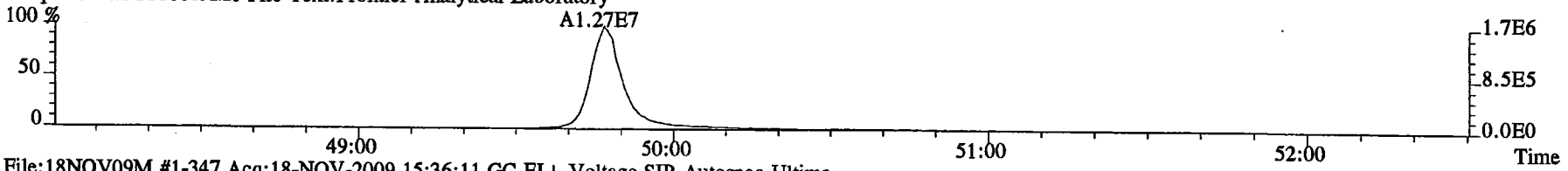
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



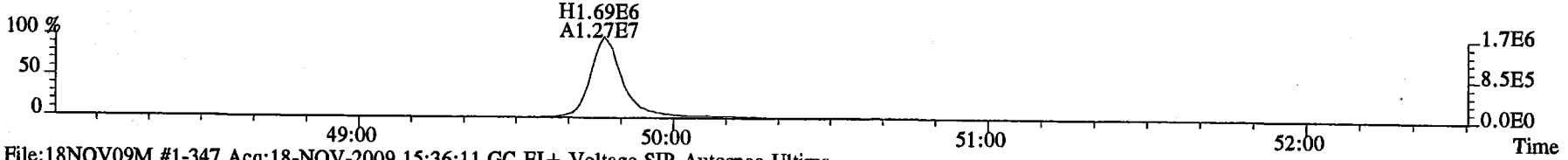
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



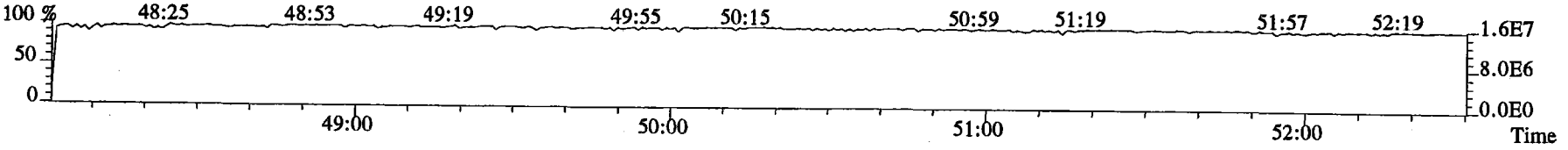
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



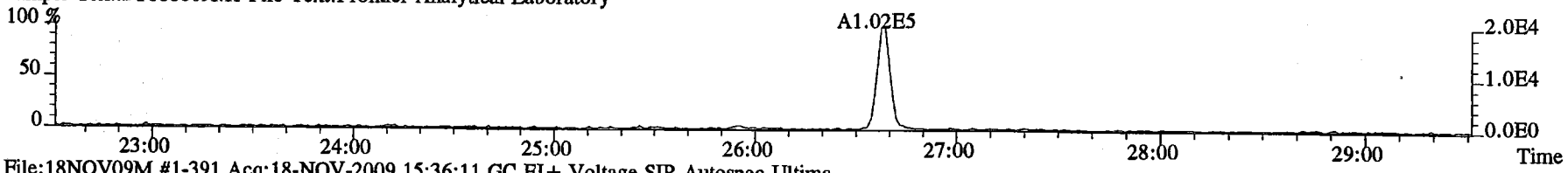
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



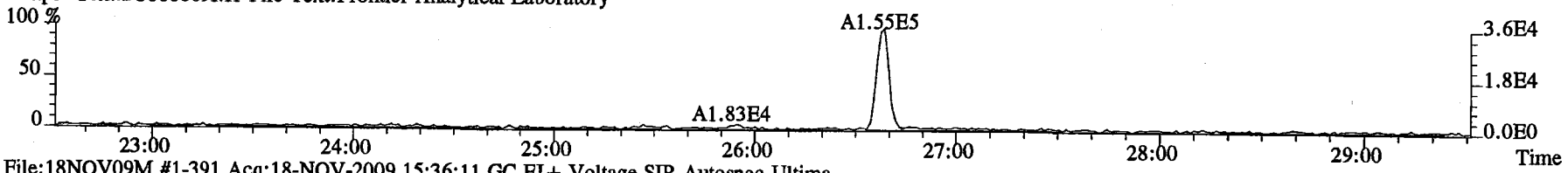
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



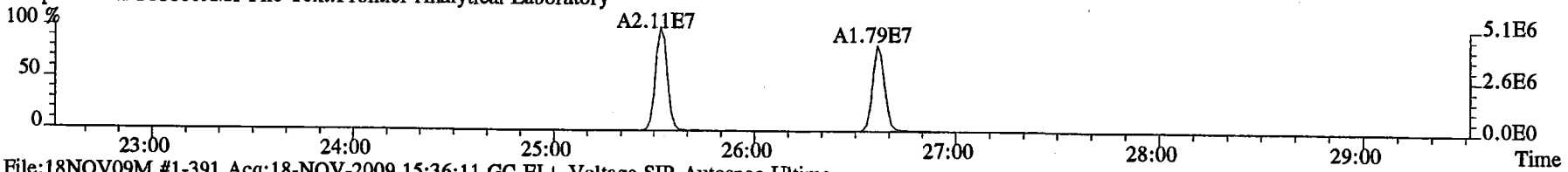
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



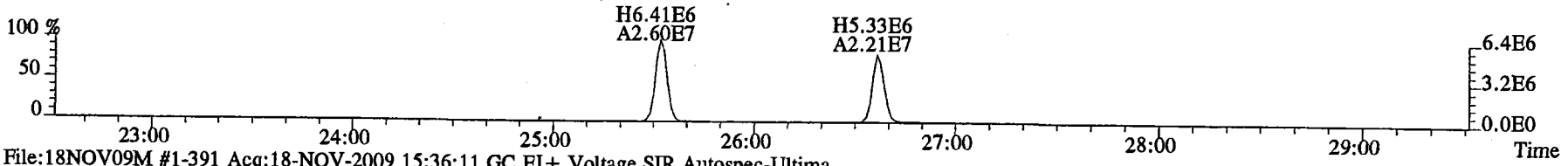
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



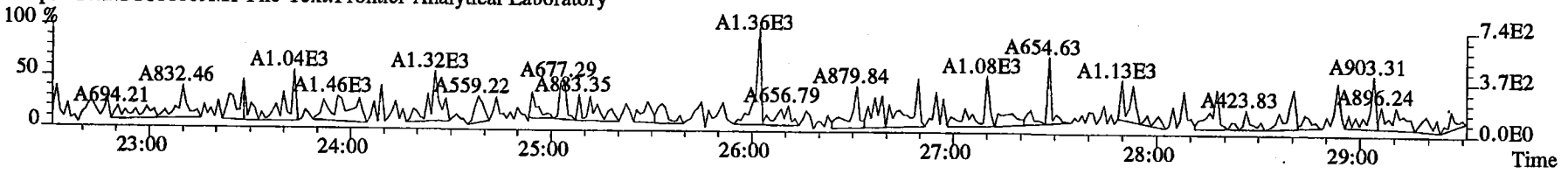
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



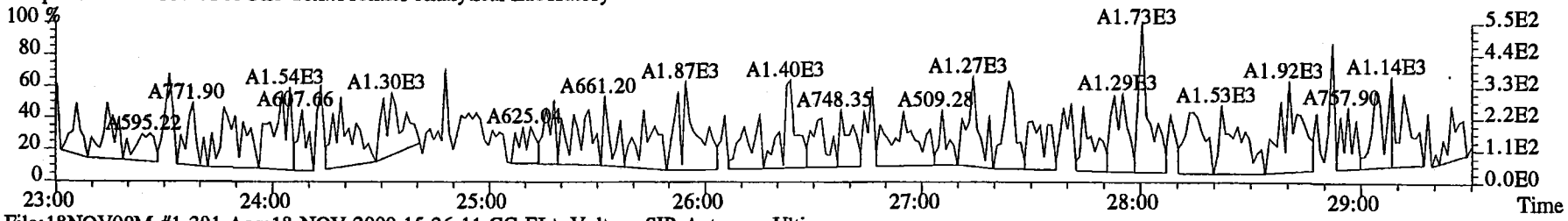
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



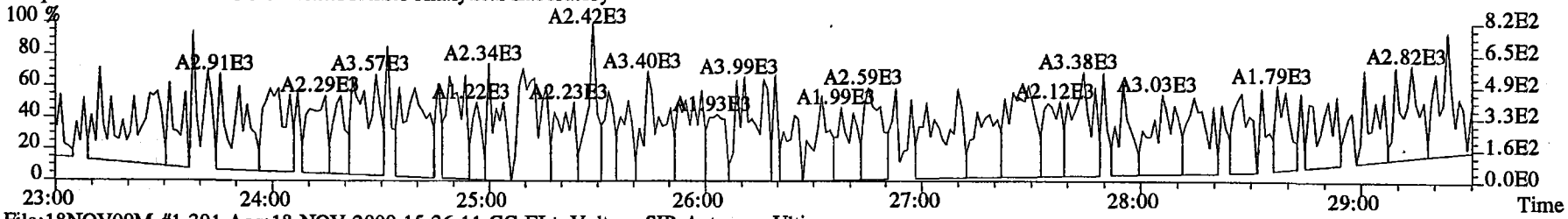
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



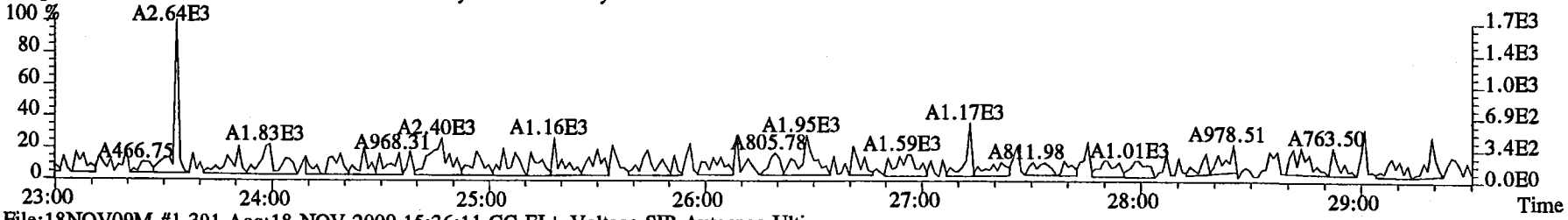
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



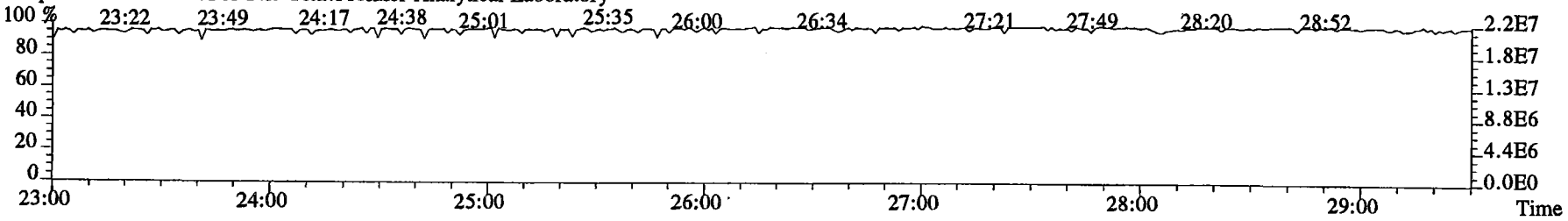
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



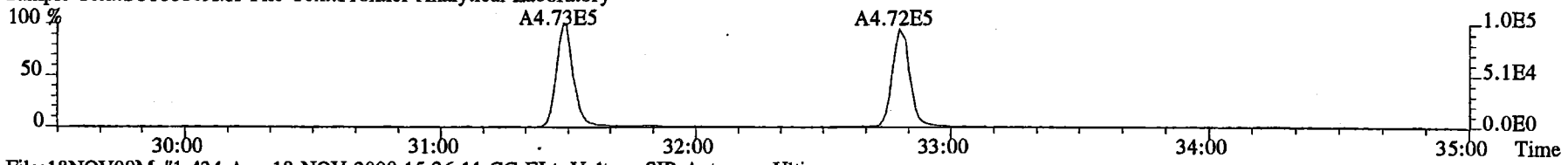
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



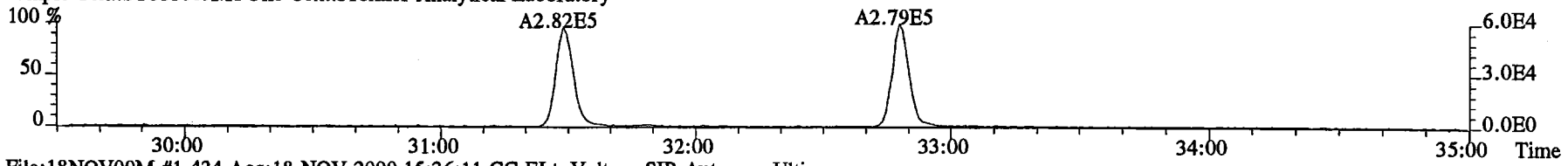
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



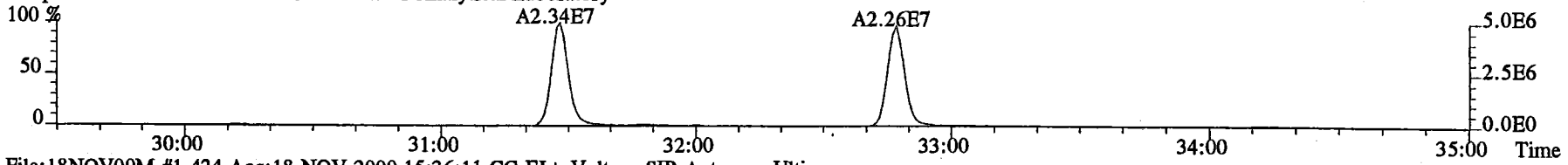
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



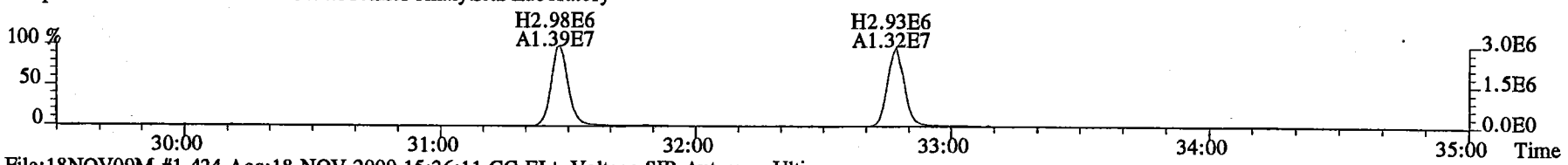
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



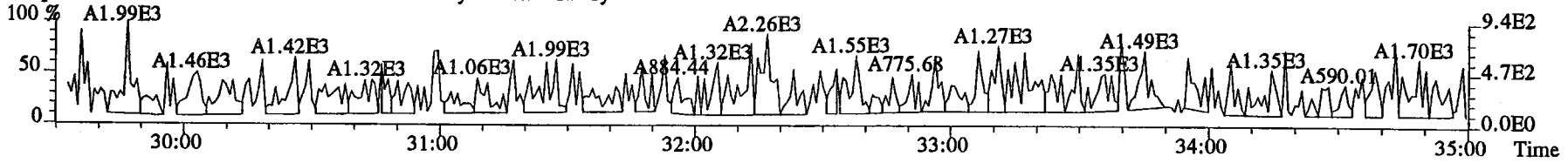
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



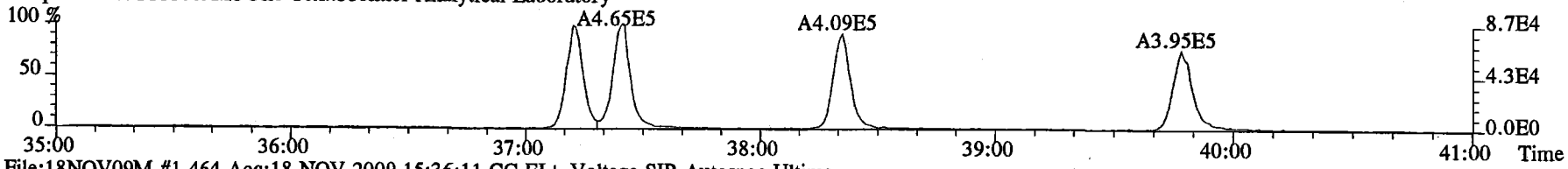
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



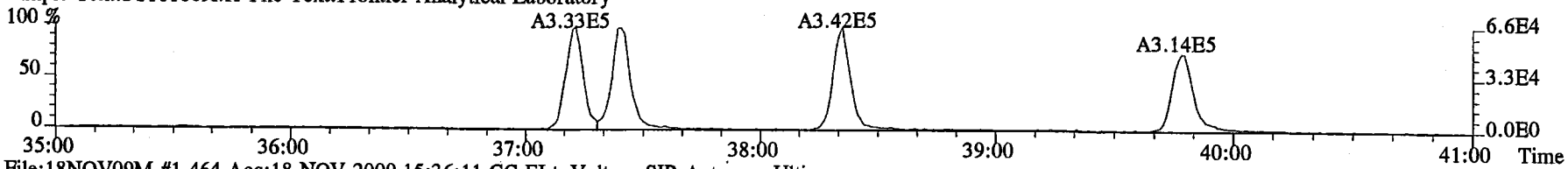
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



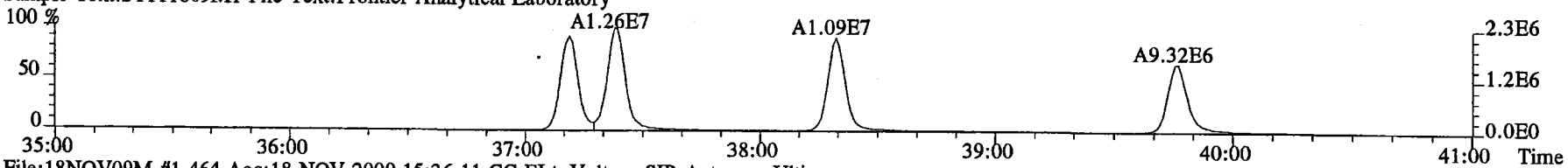
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



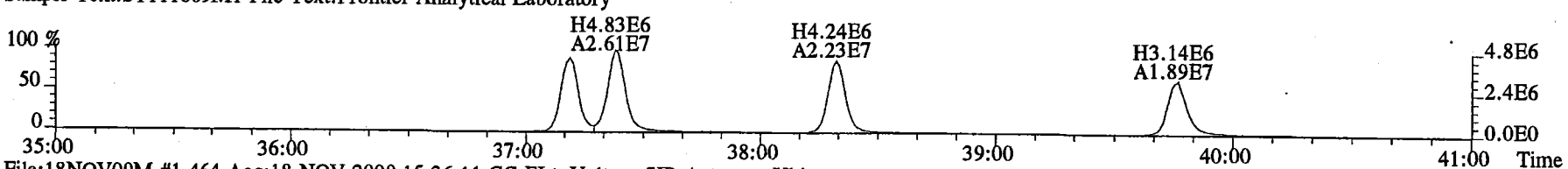
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



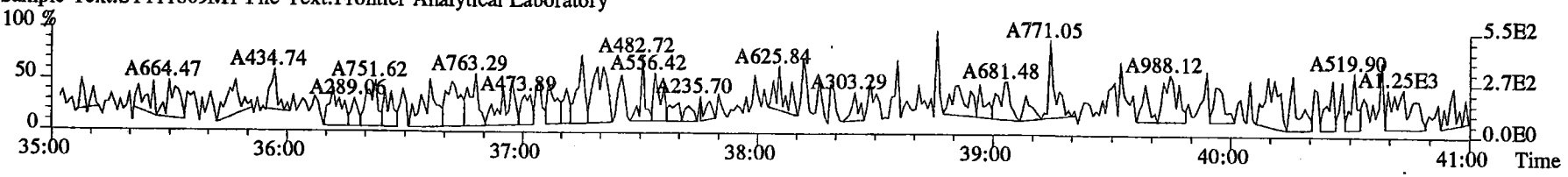
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



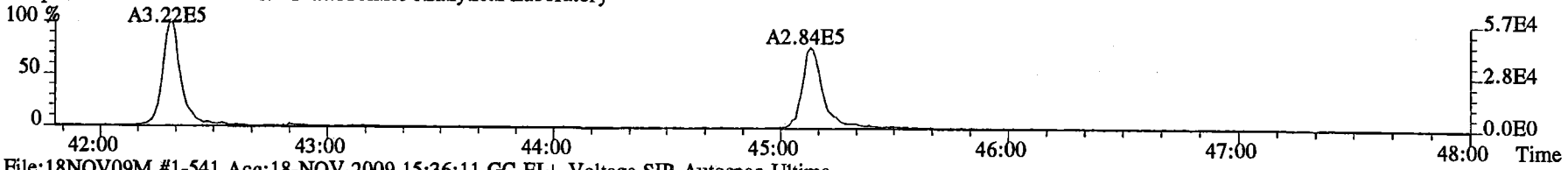
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



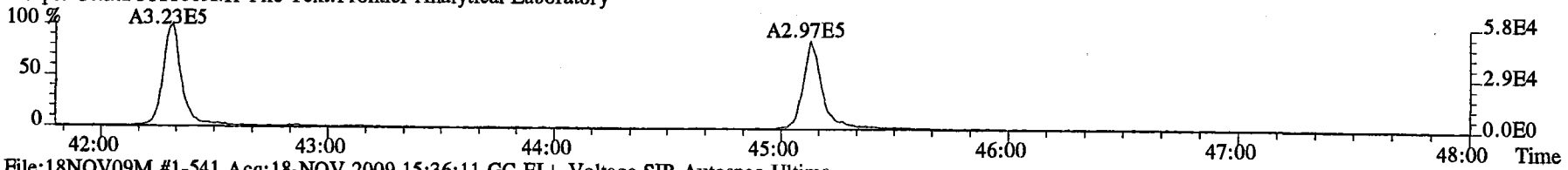
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



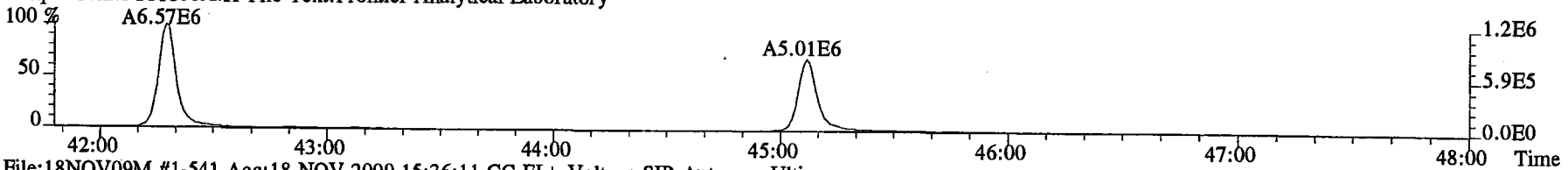
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



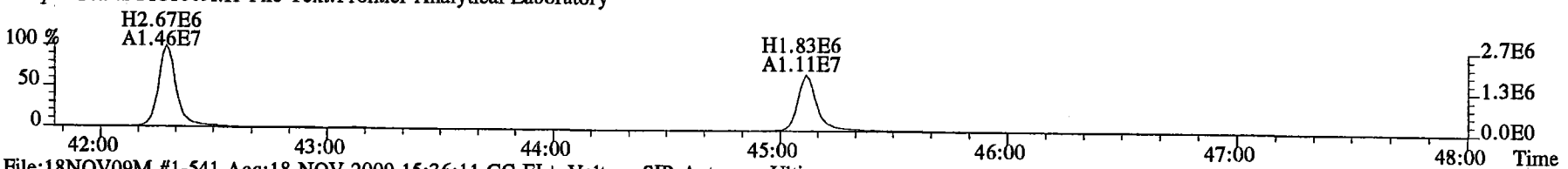
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



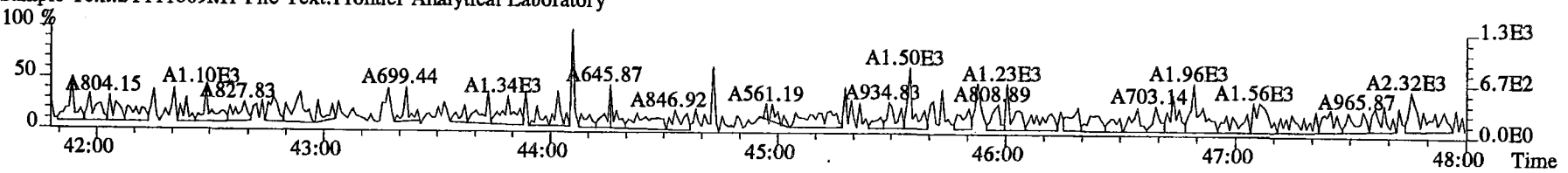
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



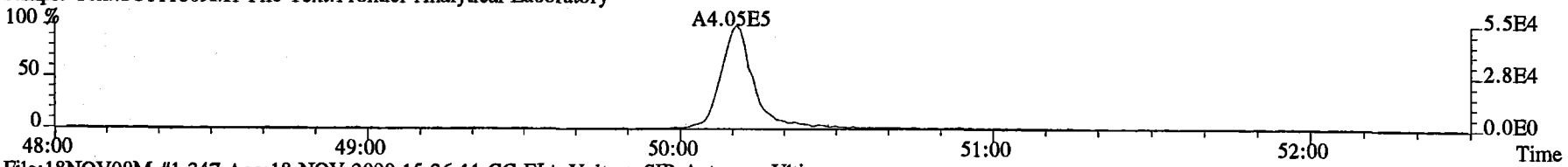
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



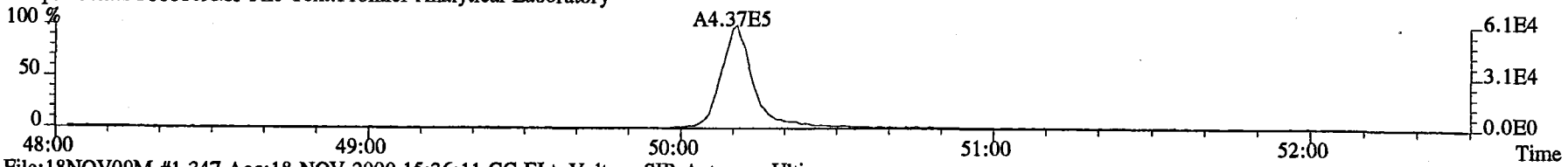
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



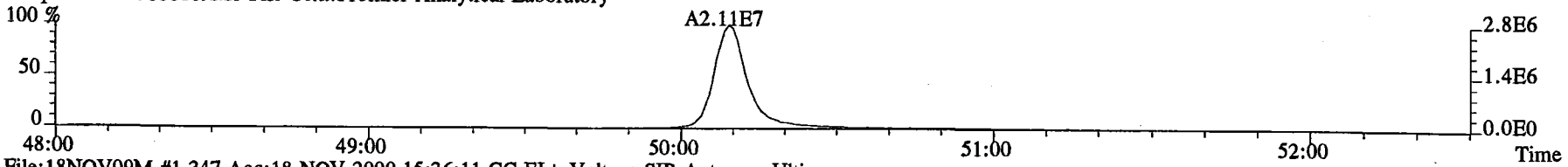
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



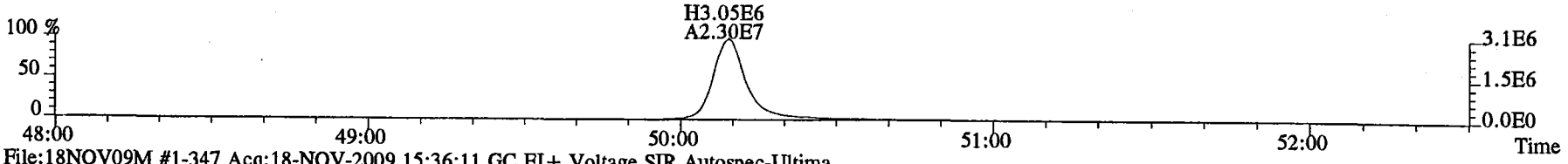
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



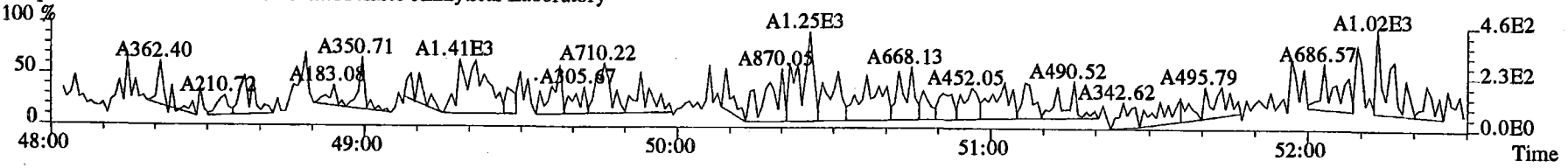
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



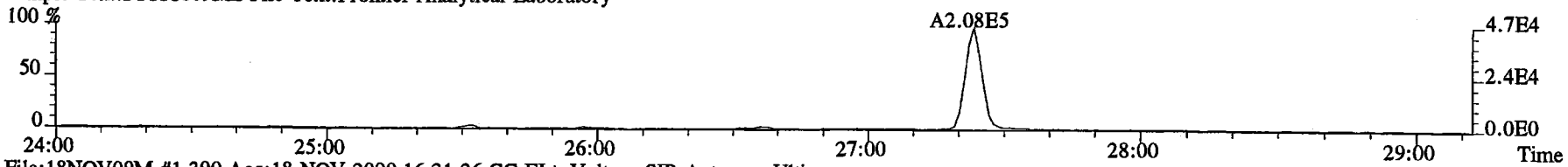
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



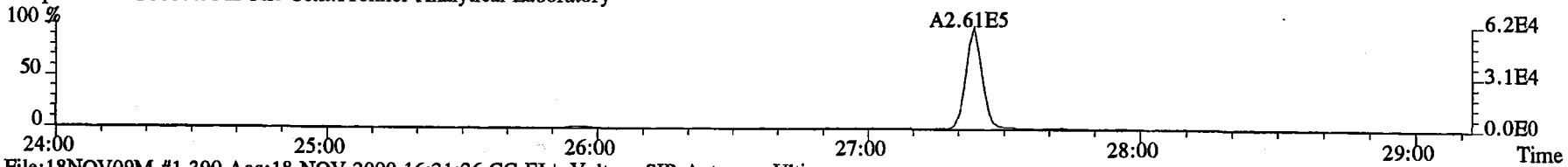
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



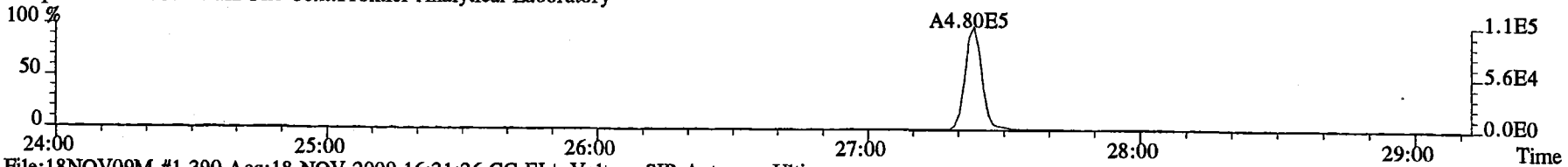
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



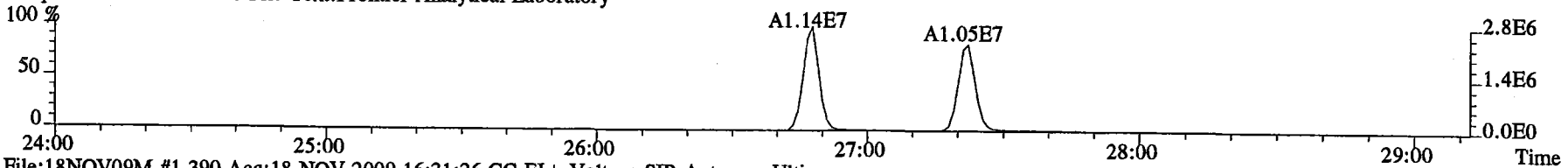
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



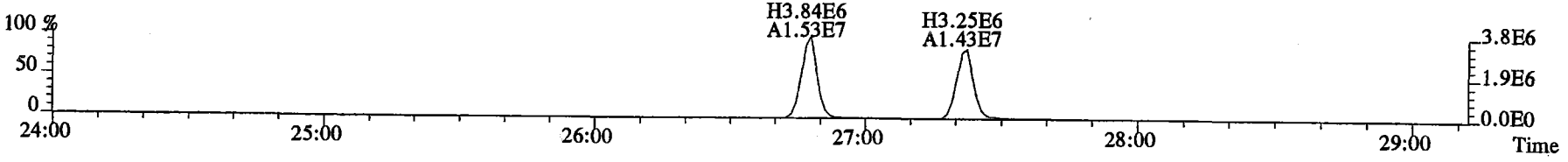
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



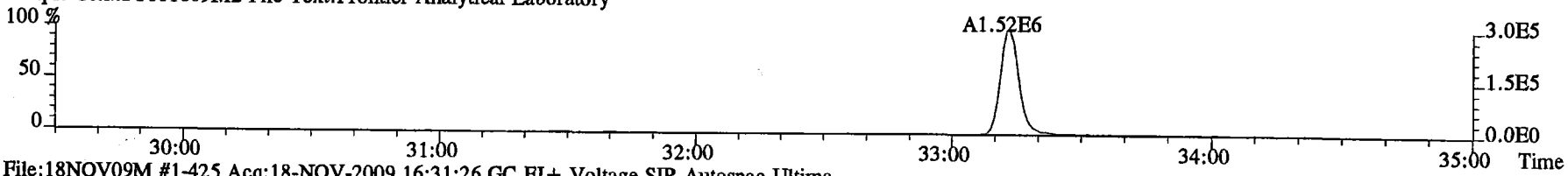
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



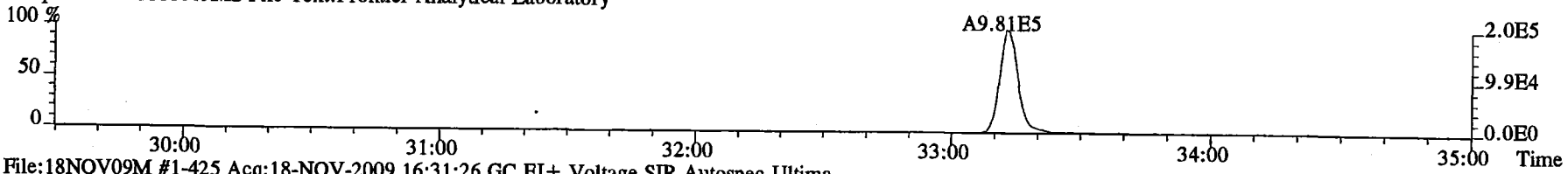
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



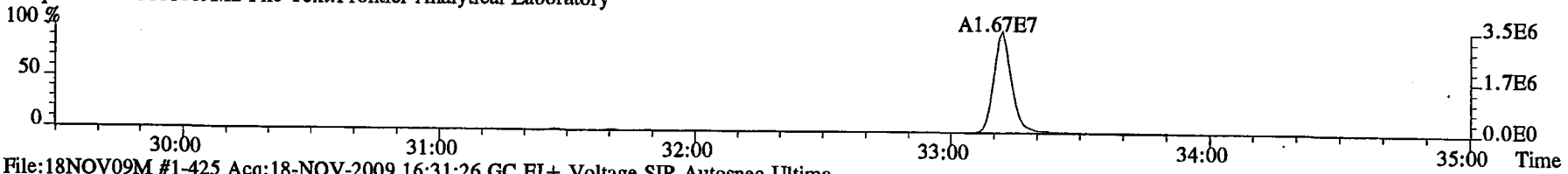
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



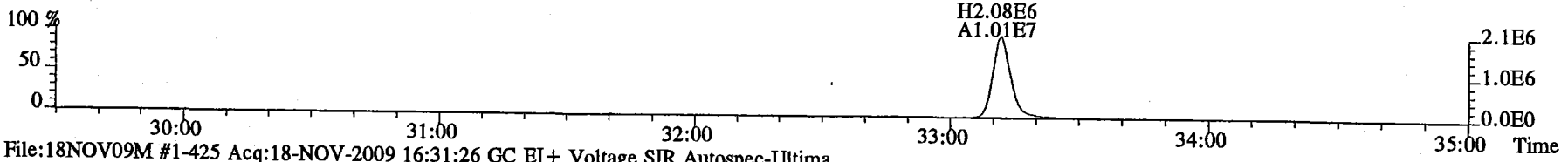
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



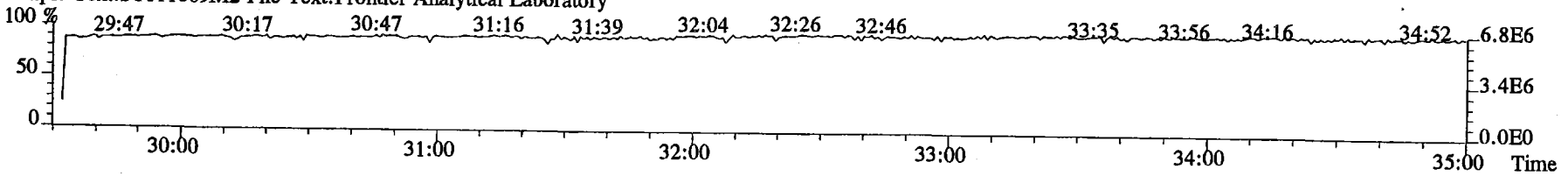
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



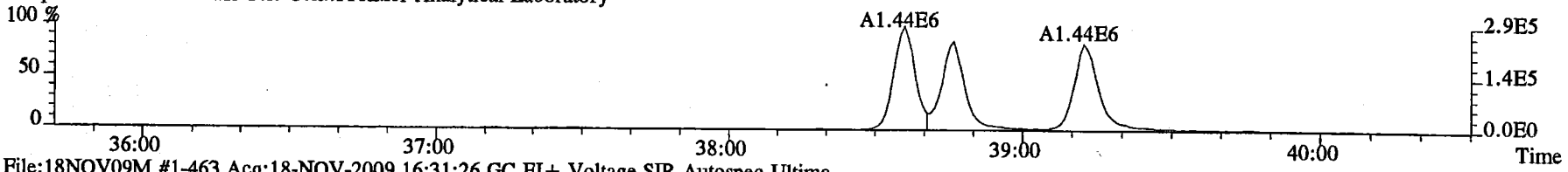
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



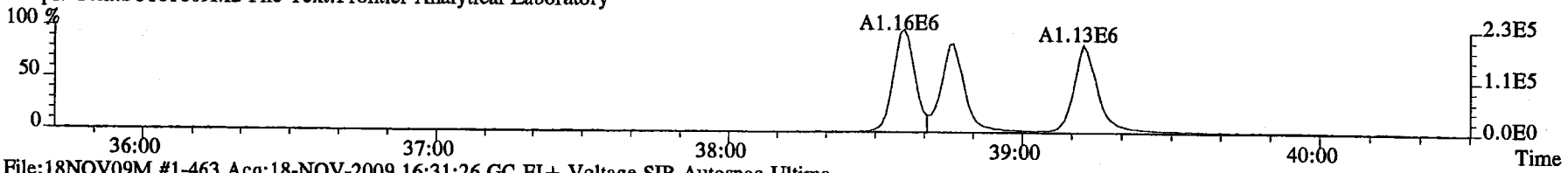
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



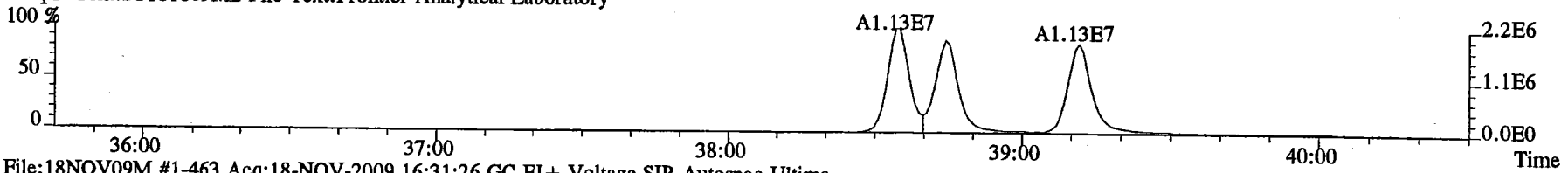
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



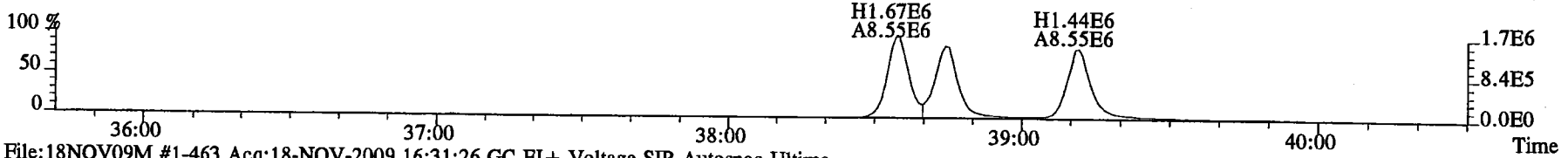
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



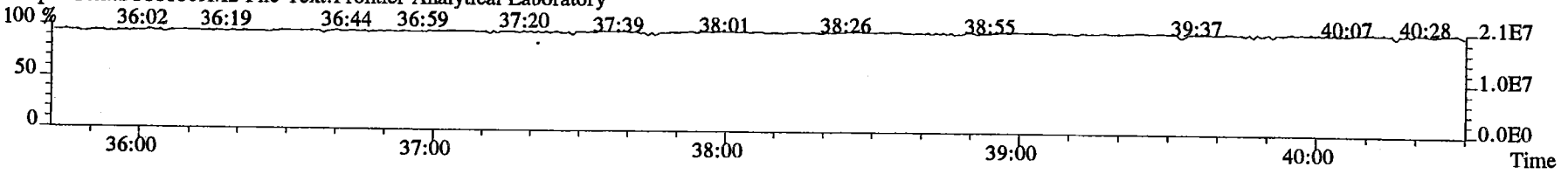
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



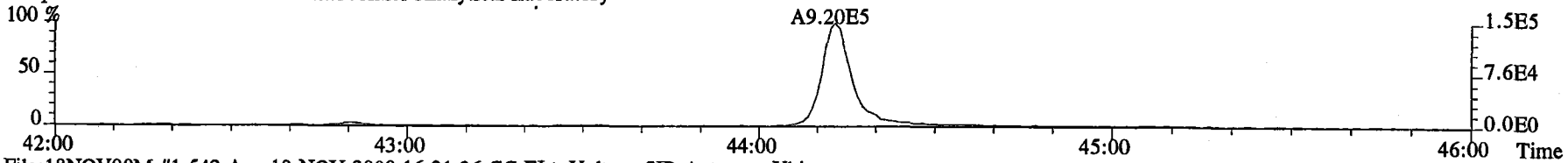
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



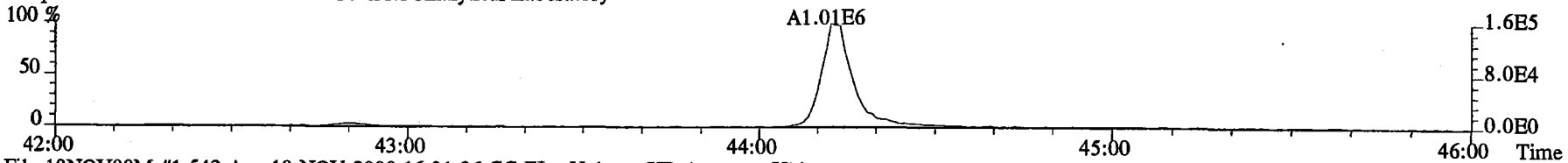
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



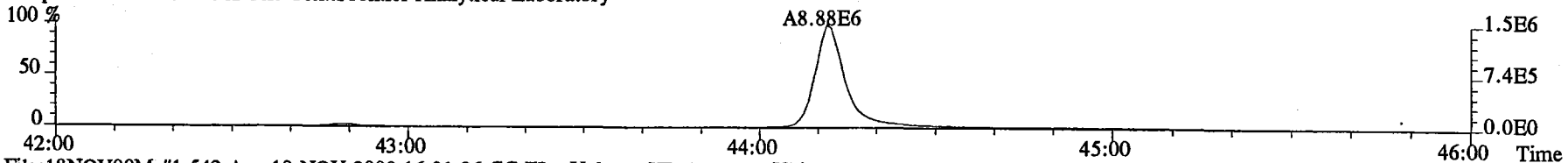
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



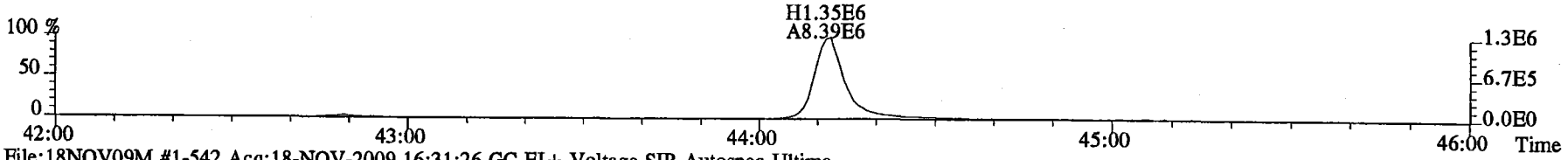
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



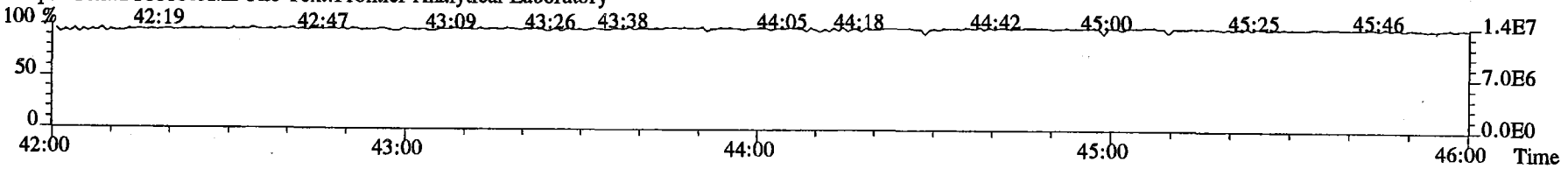
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



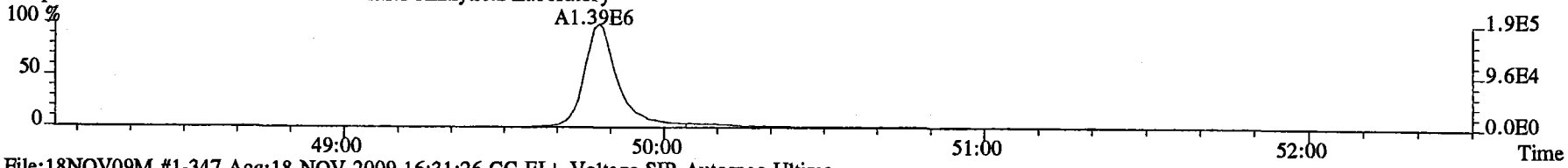
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



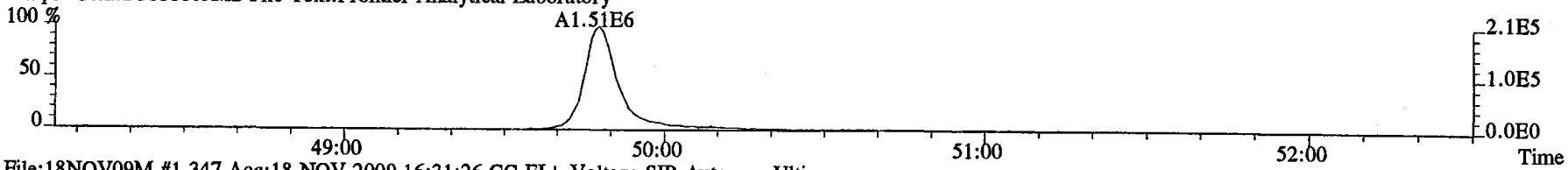
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



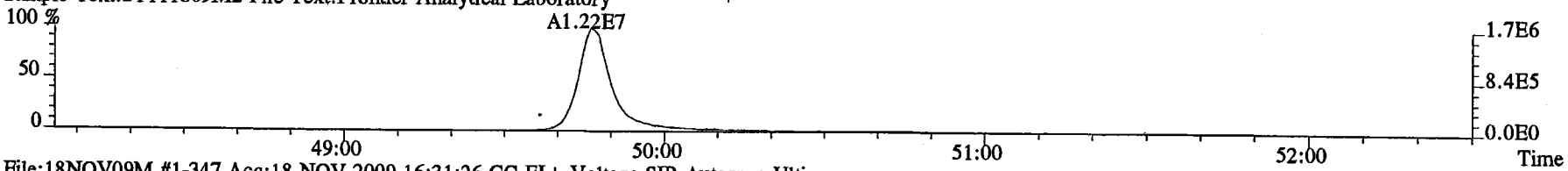
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



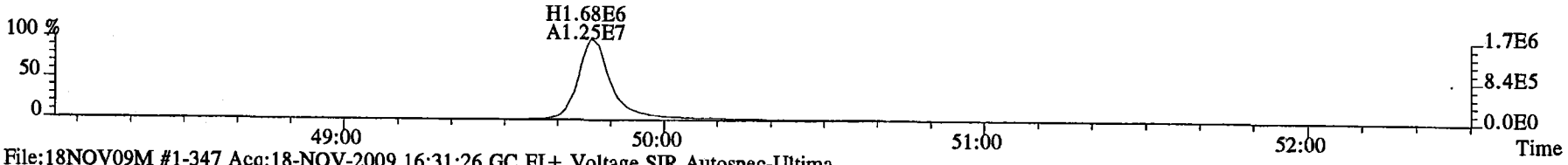
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



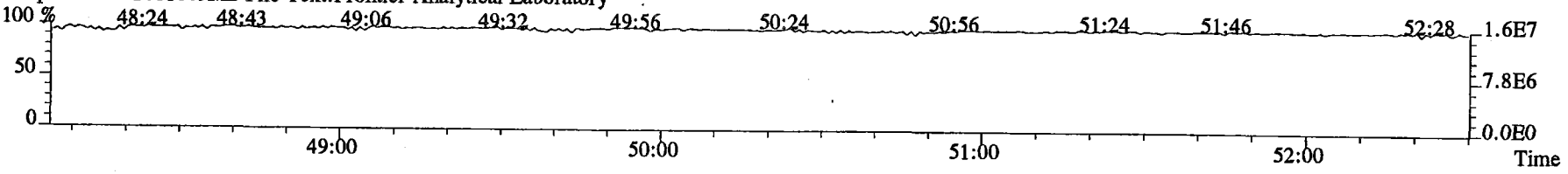
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



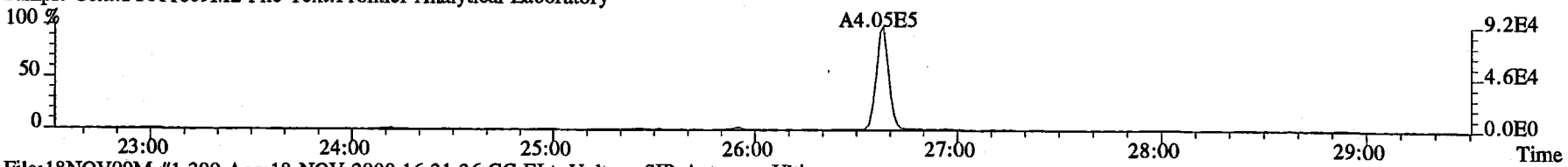
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



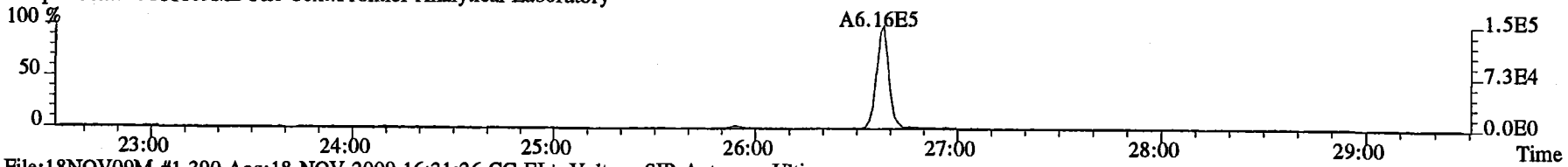
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



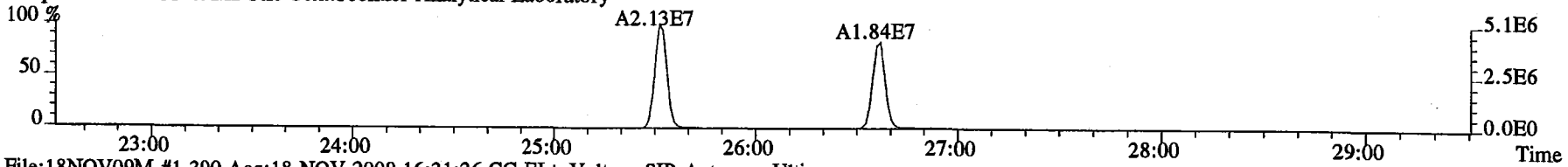
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



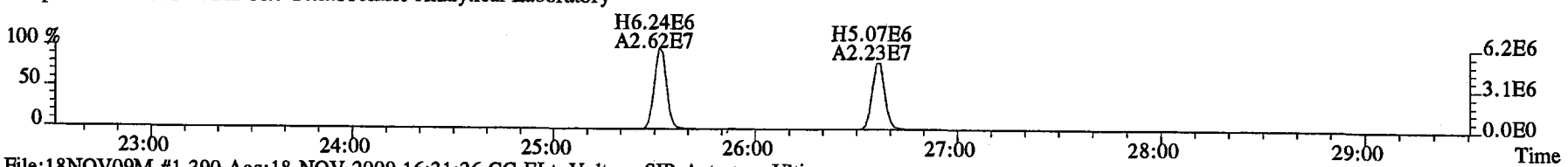
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



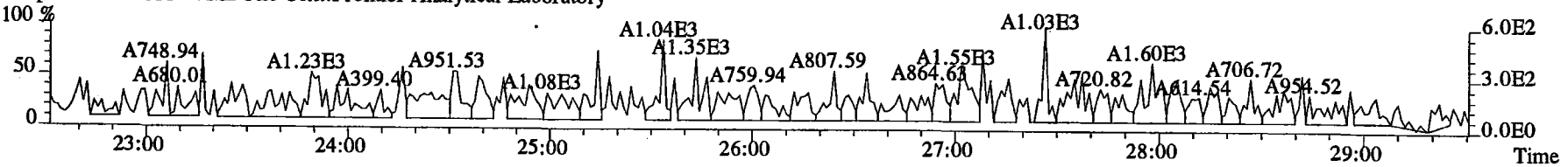
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



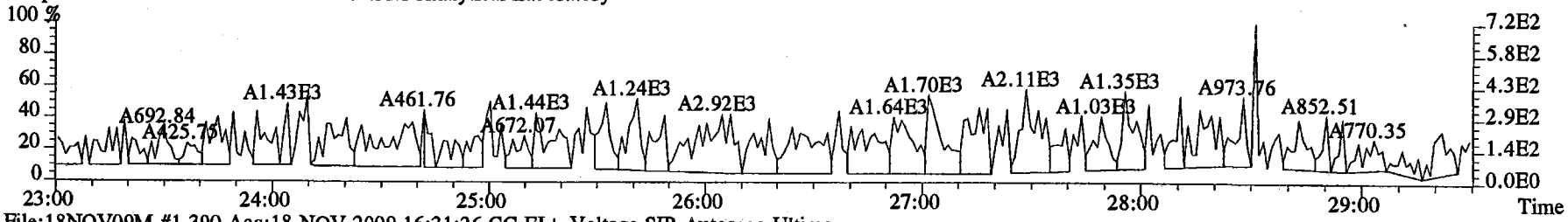
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



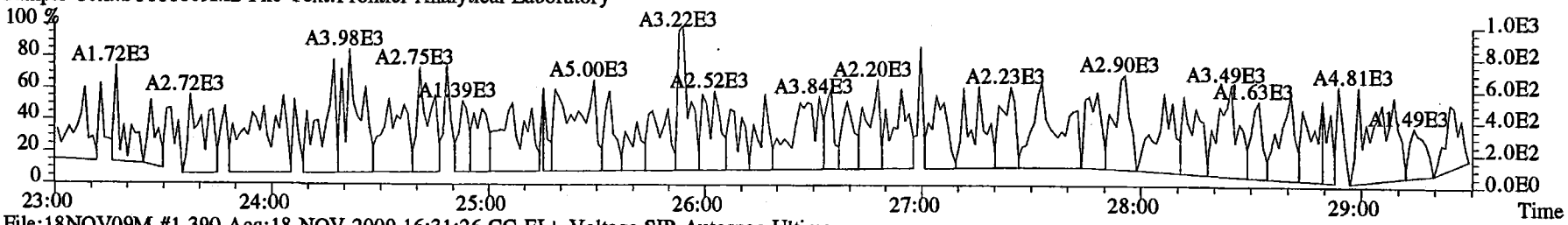
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



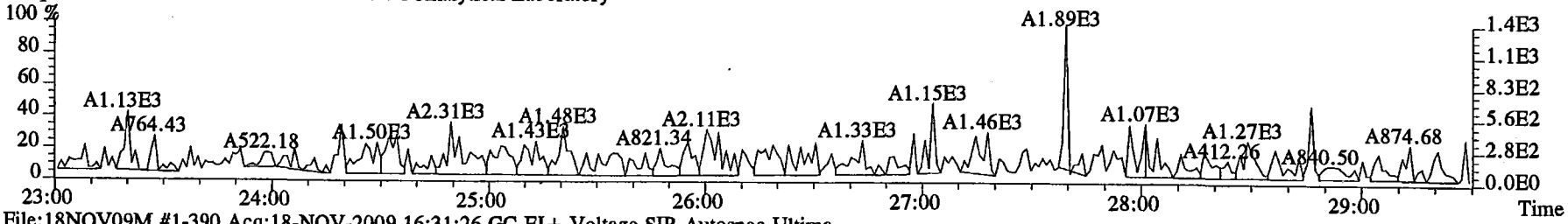
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



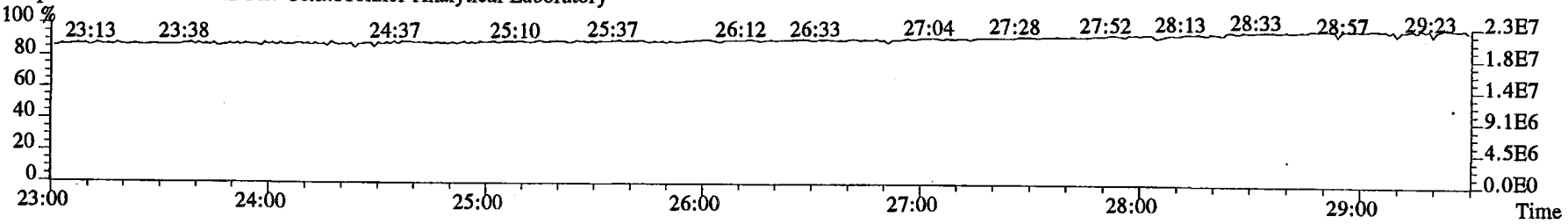
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



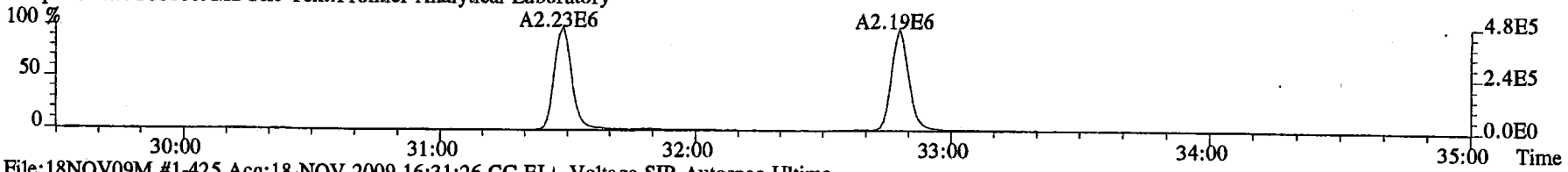
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



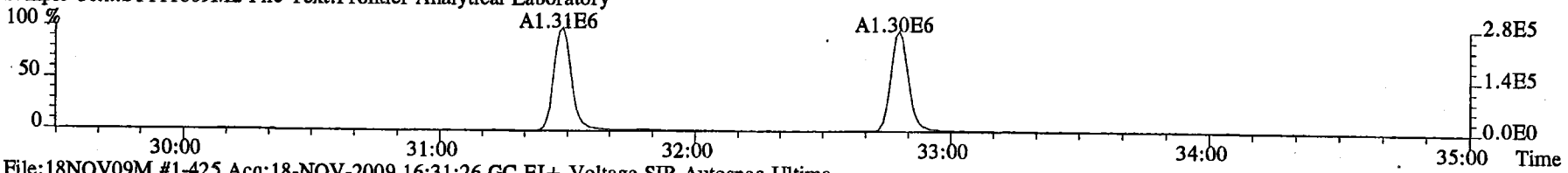
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



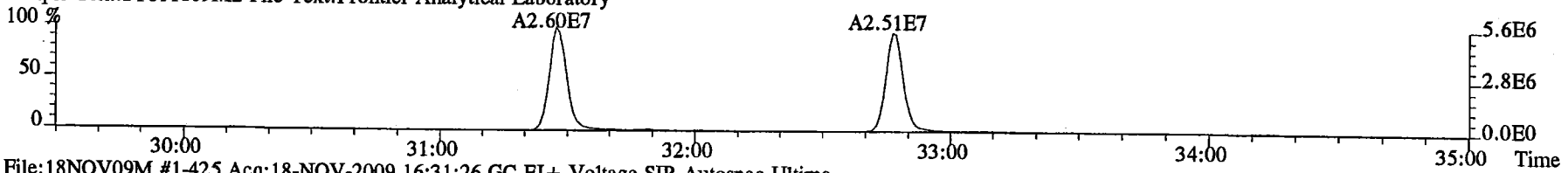
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



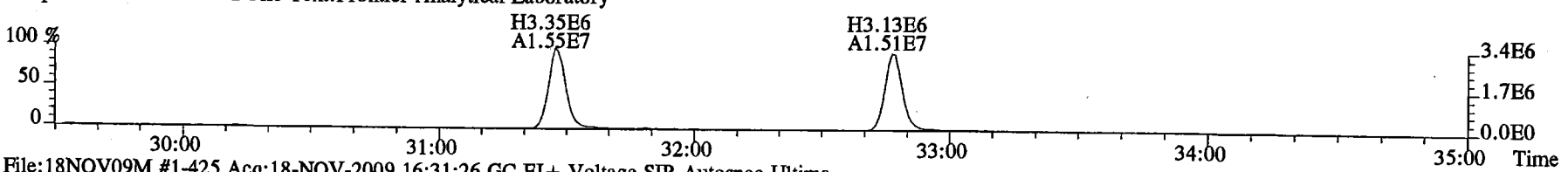
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



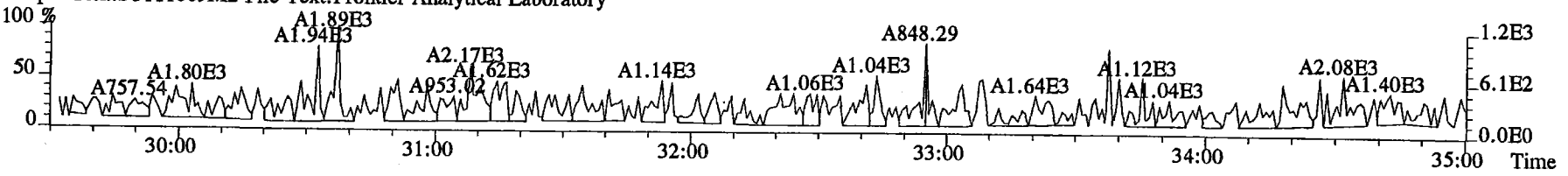
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



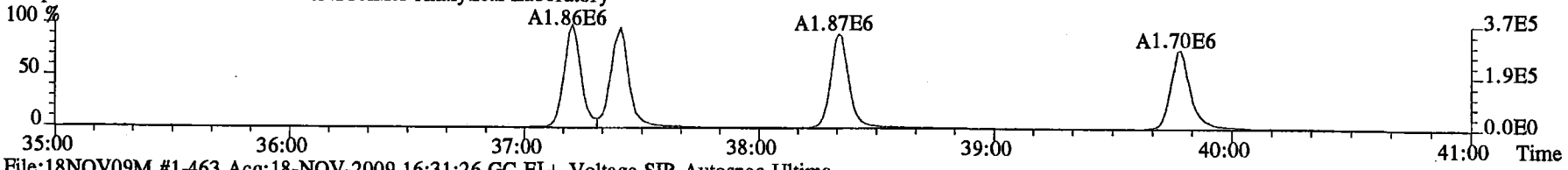
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



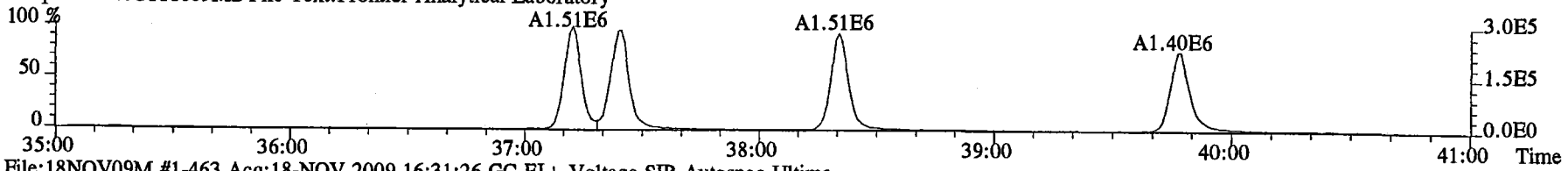
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



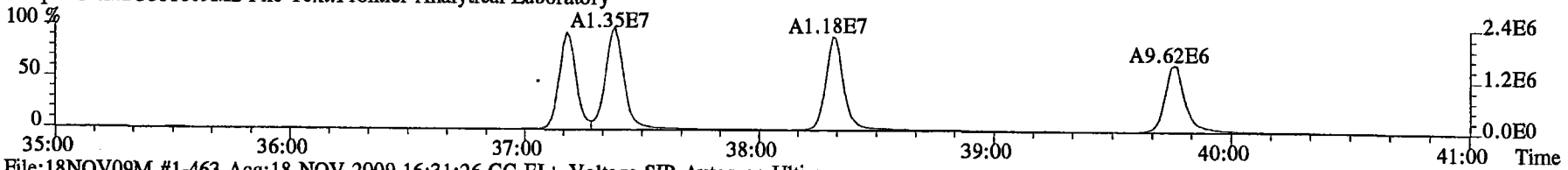
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



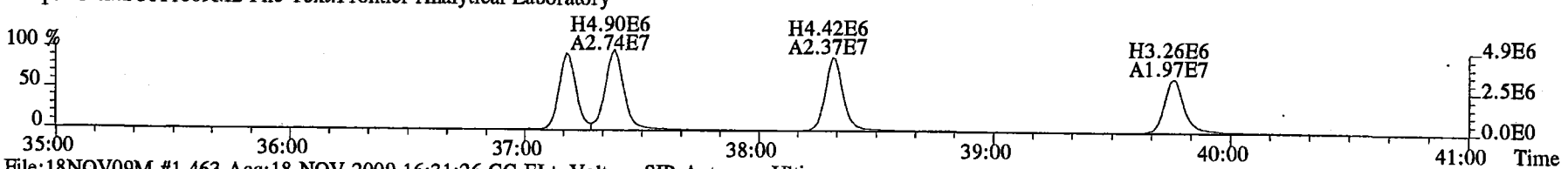
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



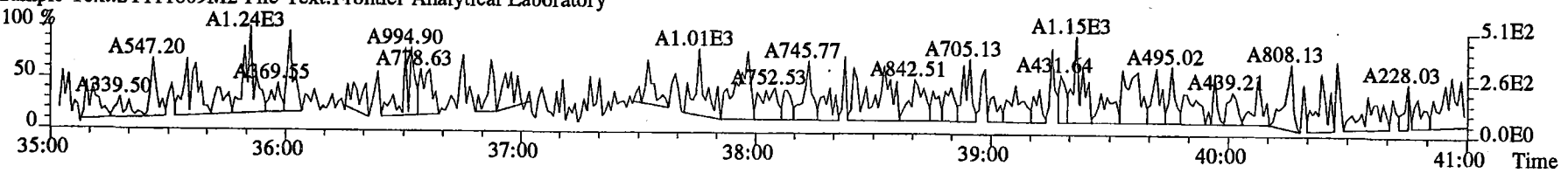
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



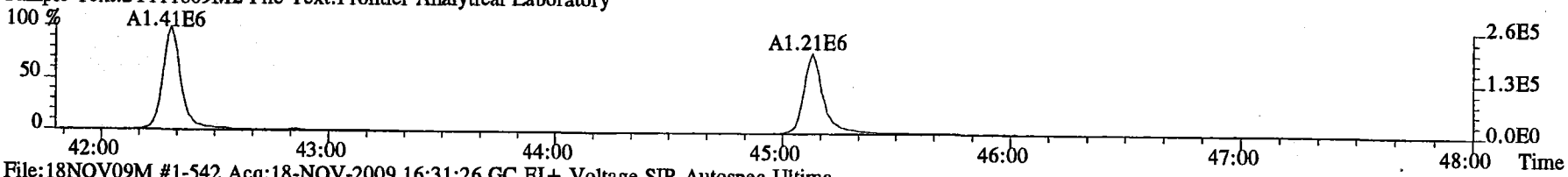
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



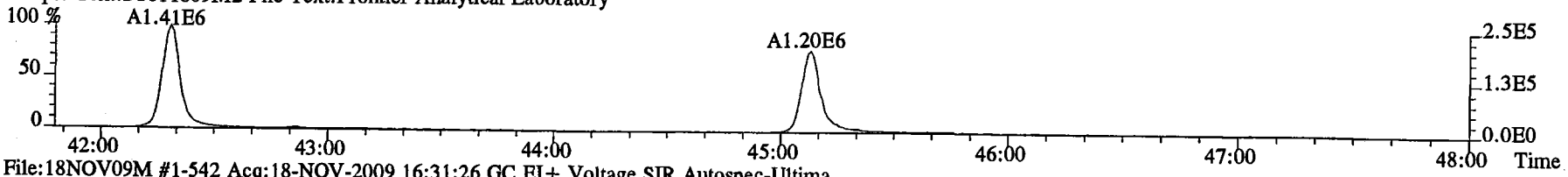
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



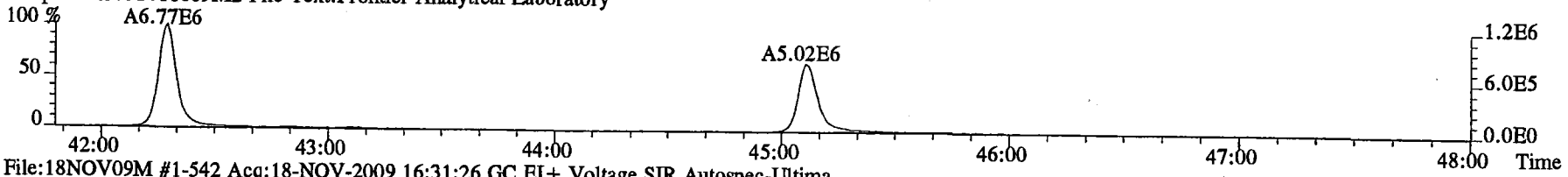
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



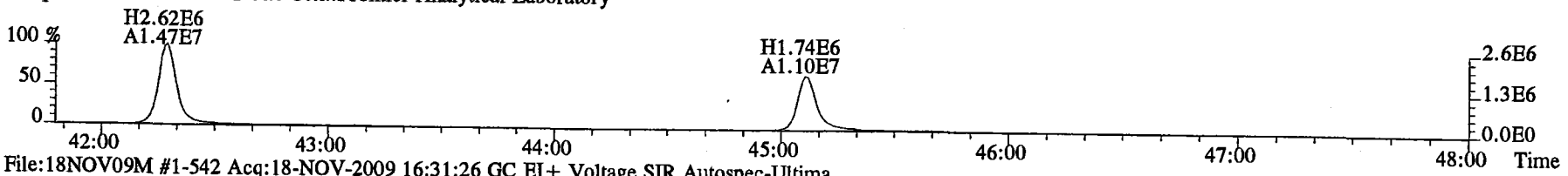
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



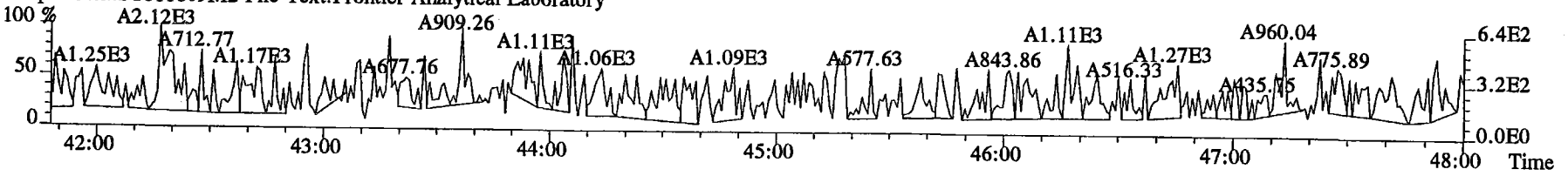
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



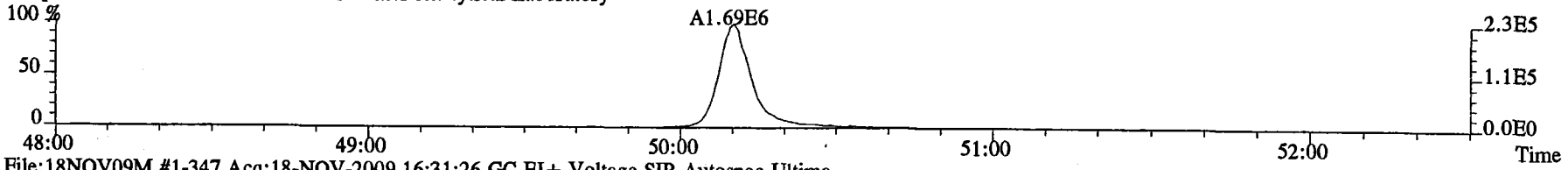
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



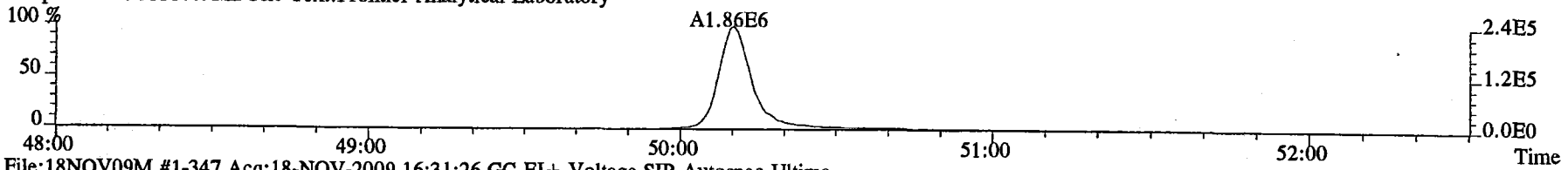
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



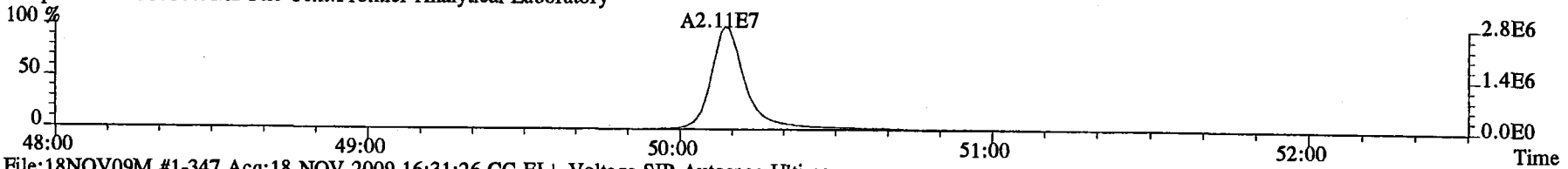
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



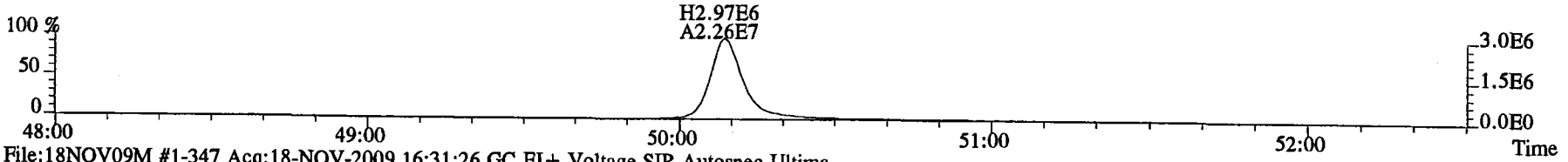
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



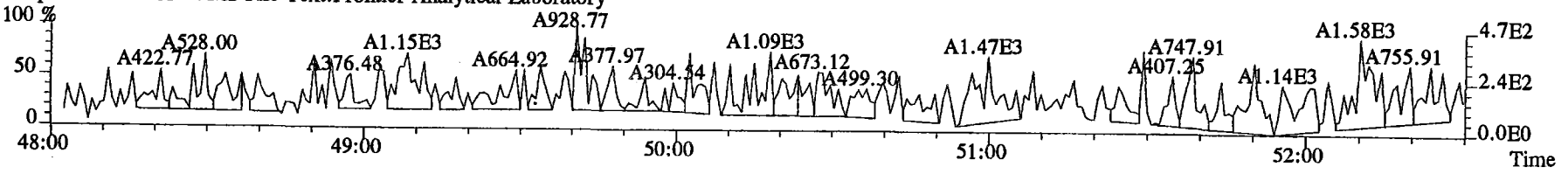
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



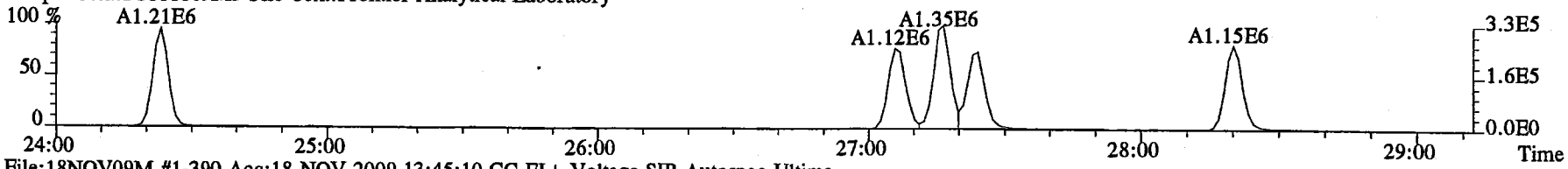
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



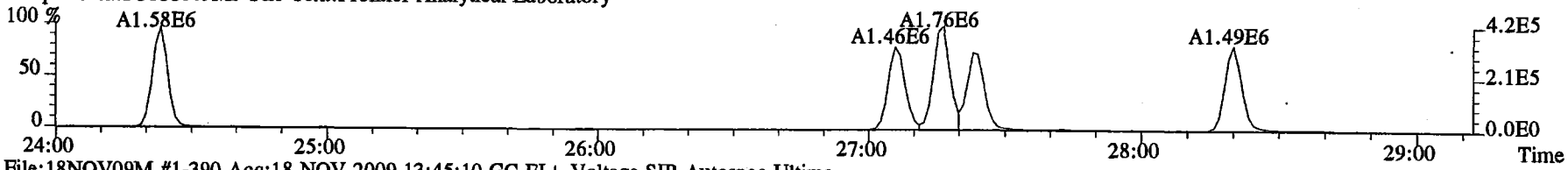
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



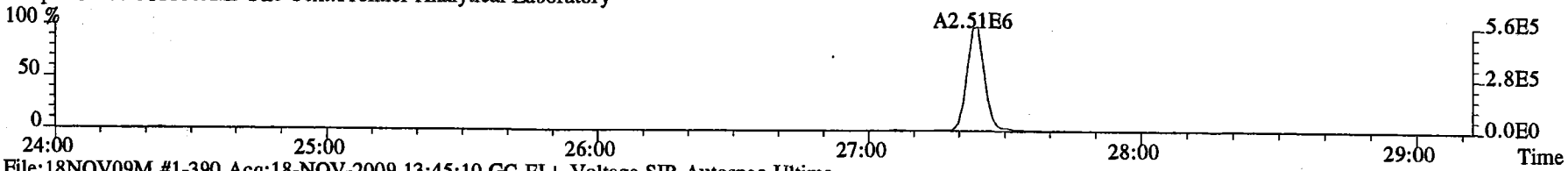
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



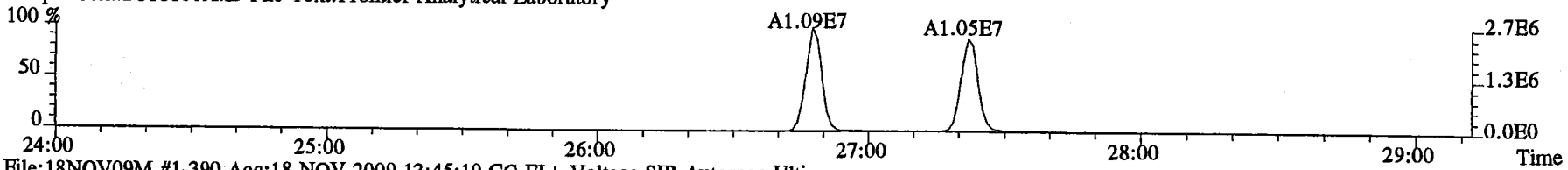
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



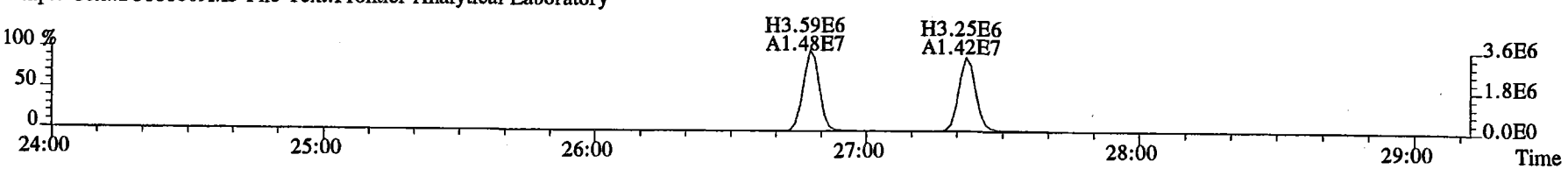
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



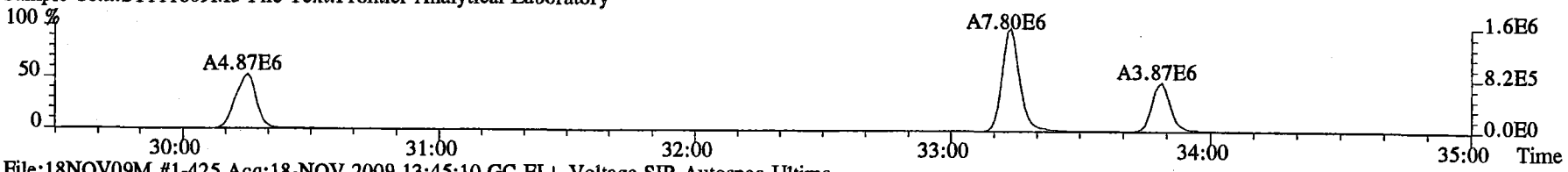
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



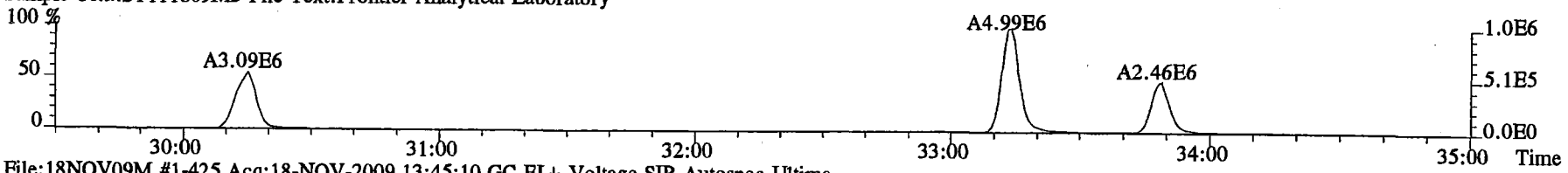
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



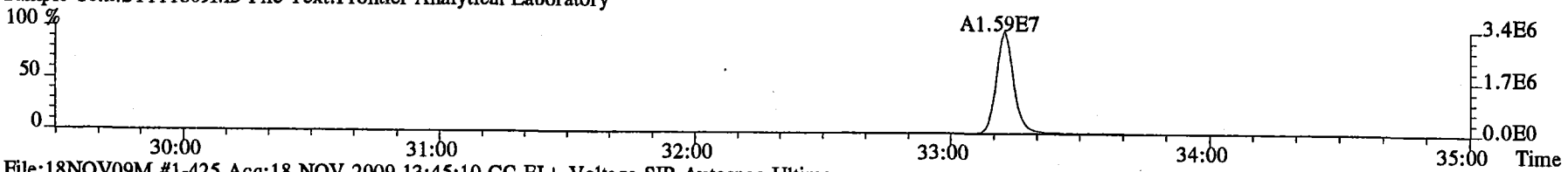
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



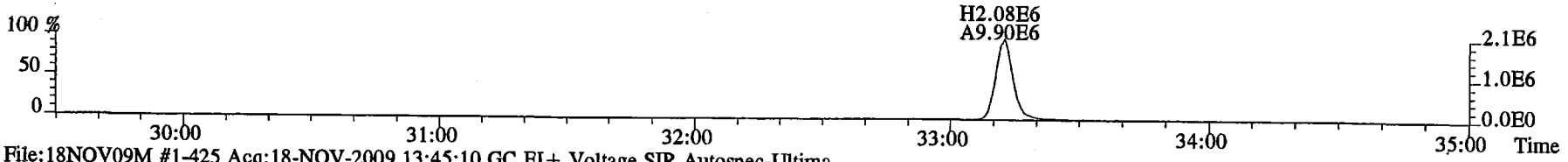
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



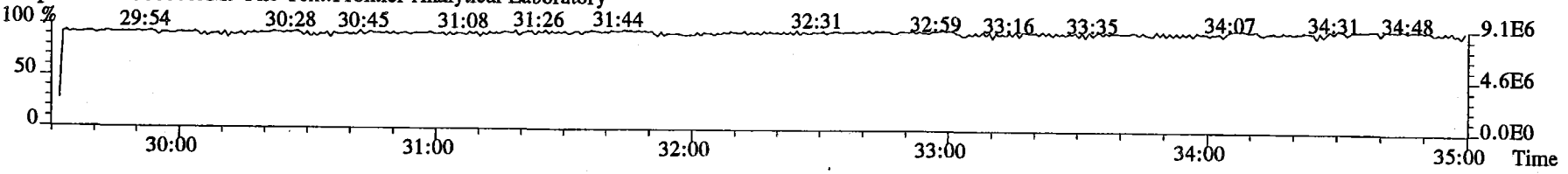
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



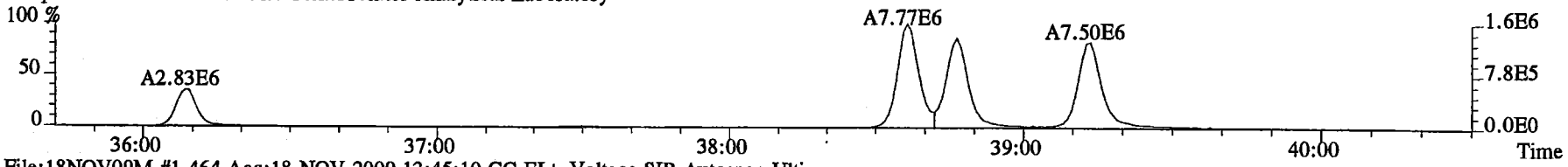
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



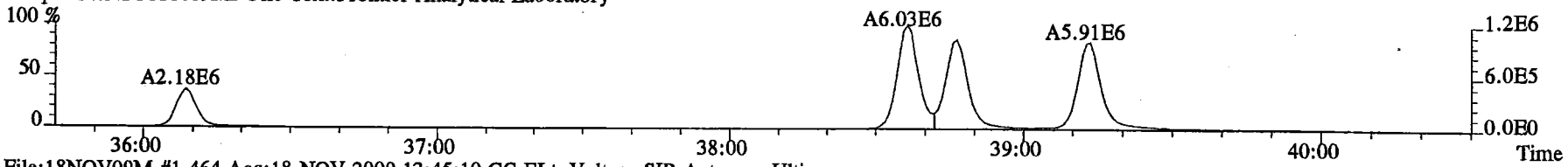
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



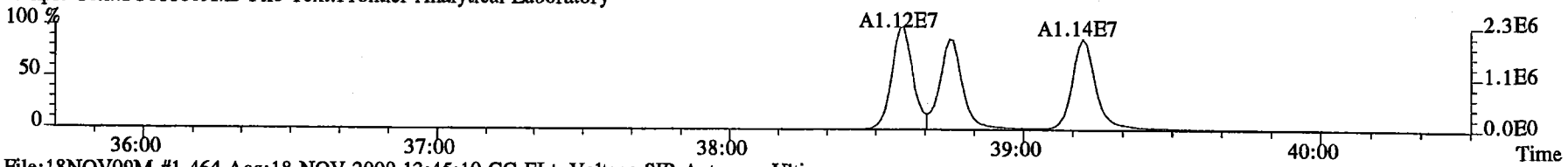
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



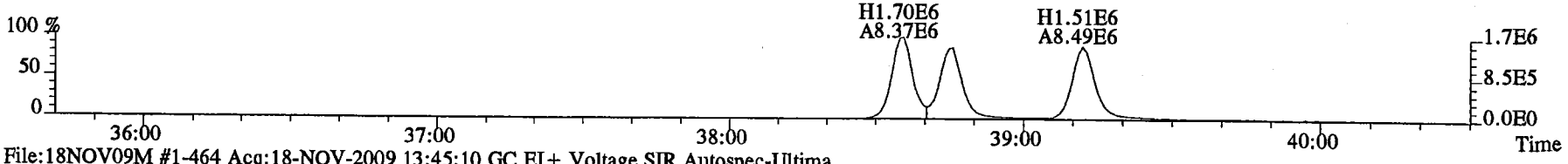
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



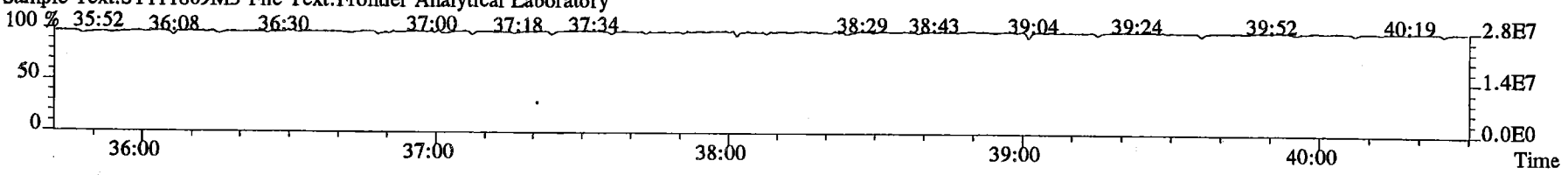
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



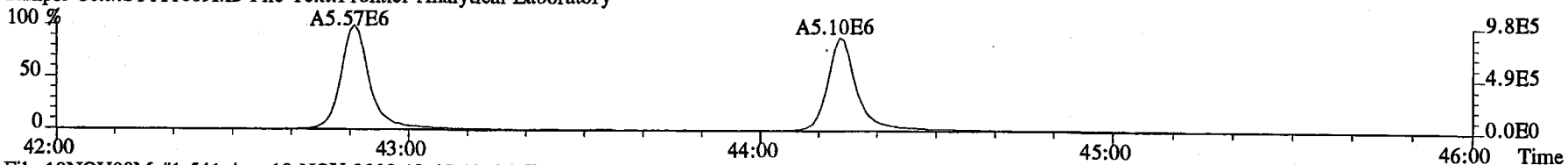
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



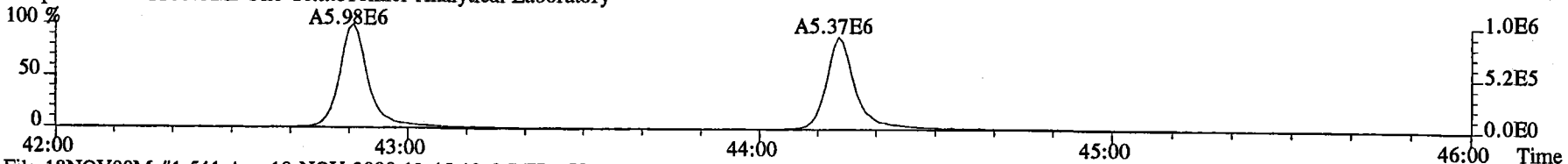
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



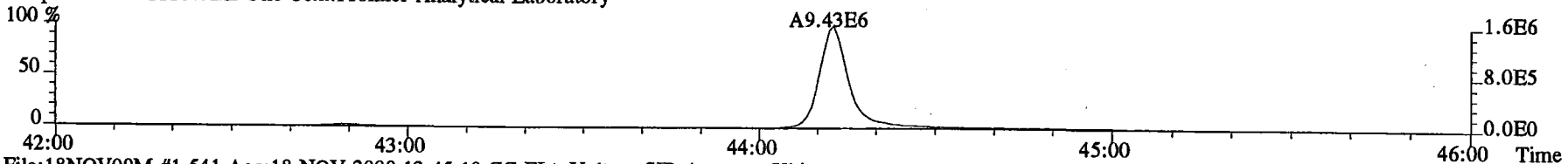
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



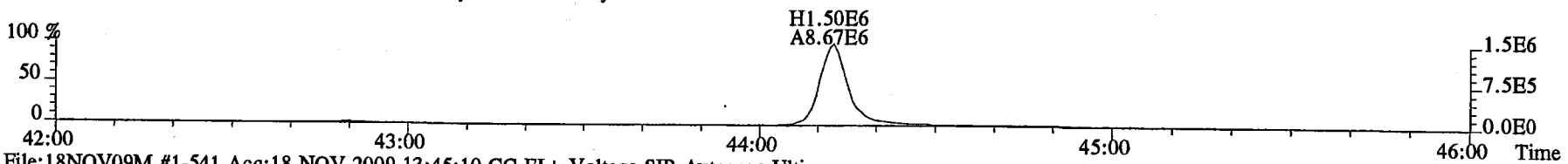
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



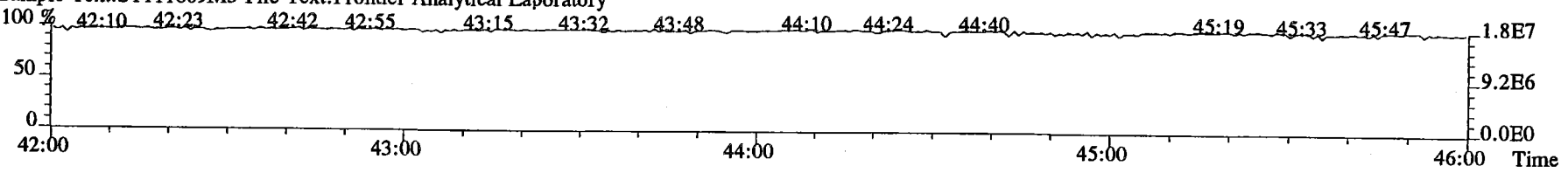
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



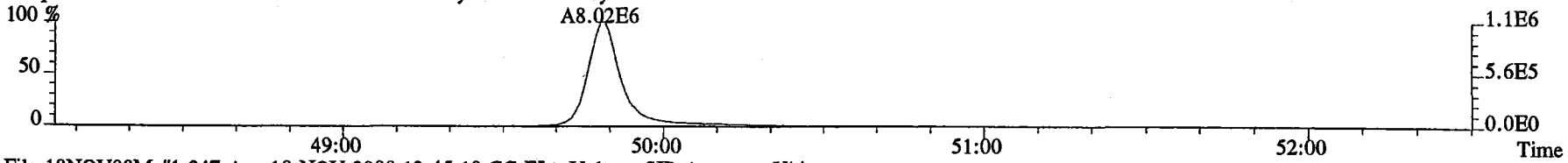
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



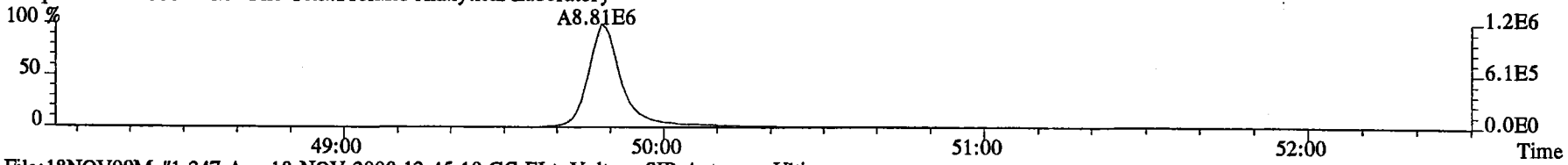
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



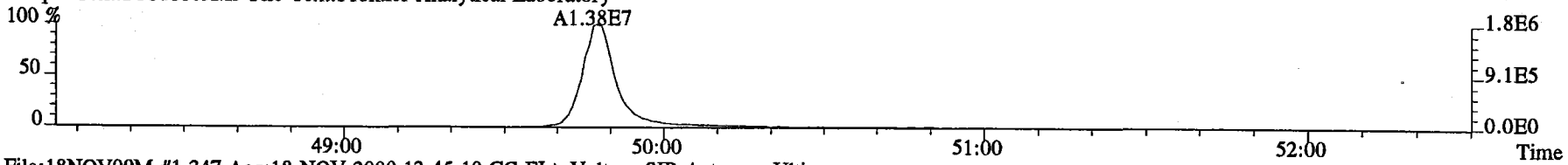
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100:0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



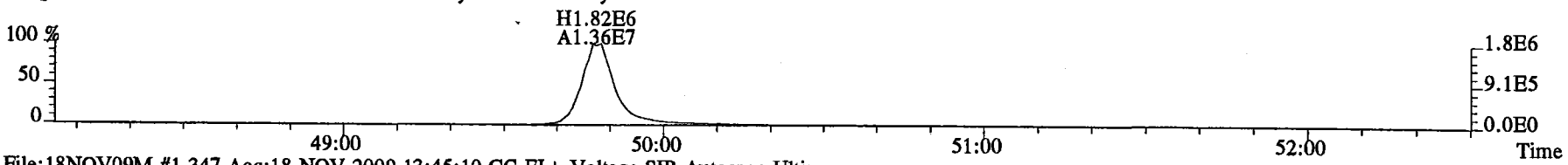
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



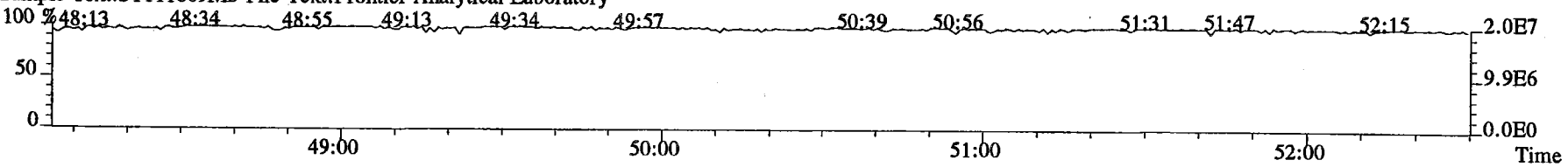
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



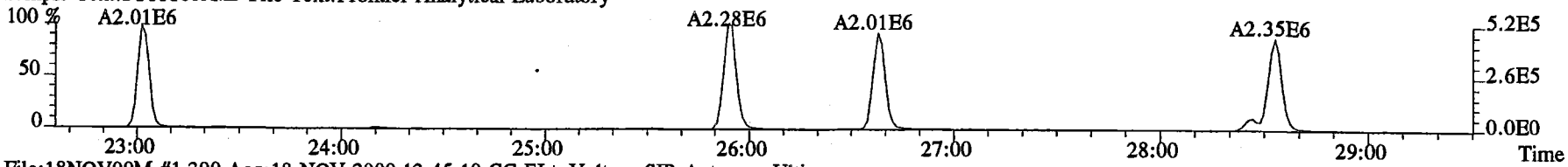
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



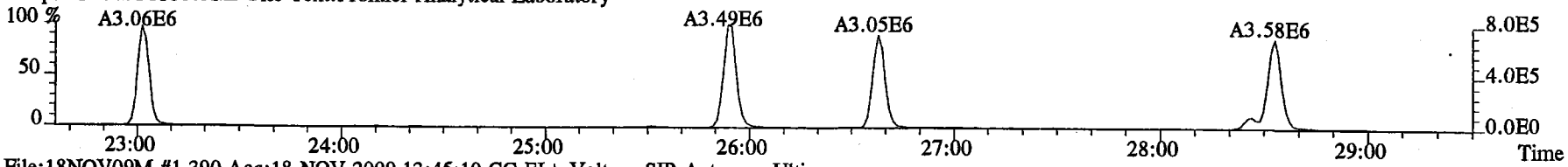
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



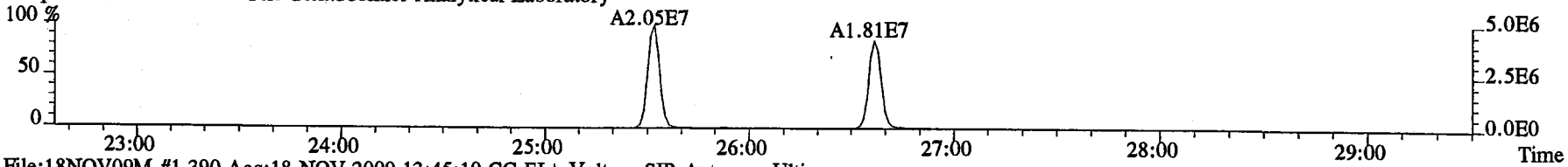
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



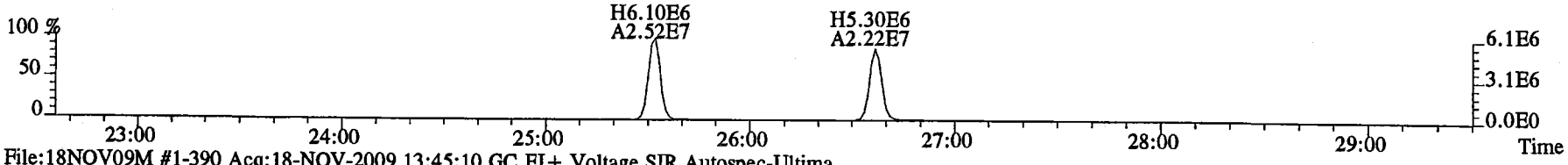
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



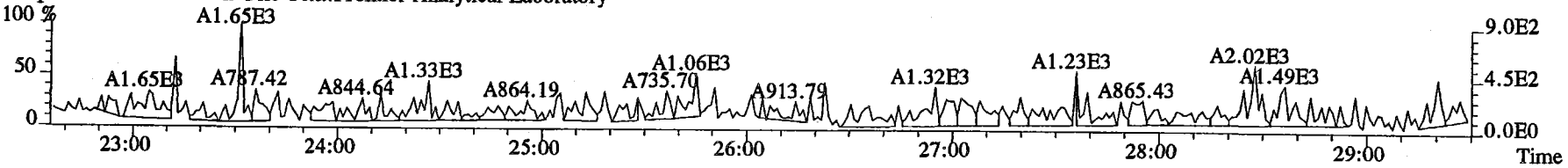
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



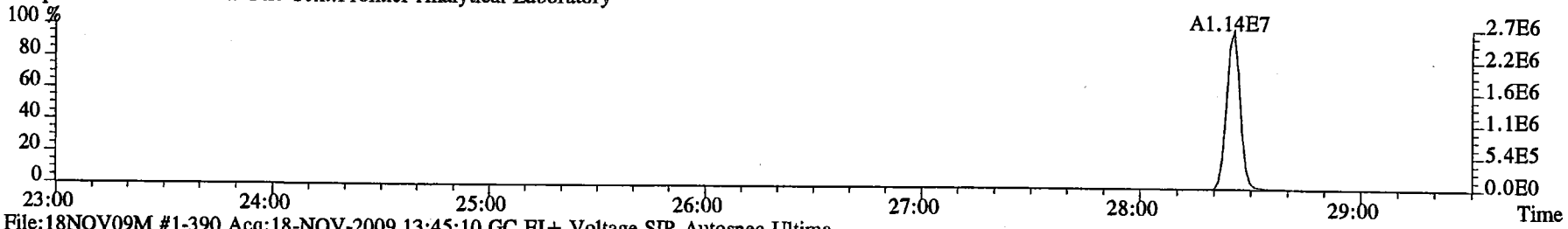
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



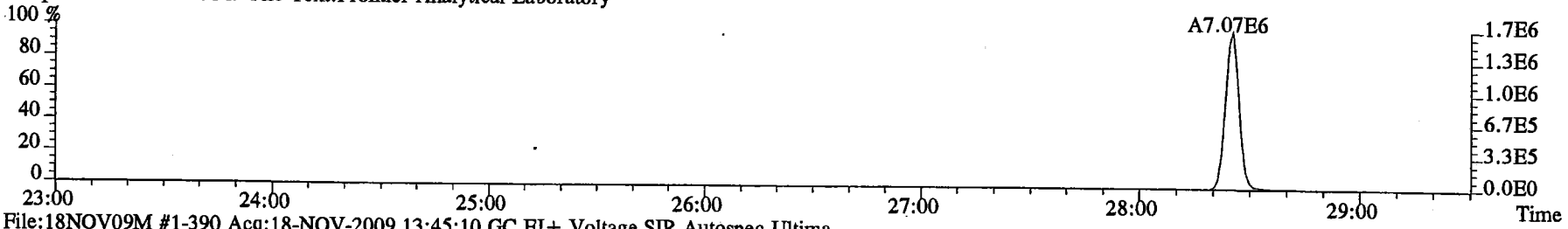
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



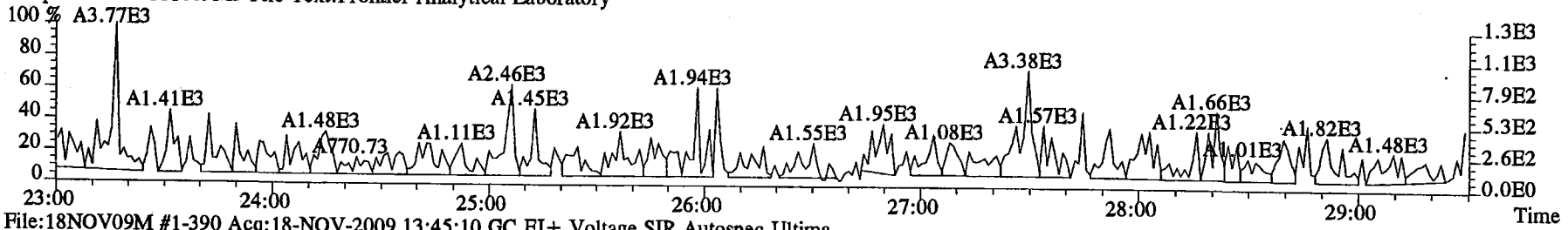
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



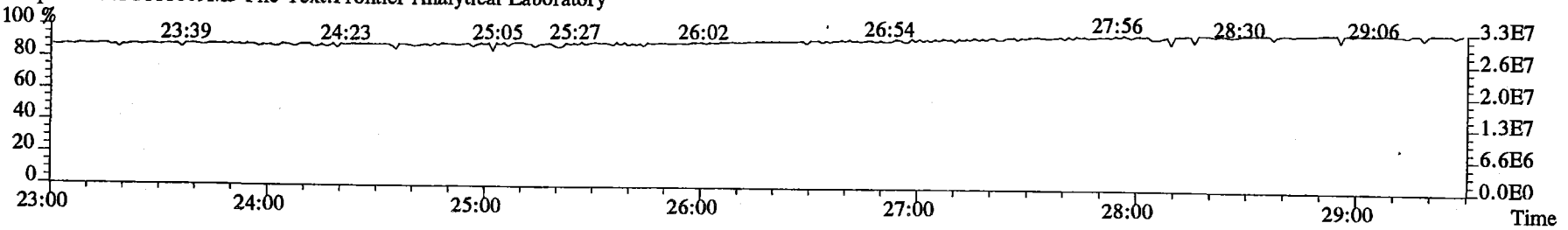
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



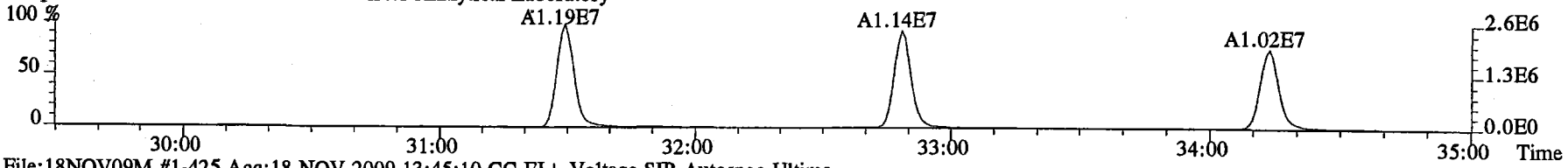
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



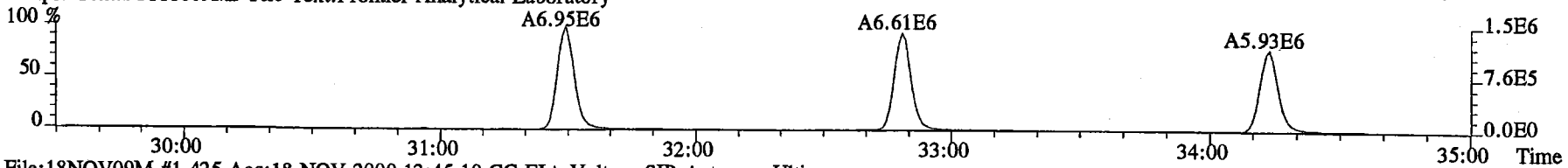
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



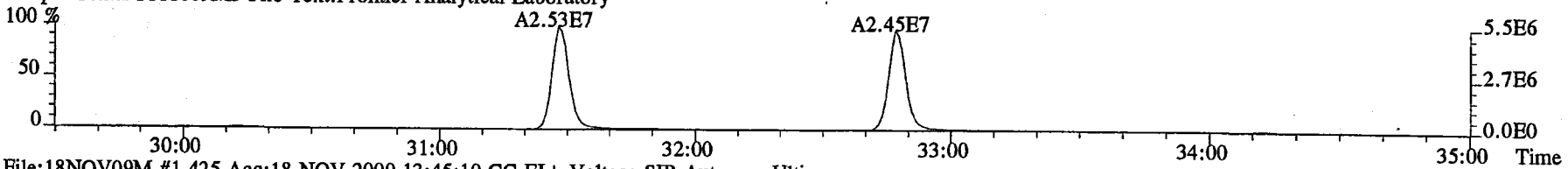
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



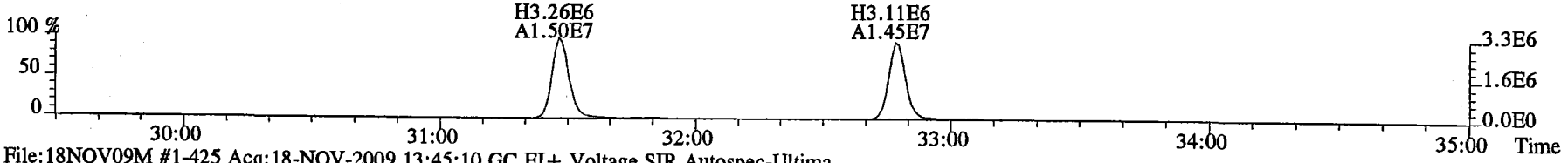
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



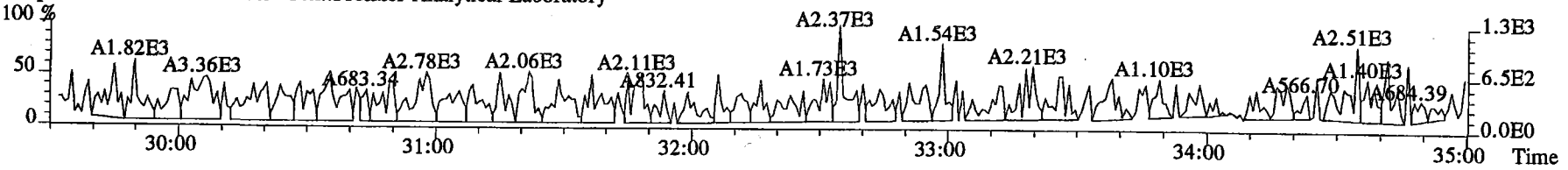
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



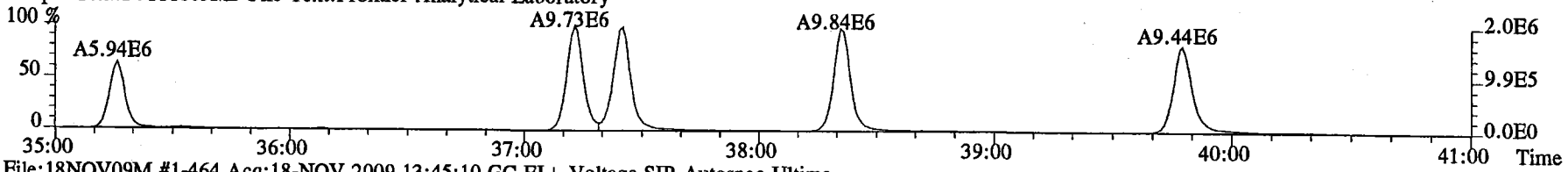
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



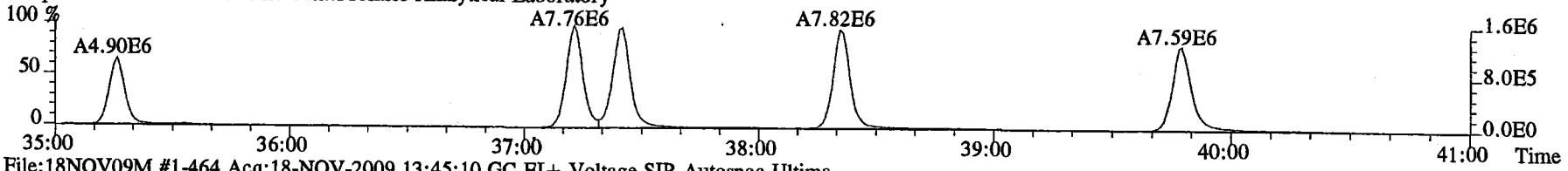
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



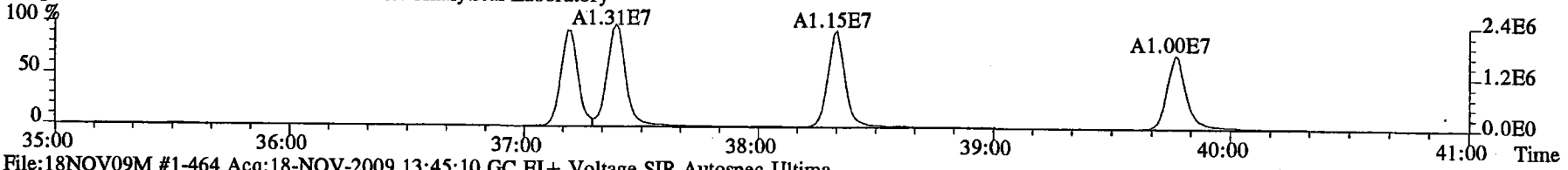
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



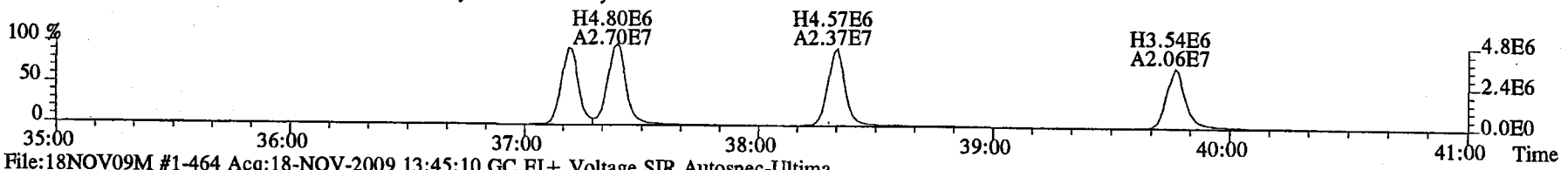
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



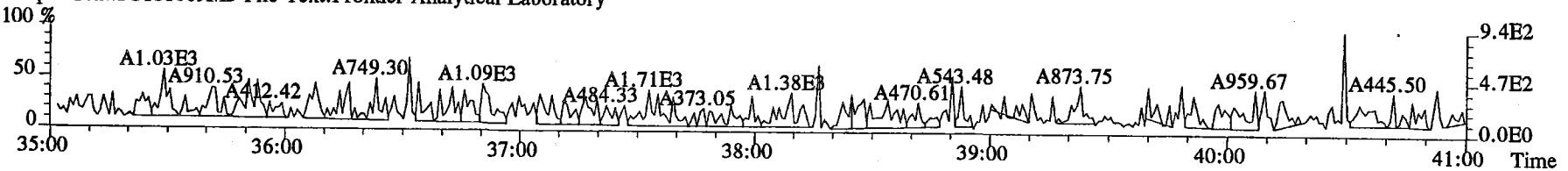
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



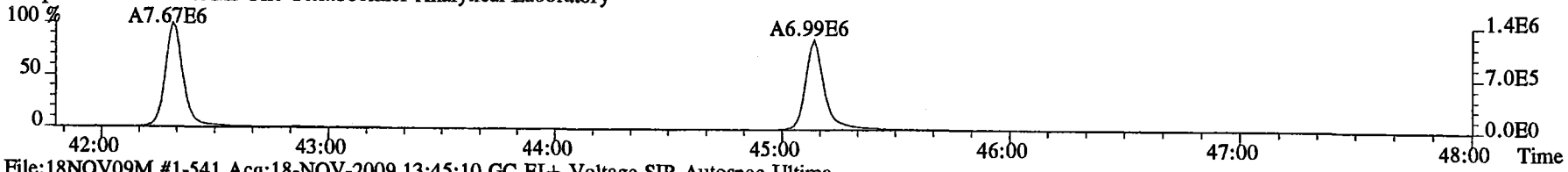
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



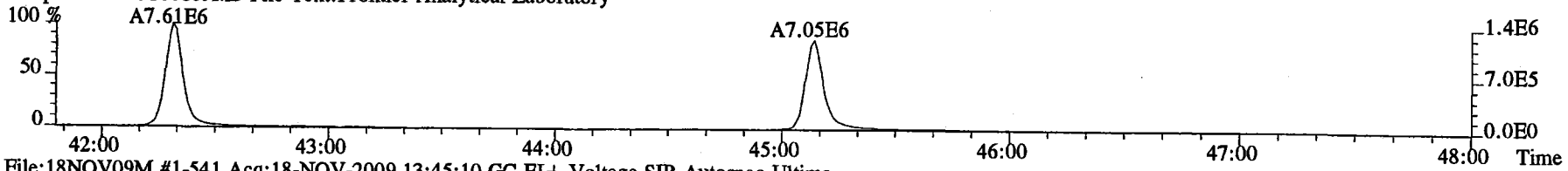
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



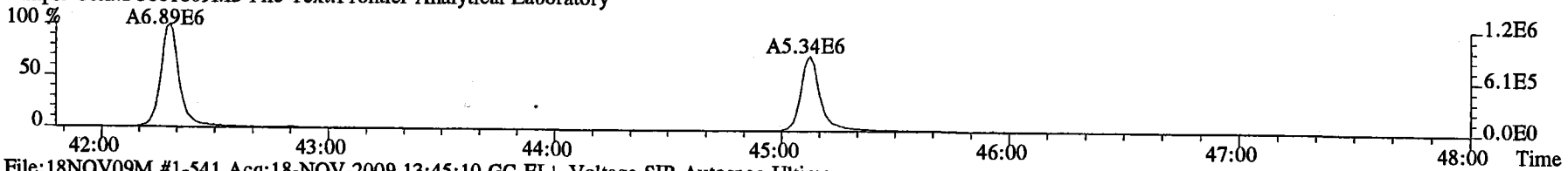
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



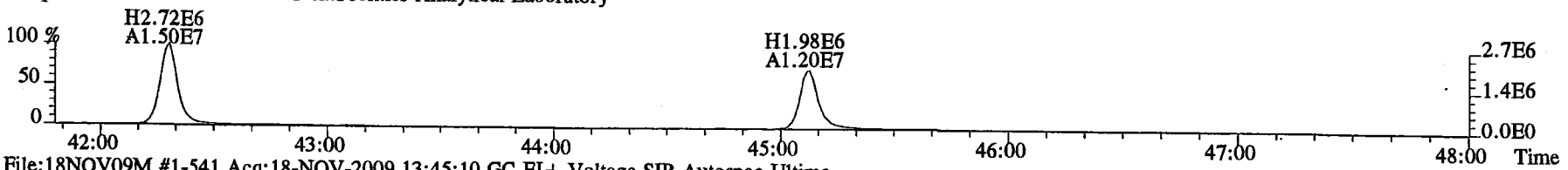
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



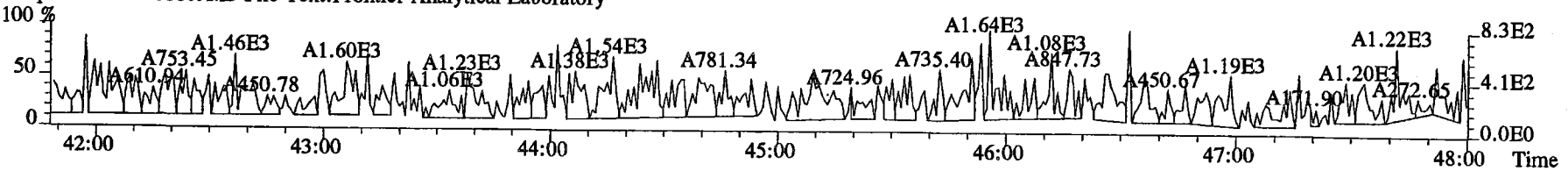
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



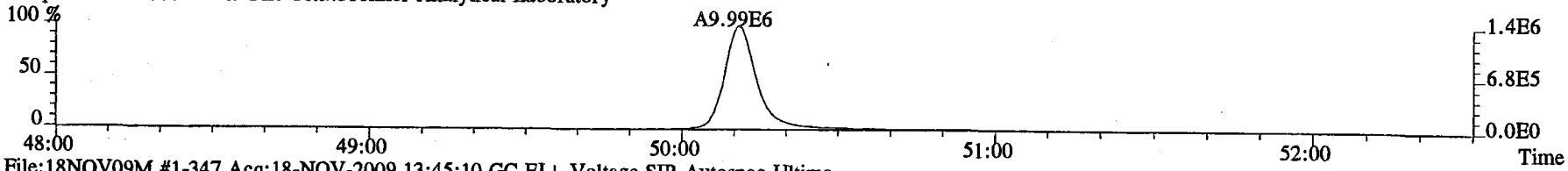
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



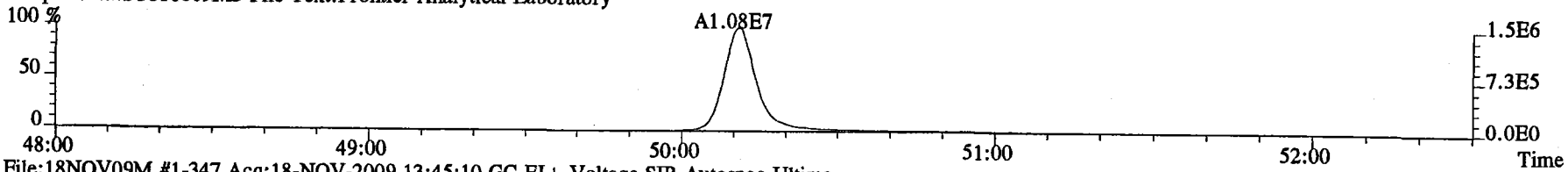
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



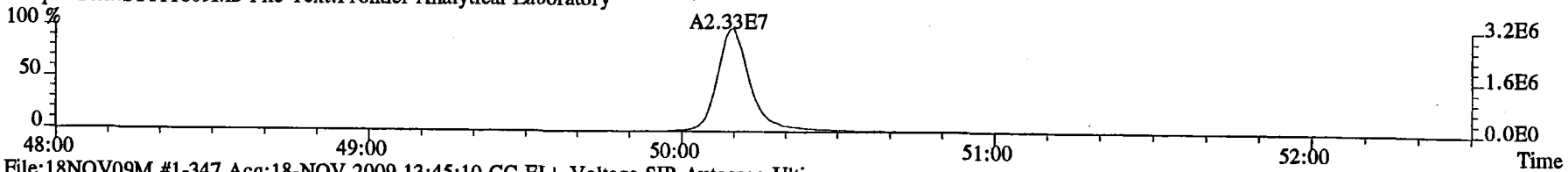
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



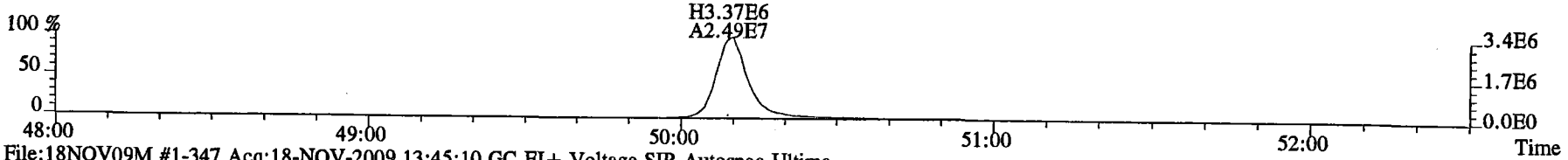
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



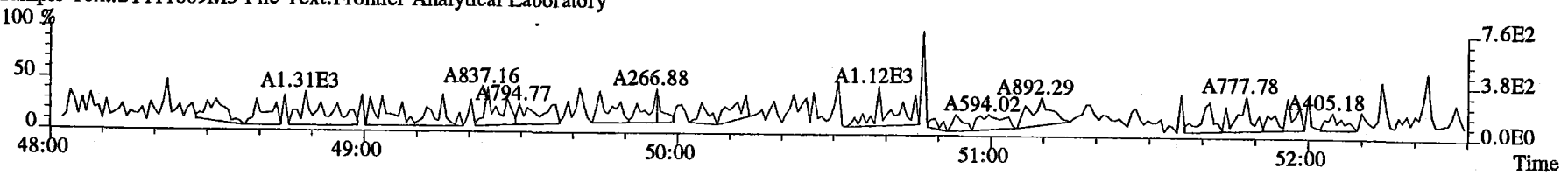
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



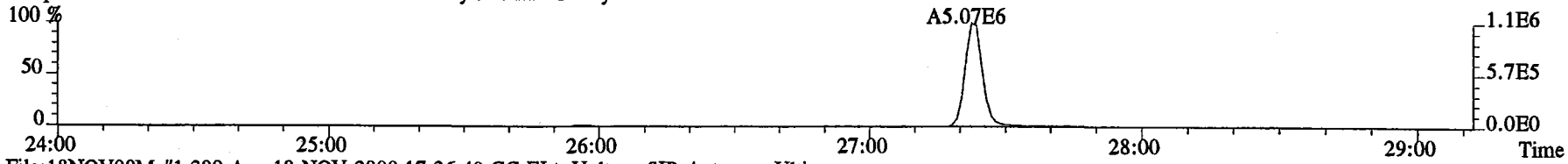
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



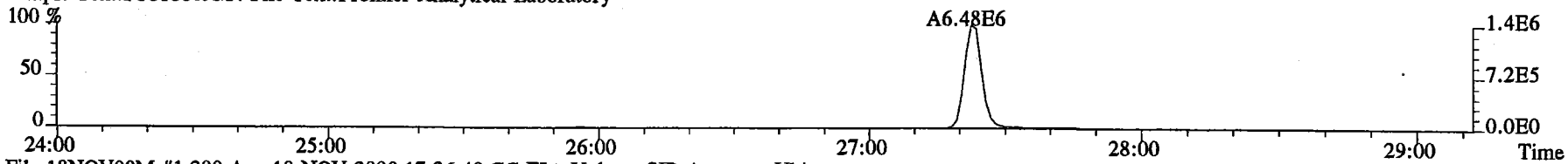
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



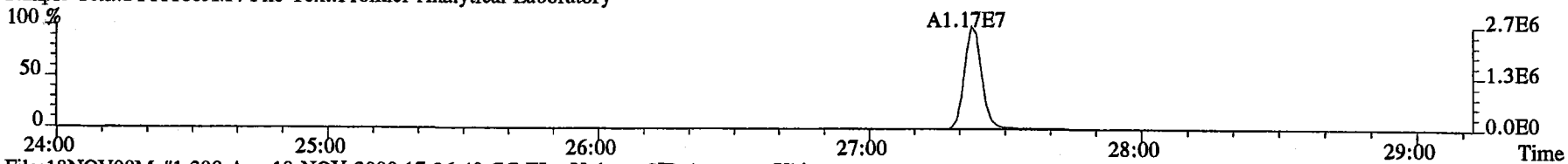
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



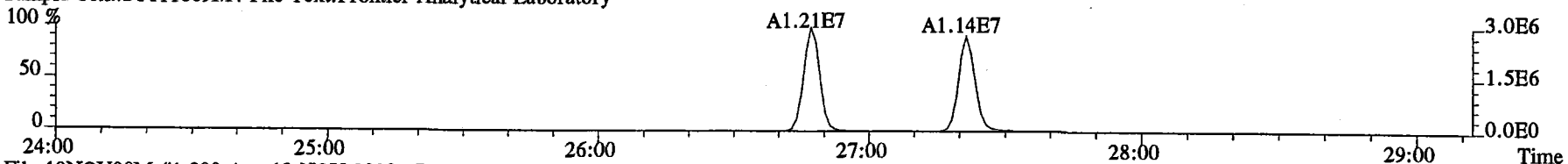
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



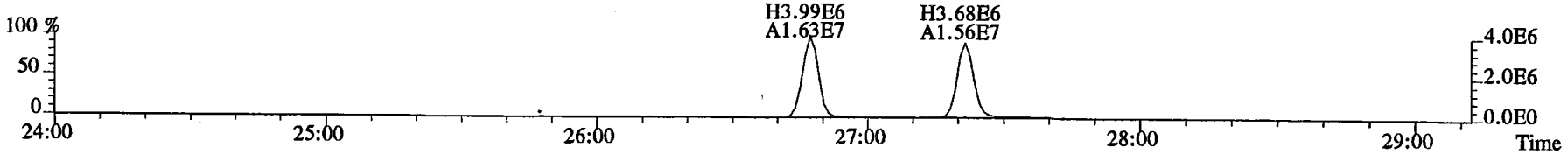
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



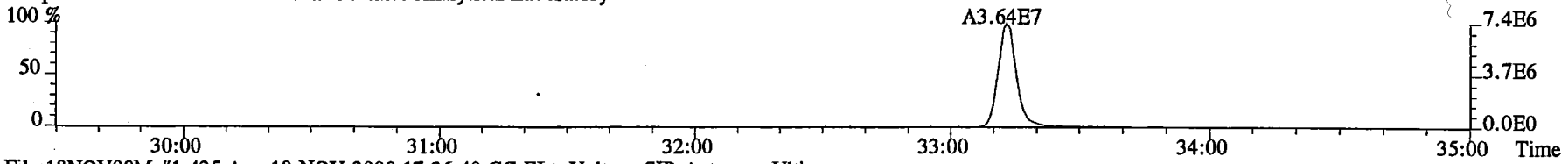
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



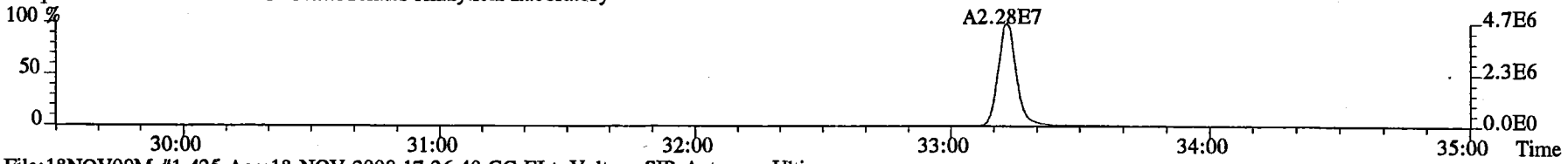
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



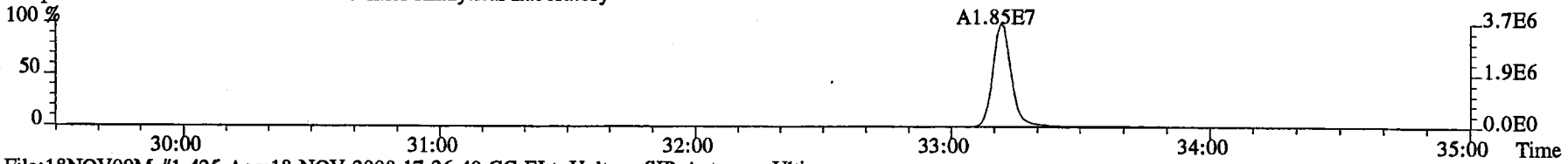
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



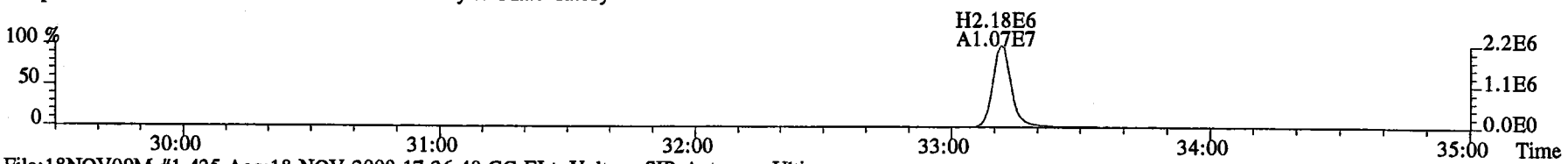
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



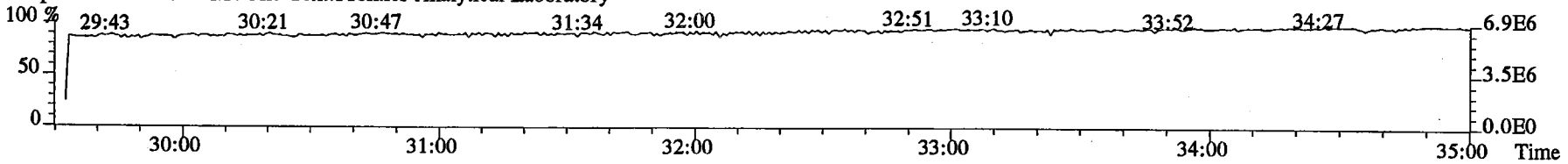
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



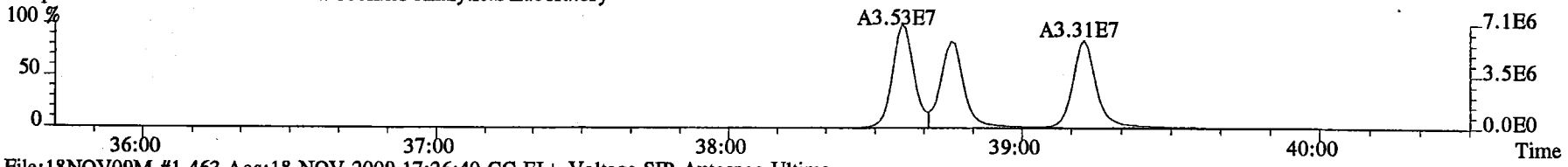
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



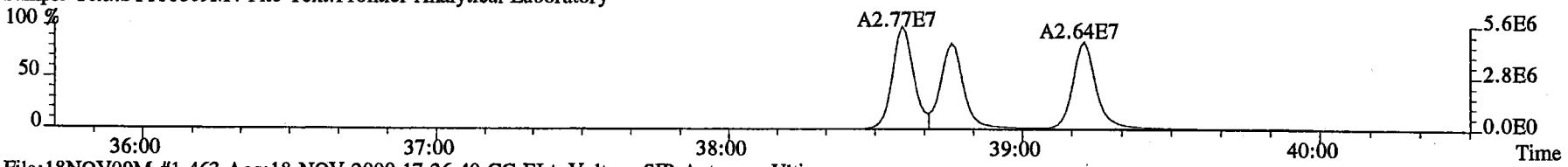
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



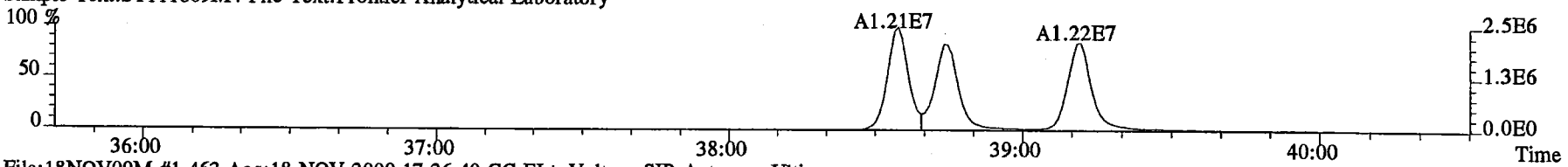
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



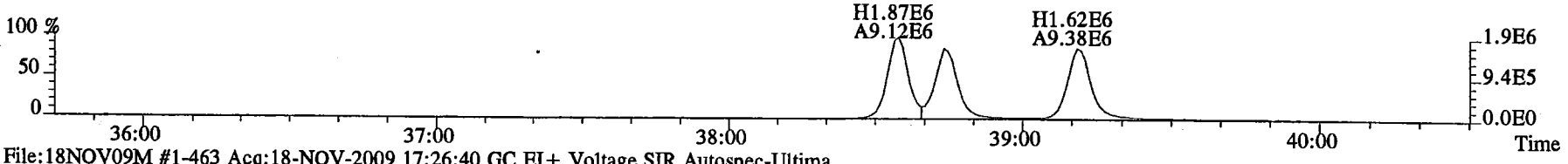
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



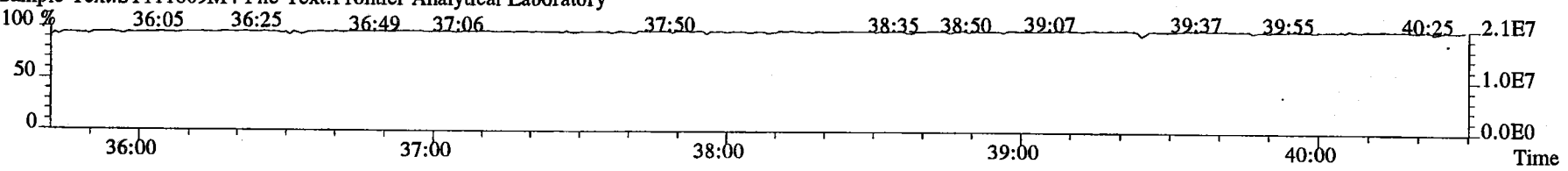
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



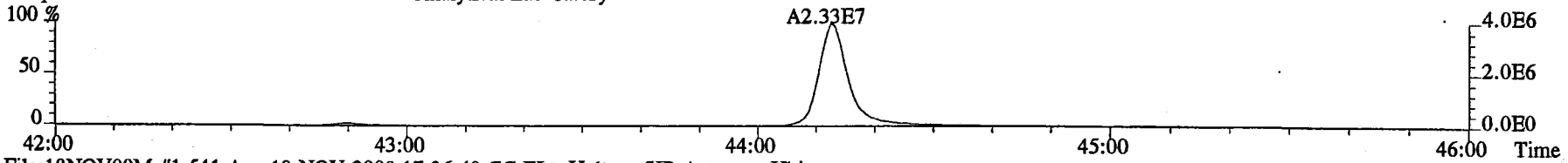
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



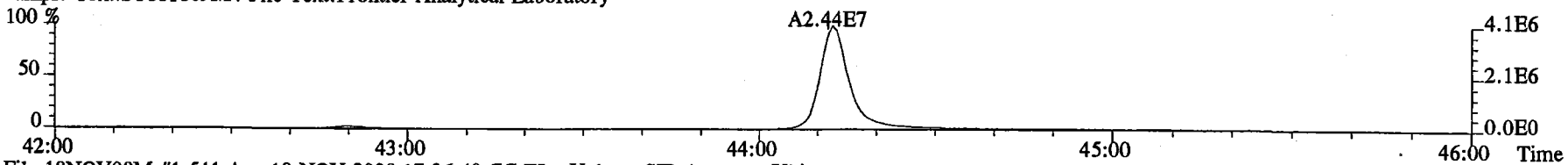
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



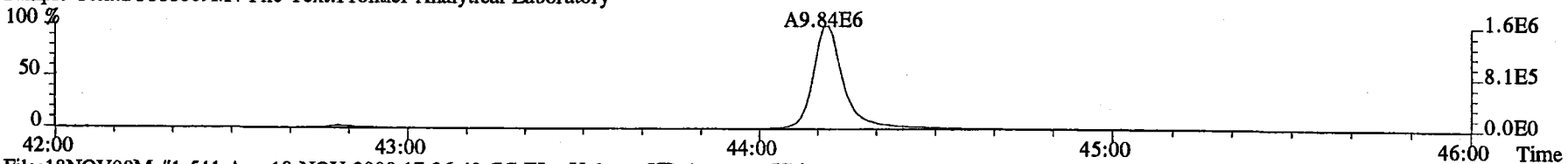
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



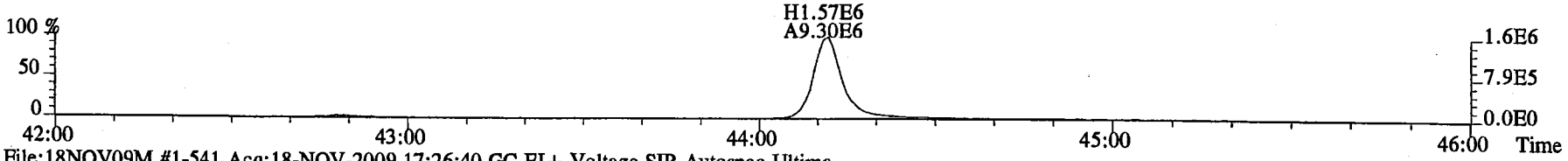
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



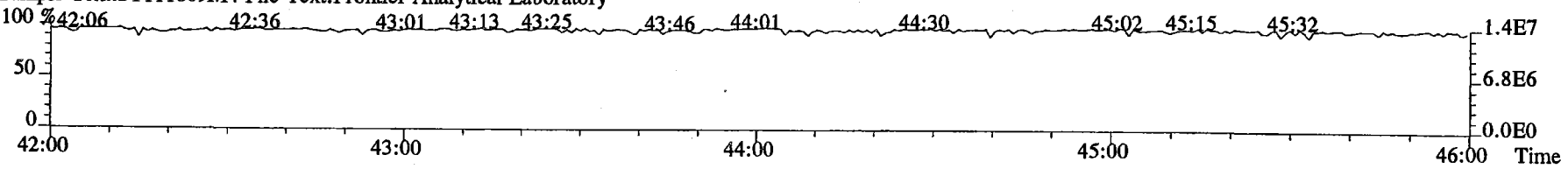
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



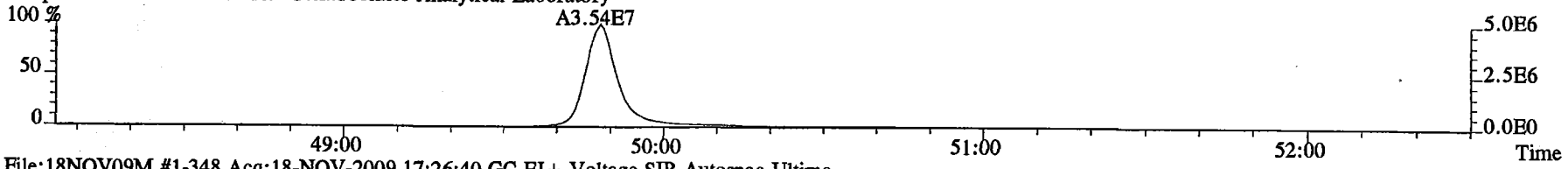
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



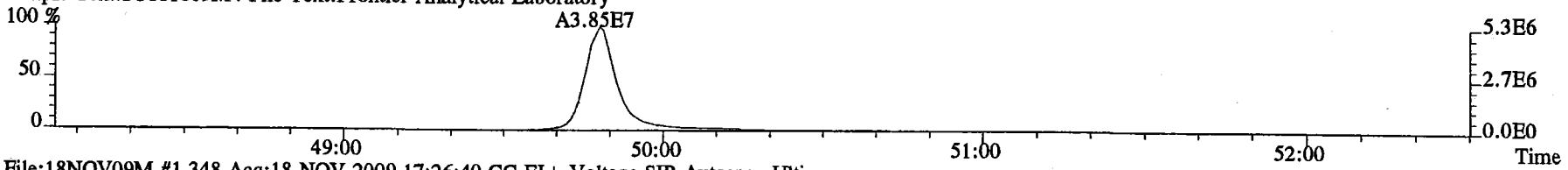
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



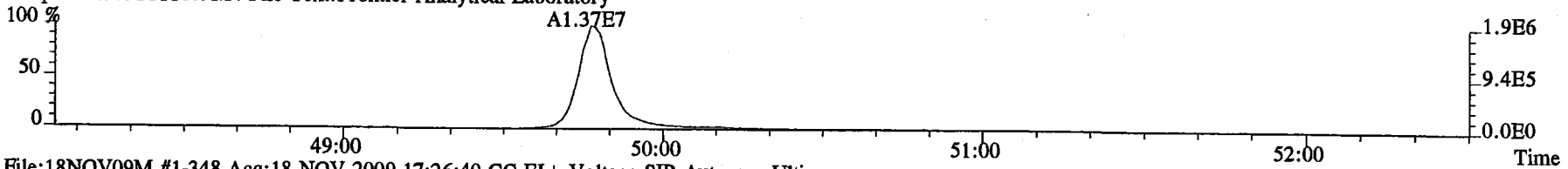
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



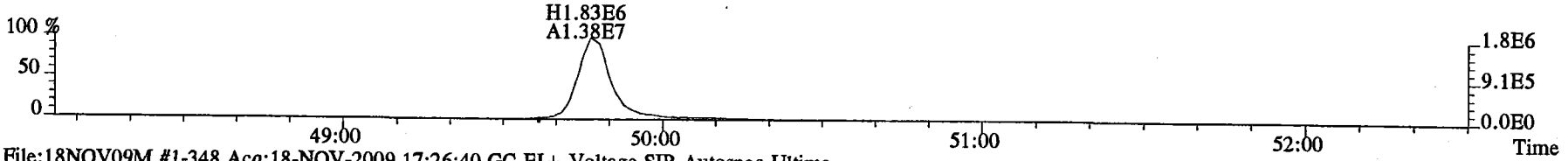
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



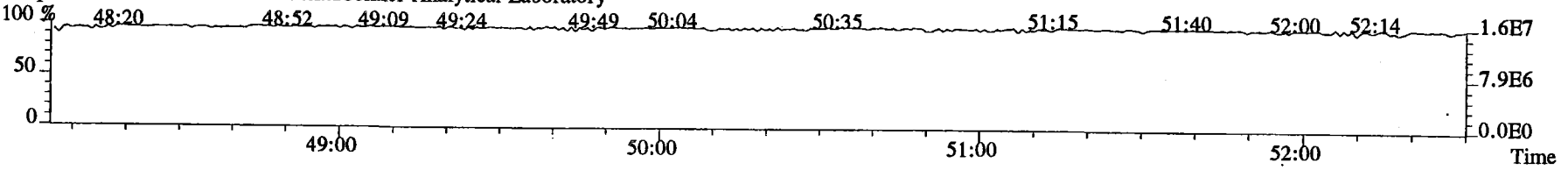
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



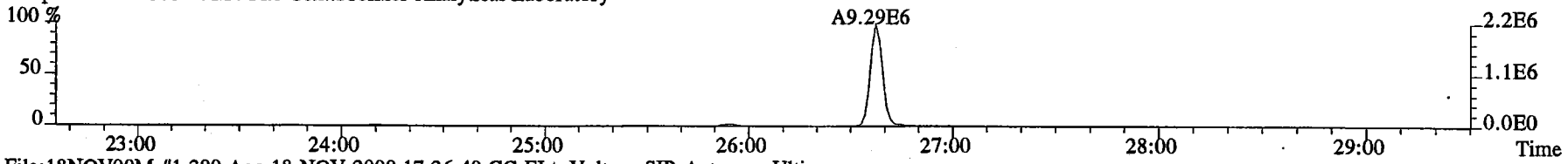
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



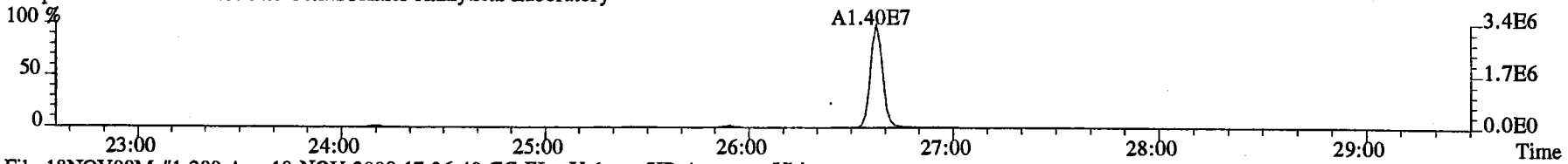
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



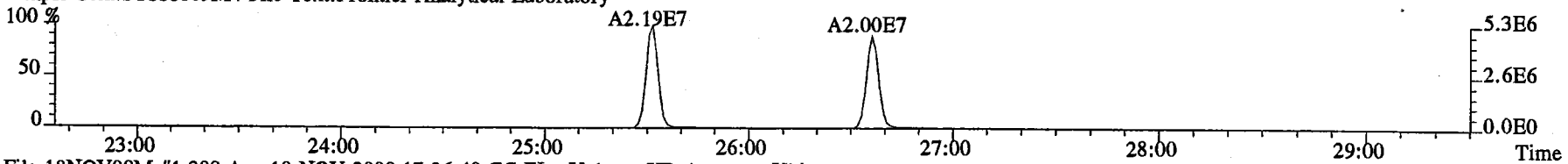
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



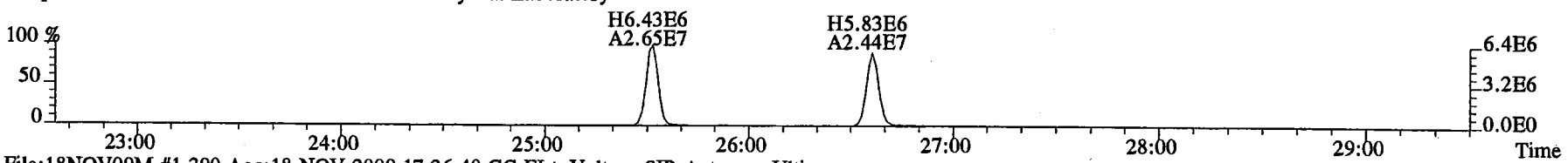
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



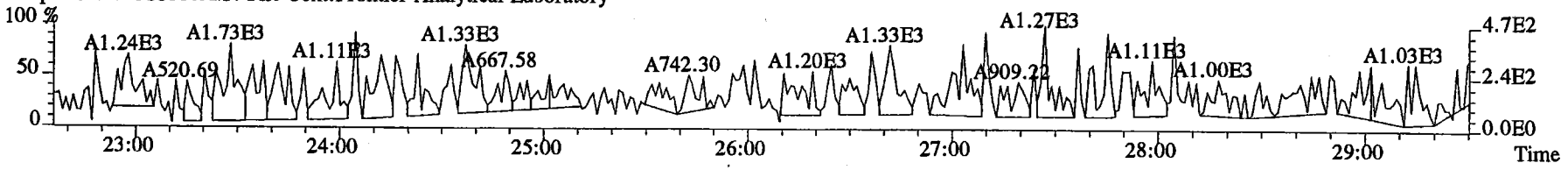
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



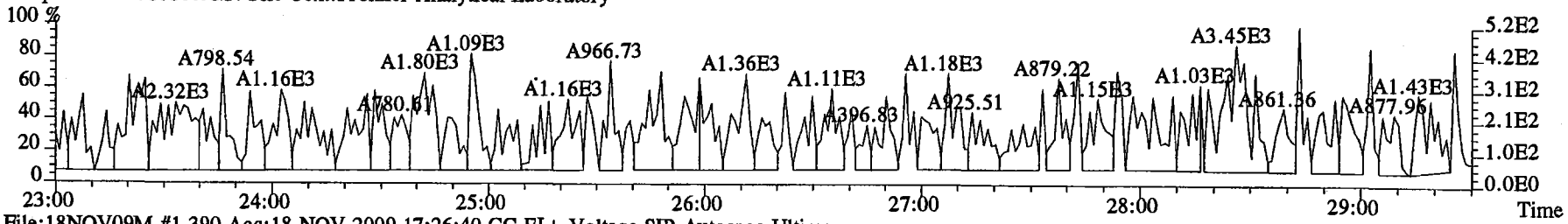
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



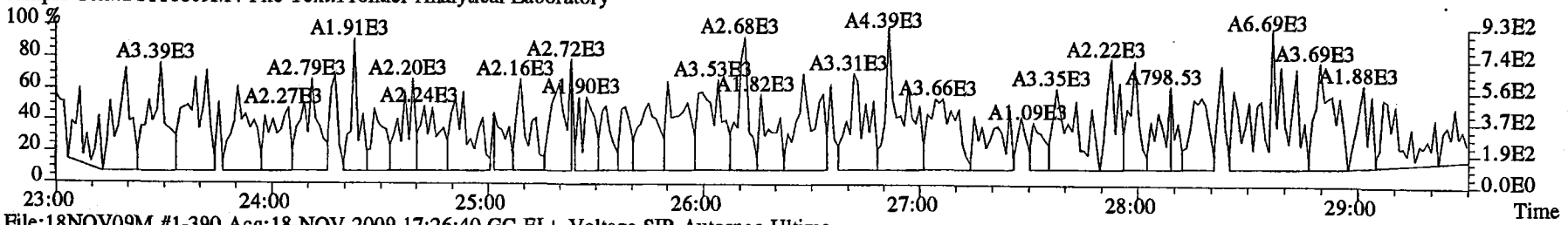
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



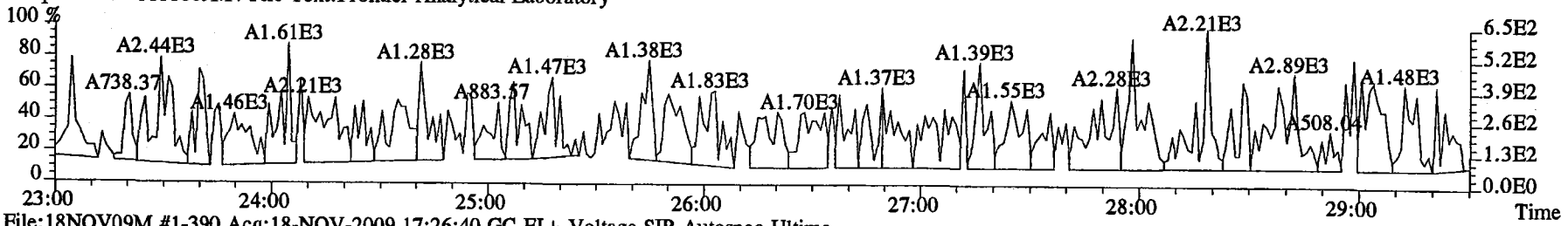
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



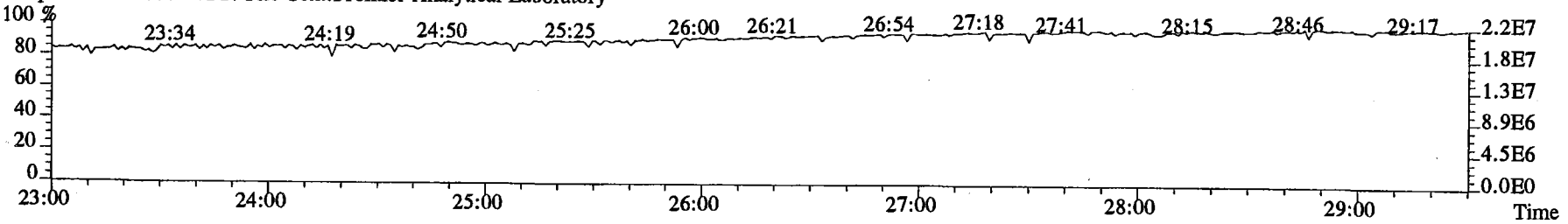
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



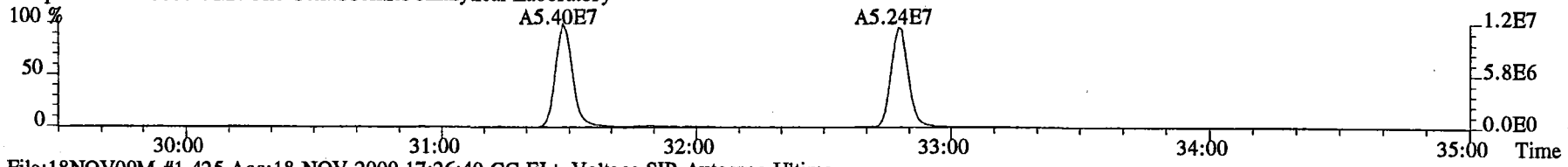
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



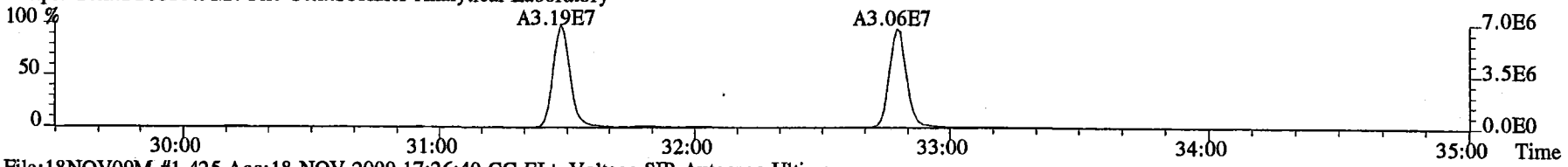
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



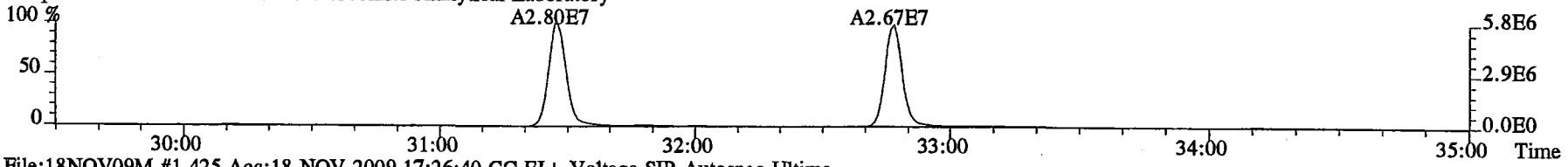
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



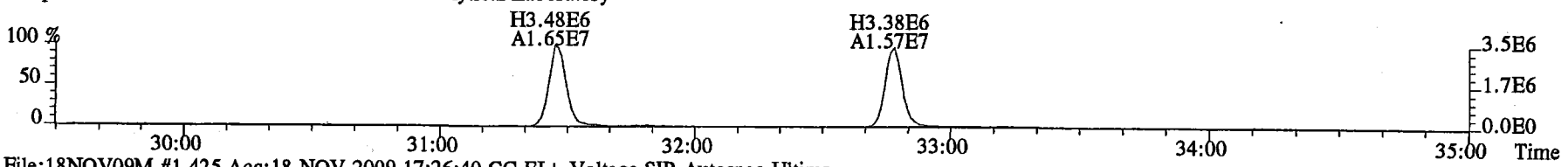
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



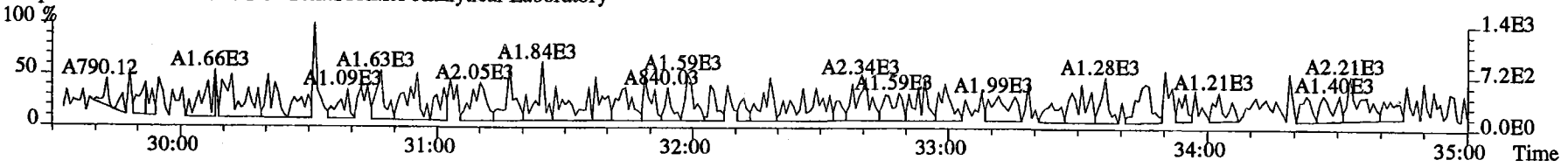
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



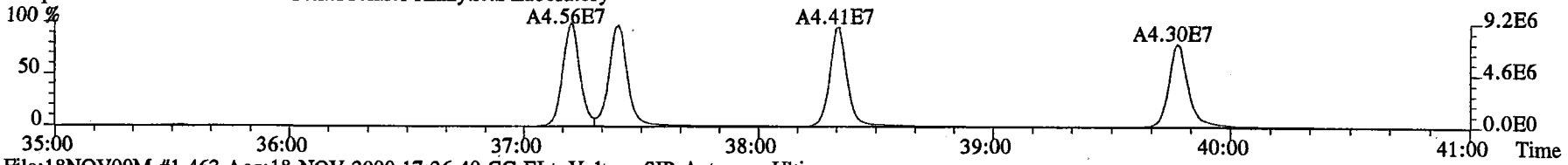
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



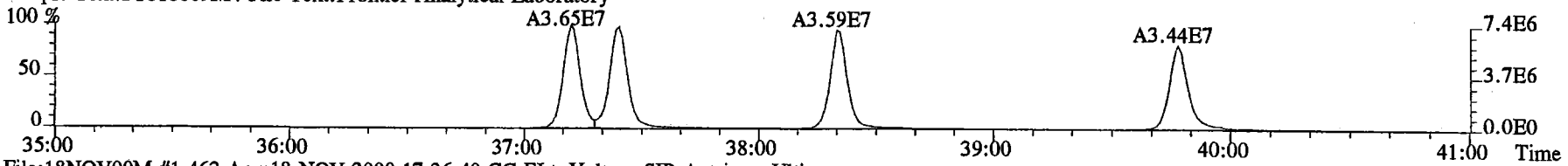
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



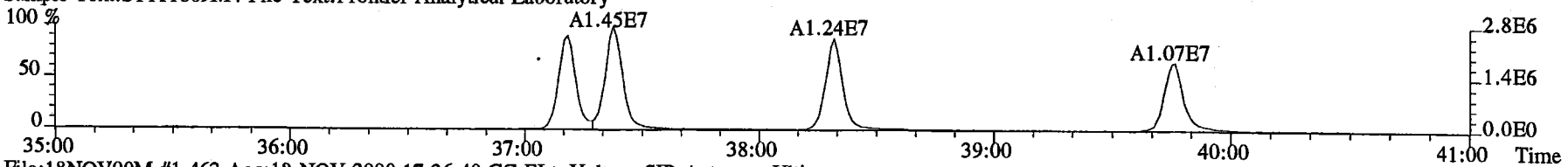
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



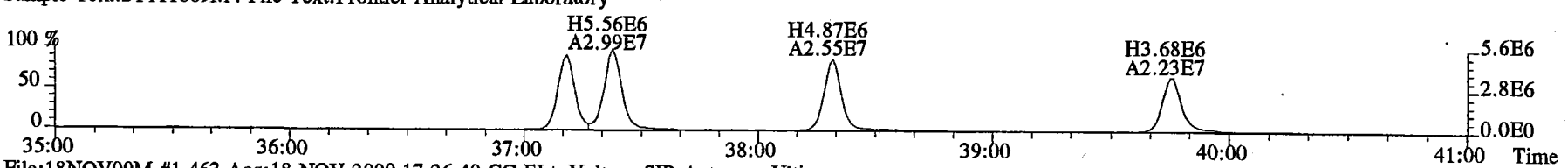
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



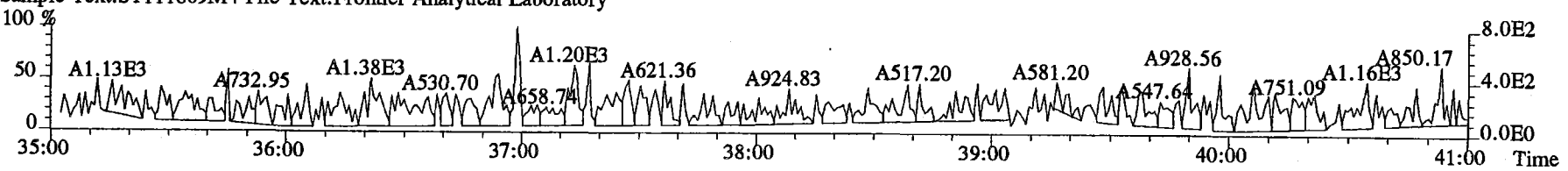
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



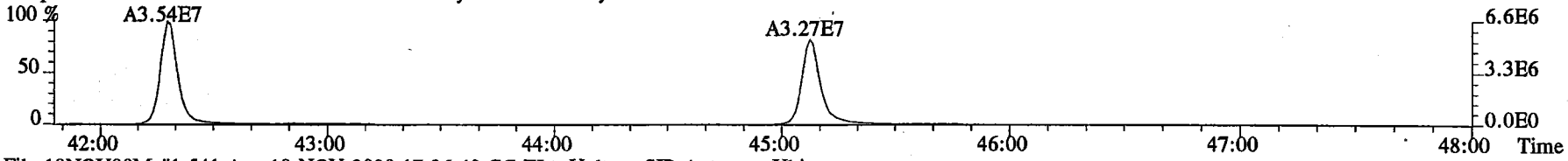
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



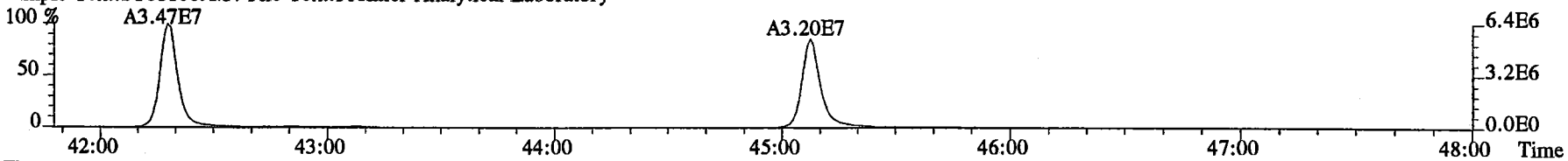
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



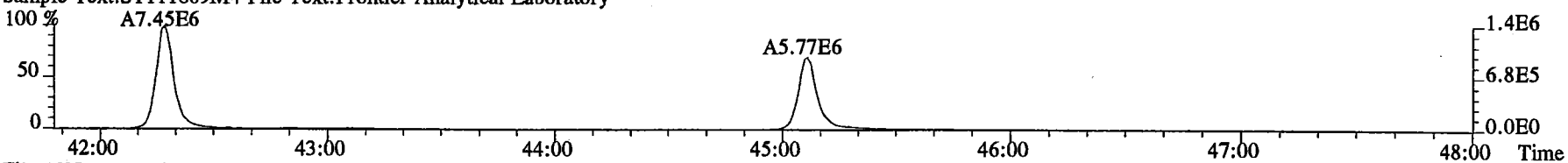
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



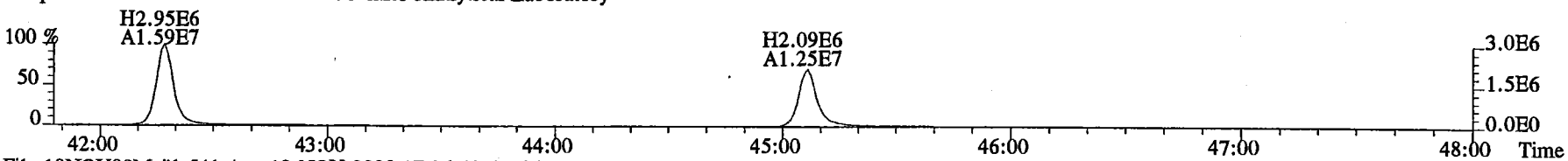
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



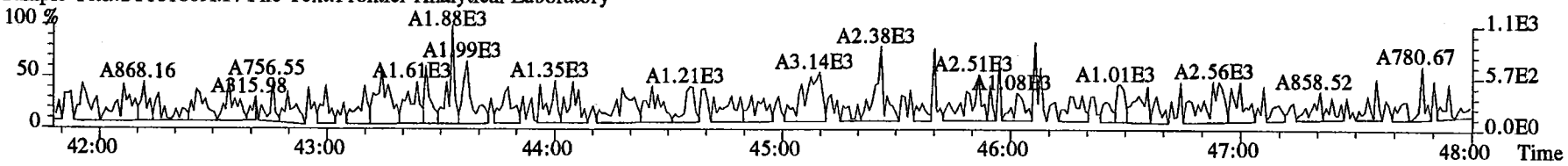
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



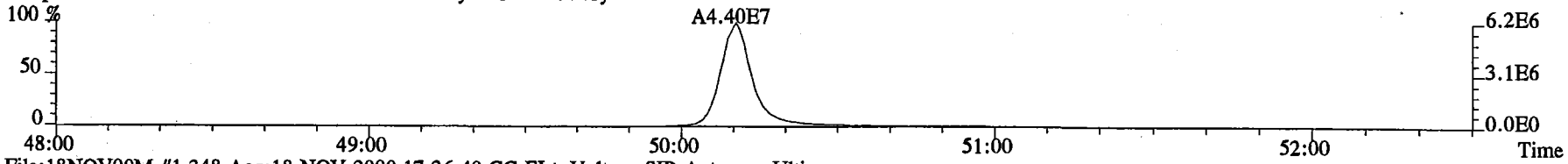
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



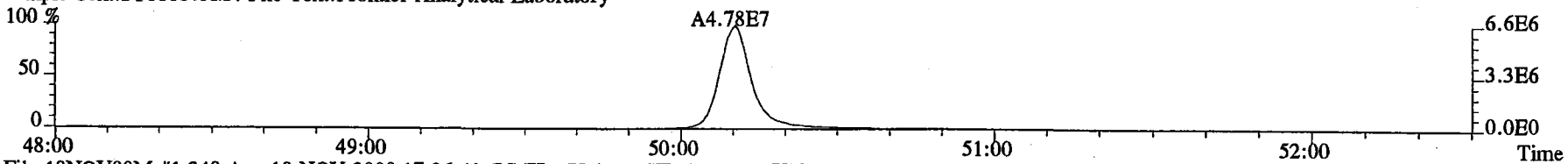
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



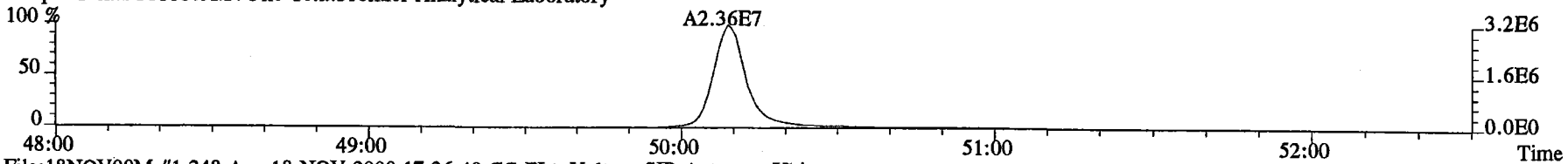
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



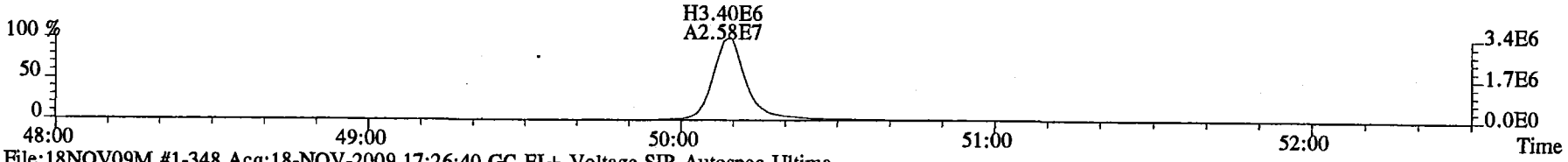
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



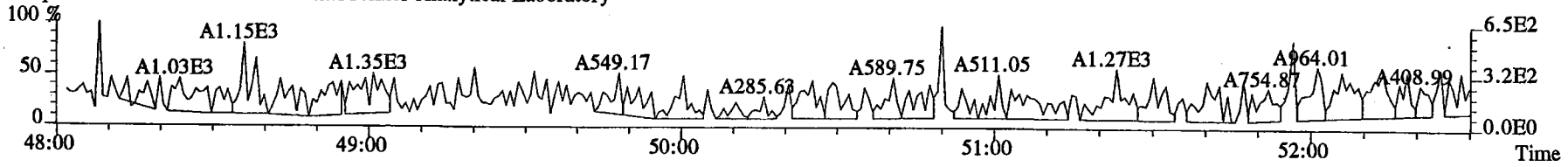
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



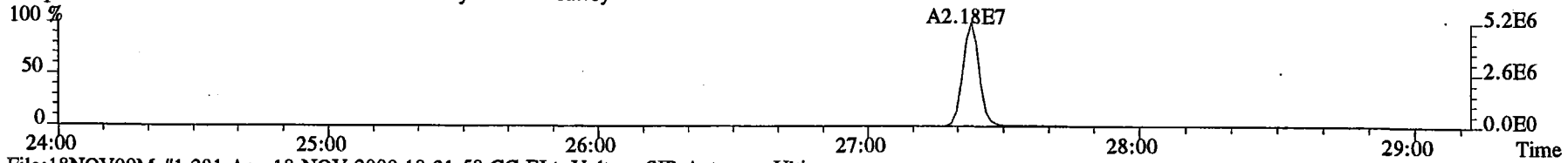
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



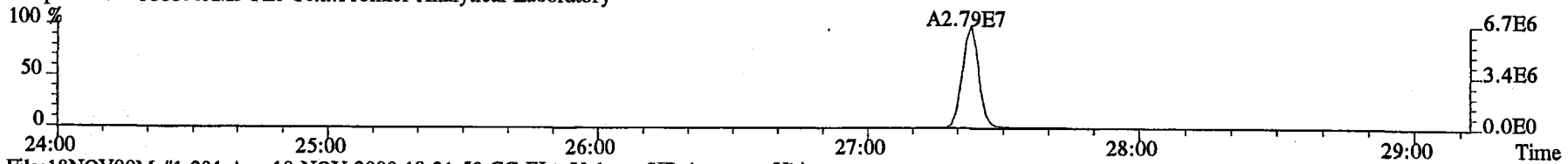
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



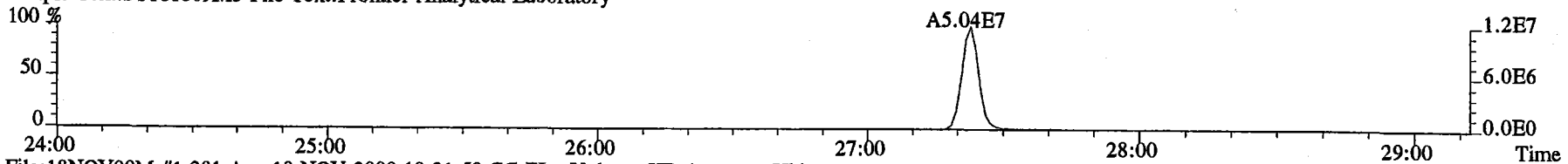
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



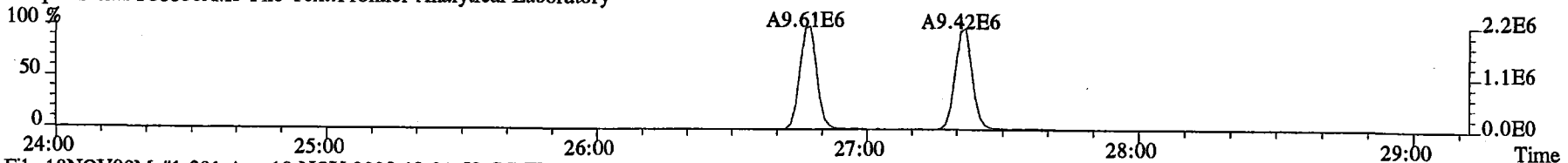
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



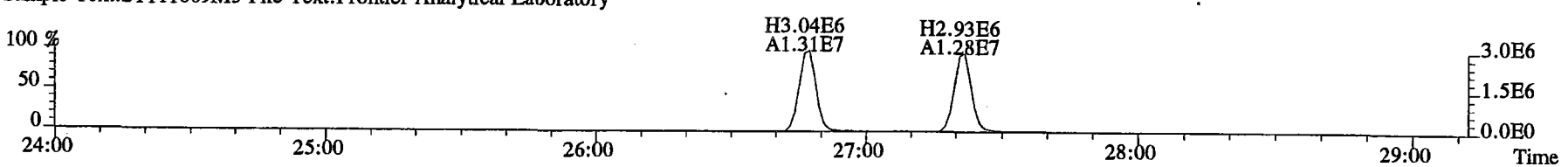
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



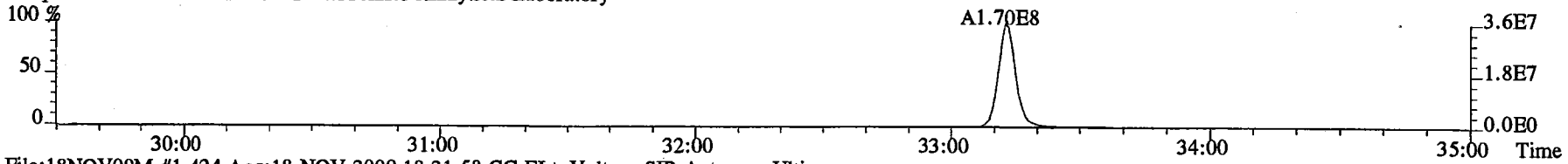
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



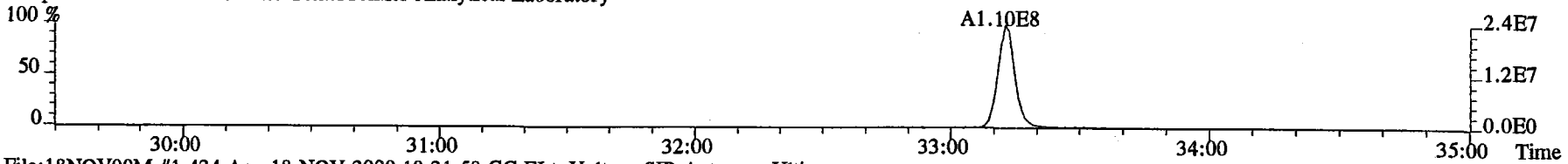
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



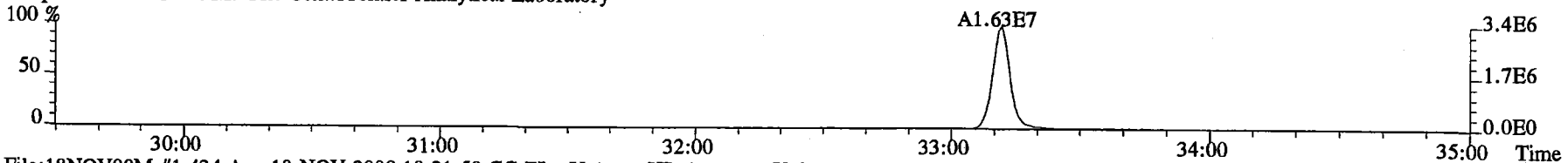
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



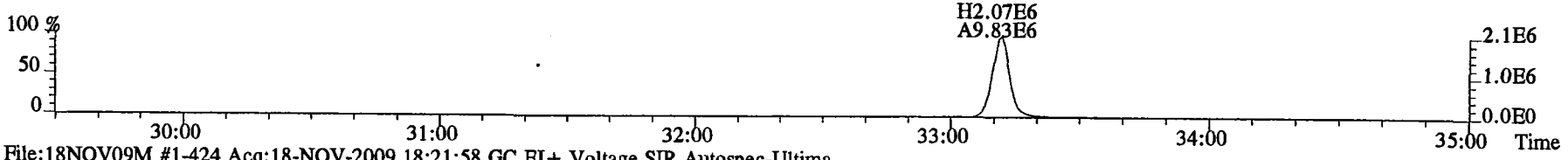
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



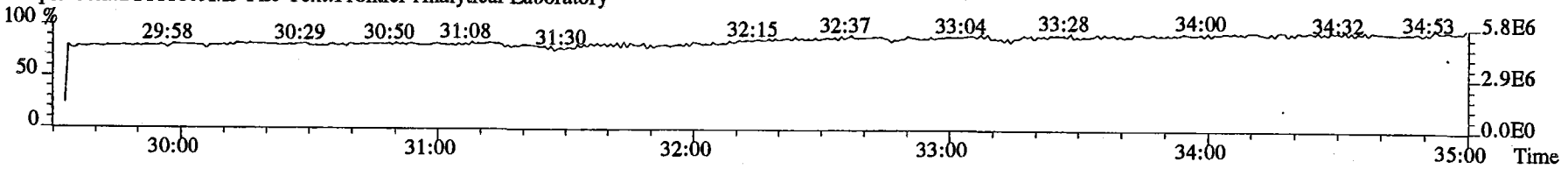
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



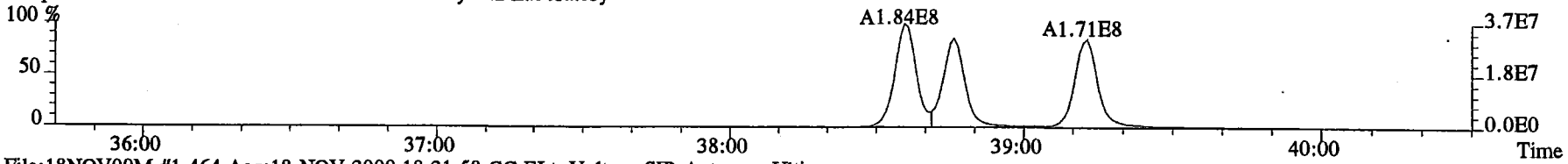
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



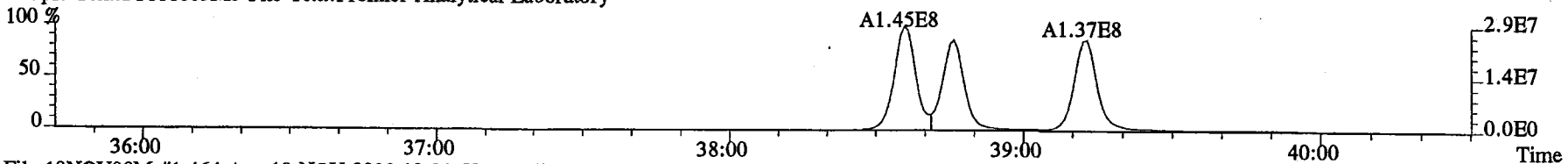
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



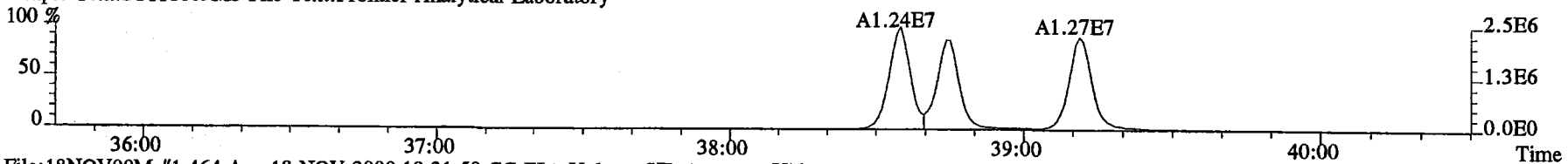
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



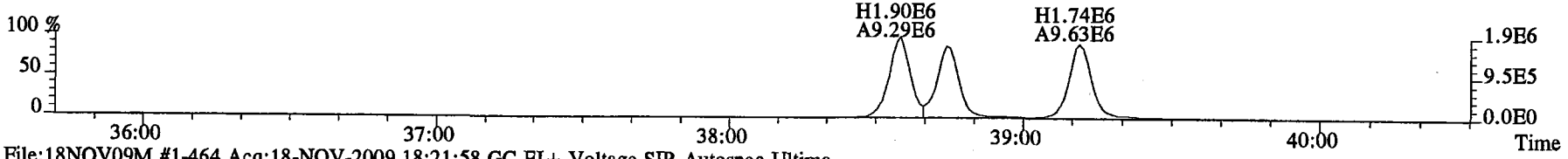
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



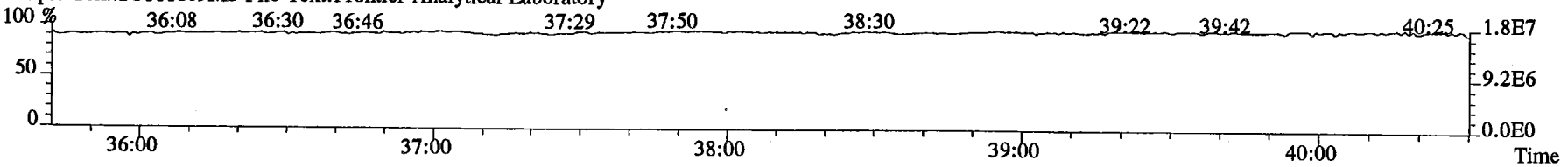
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



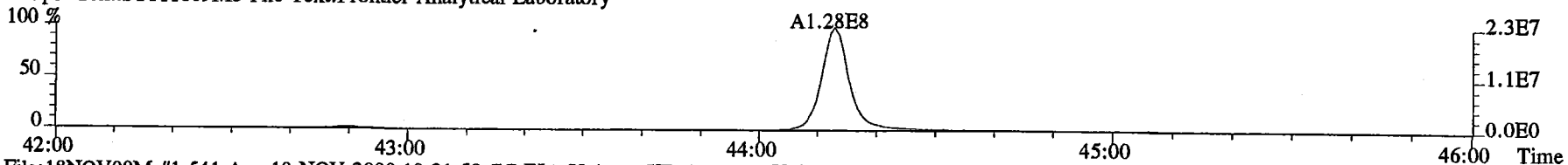
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



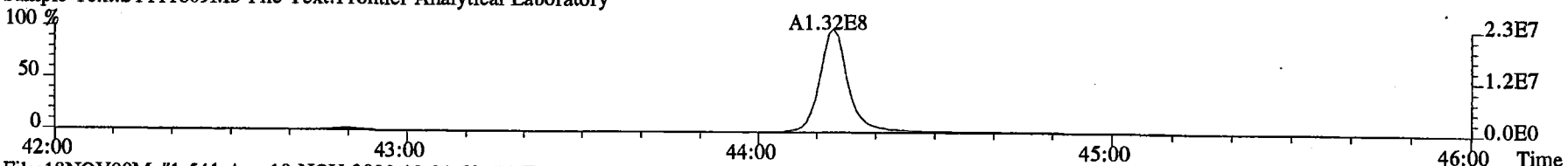
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



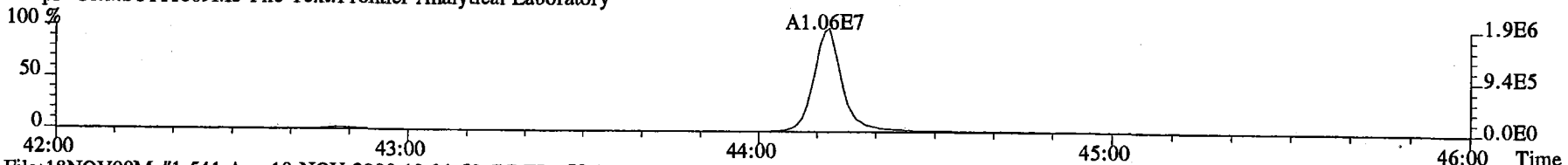
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



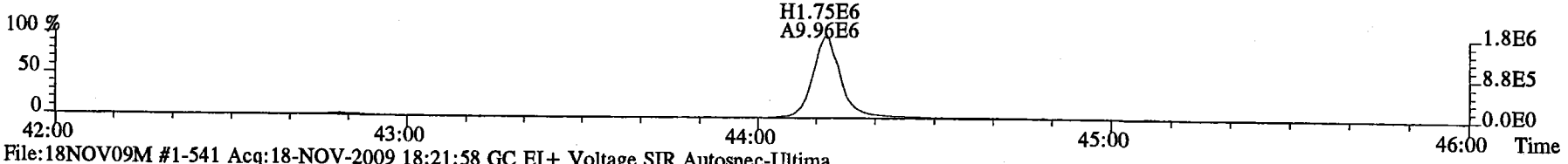
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



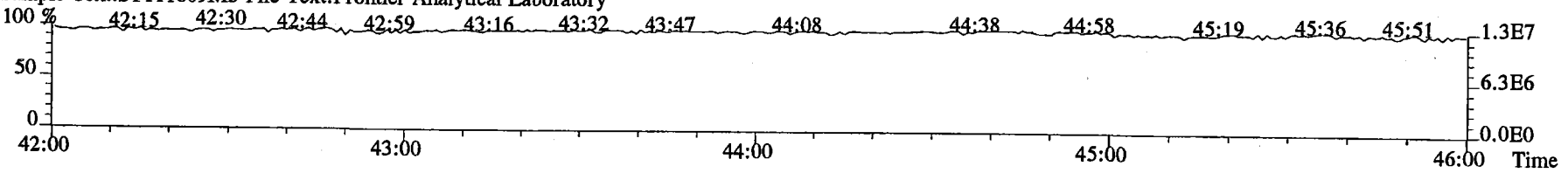
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



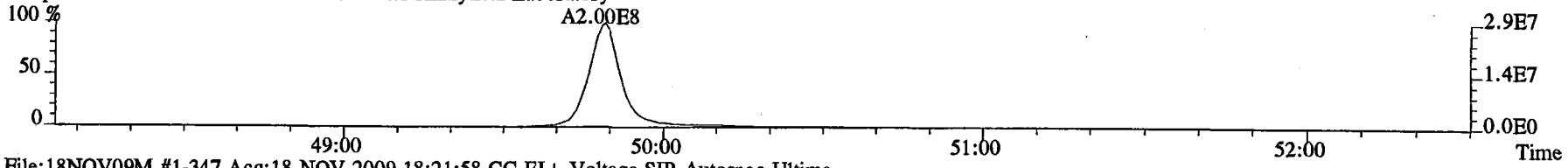
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



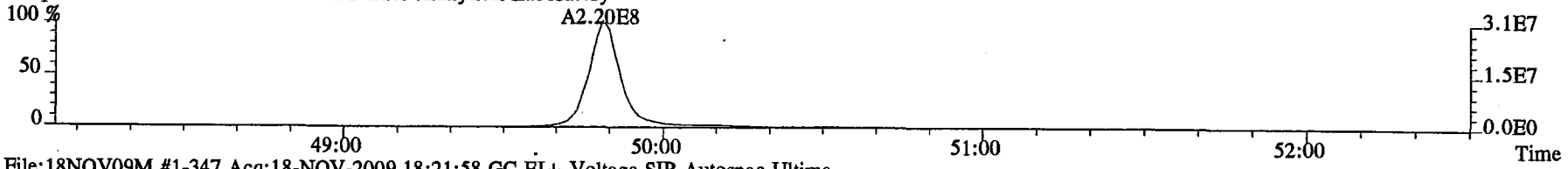
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



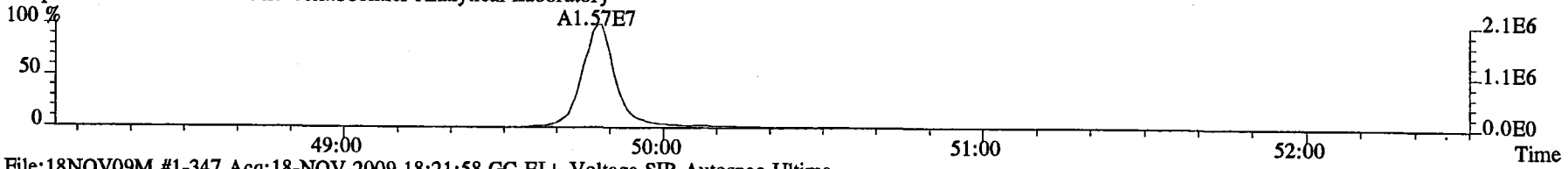
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



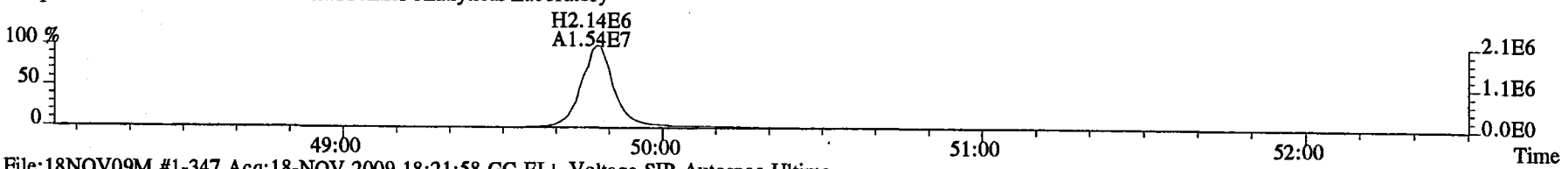
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



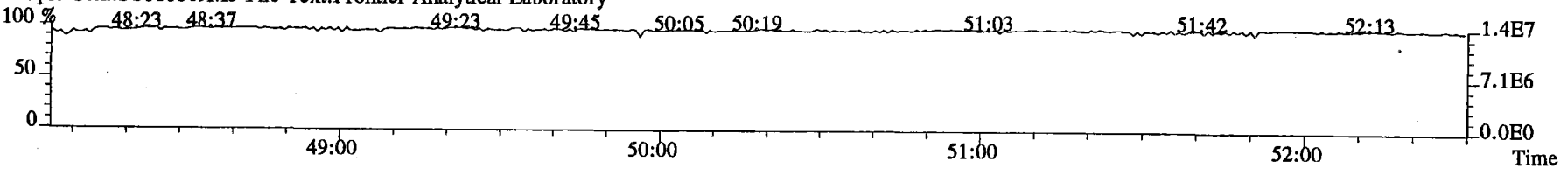
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



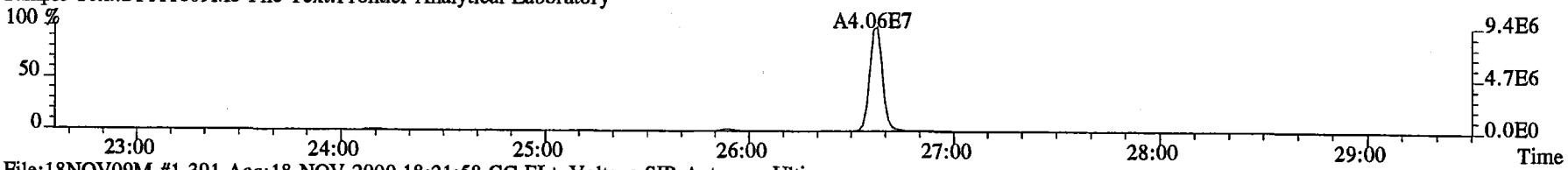
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



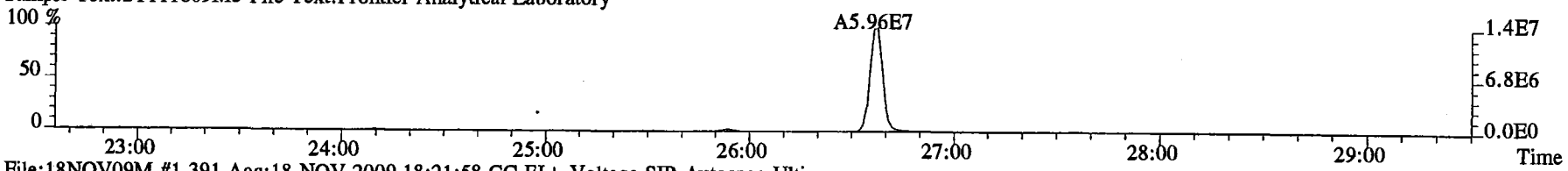
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



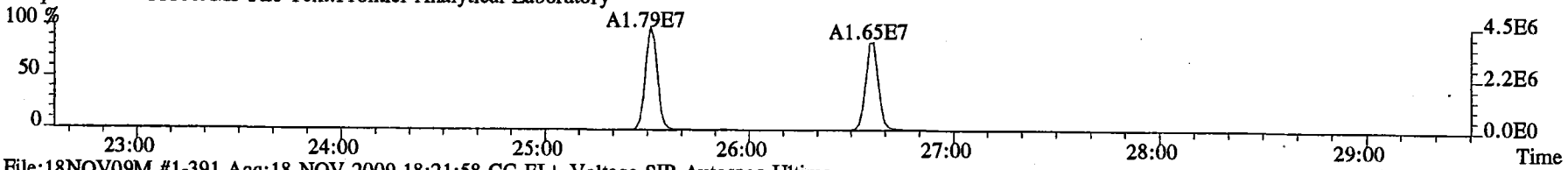
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



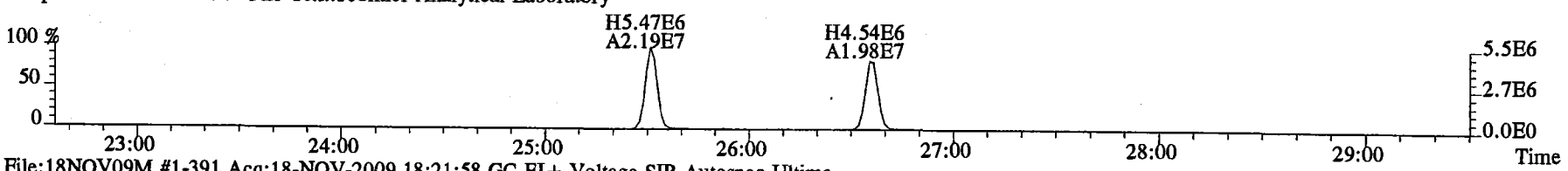
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



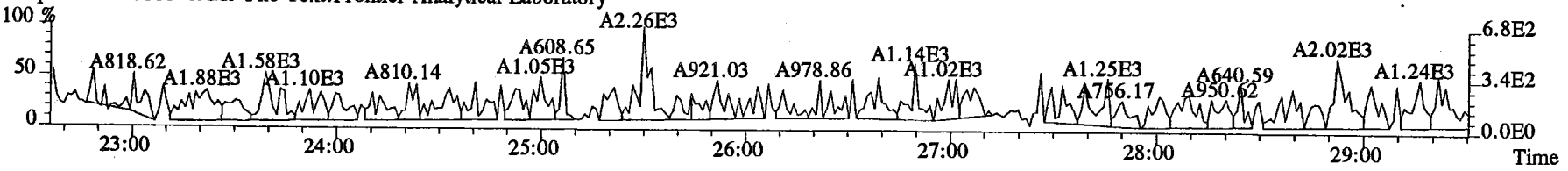
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



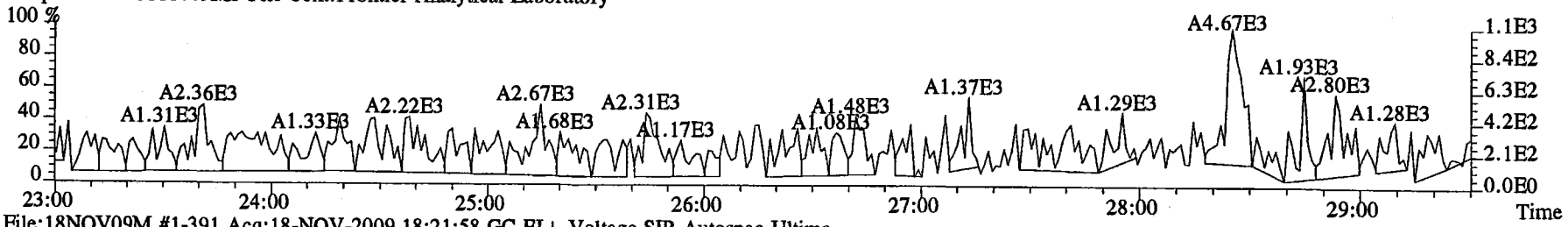
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



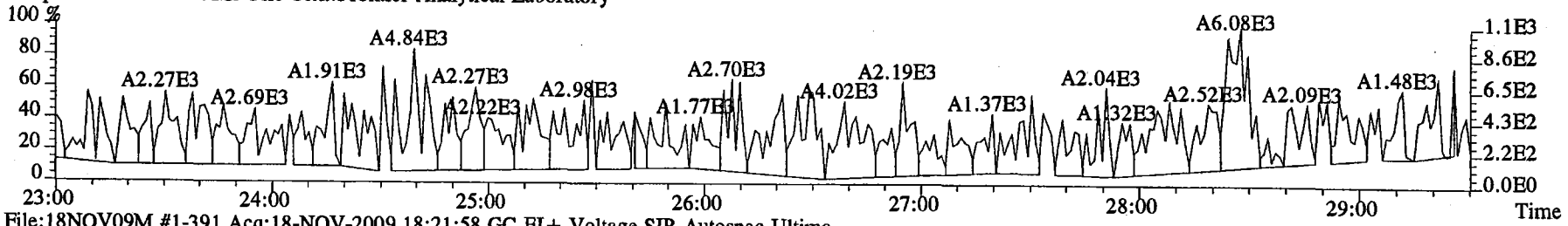
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



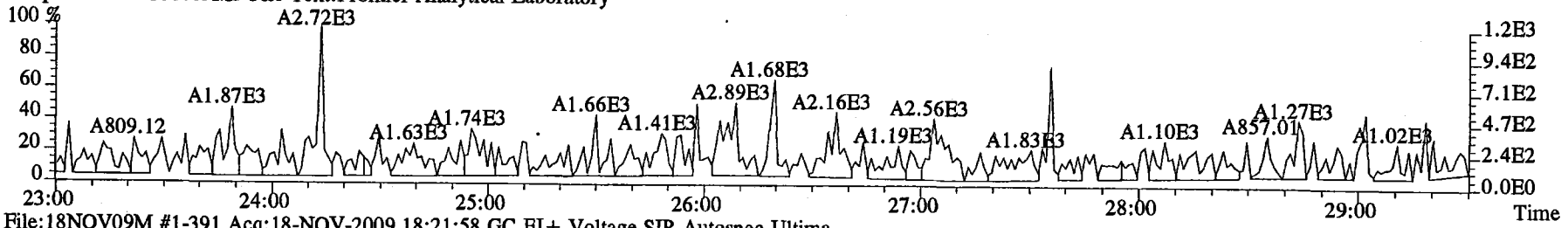
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



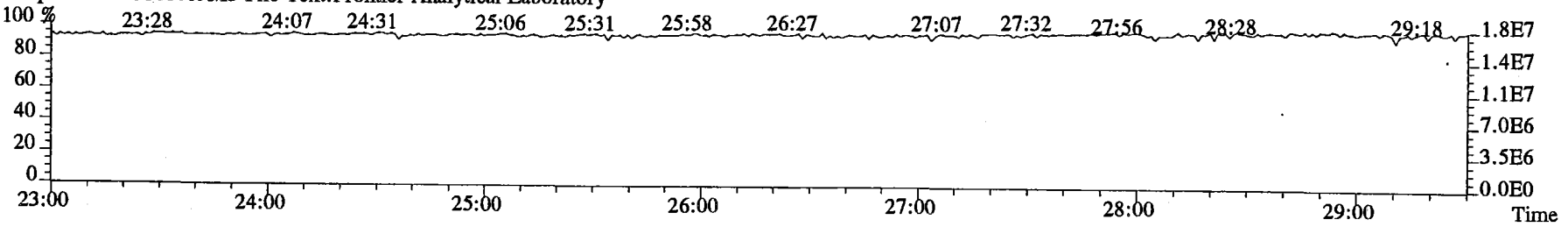
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



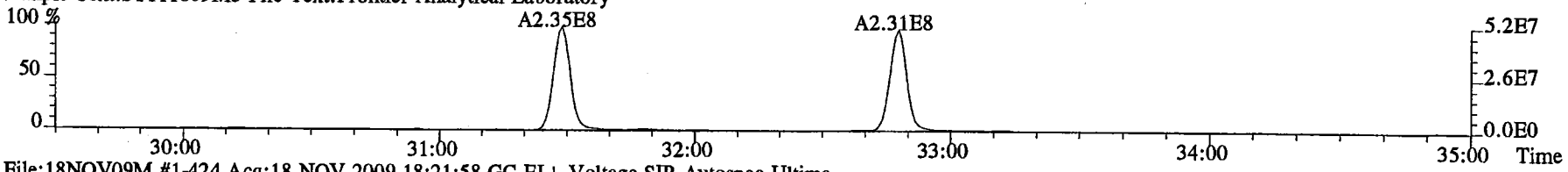
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



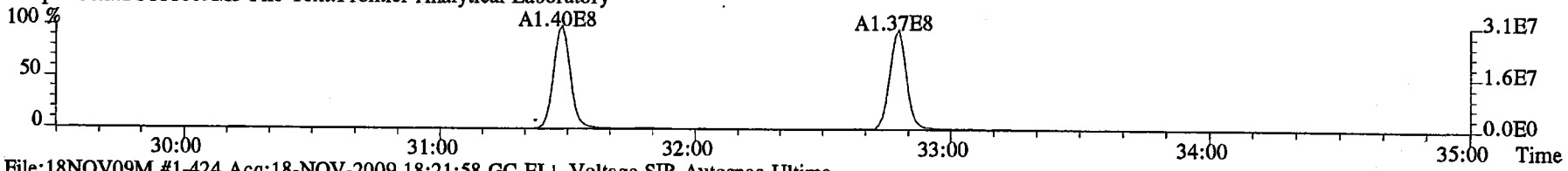
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



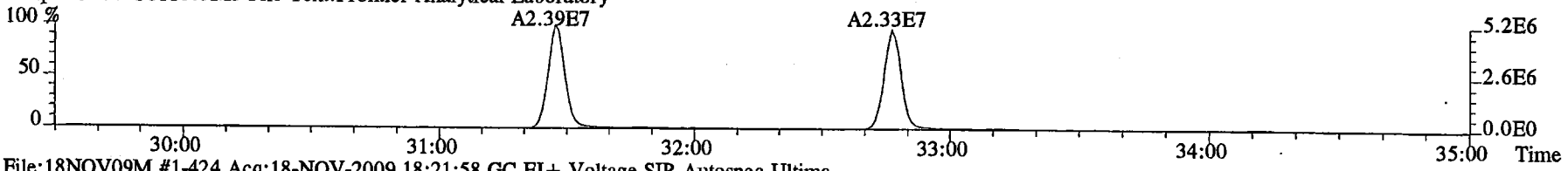
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



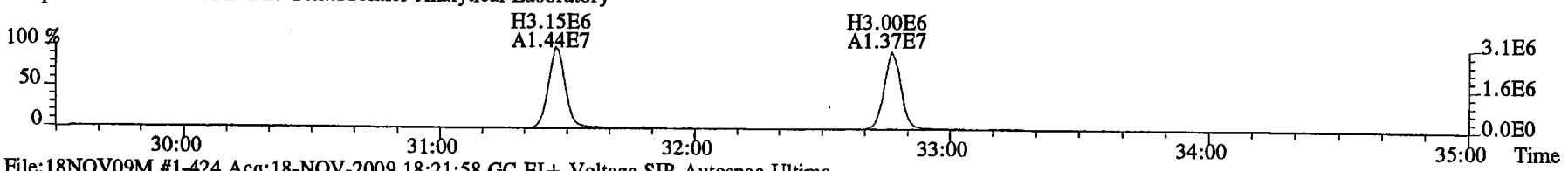
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



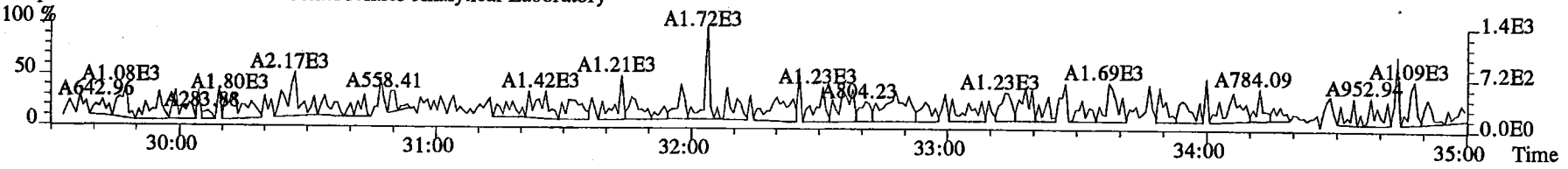
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



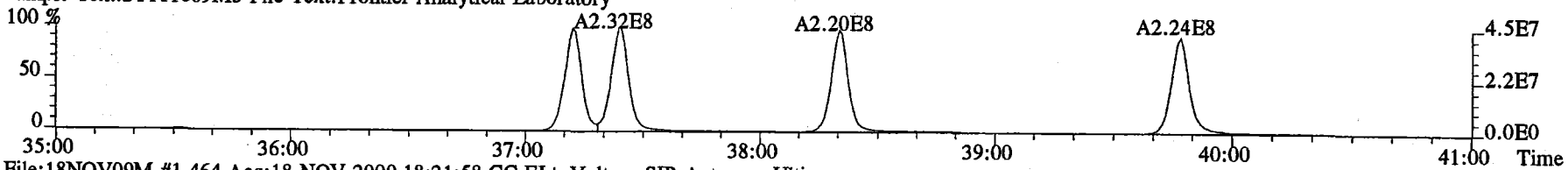
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



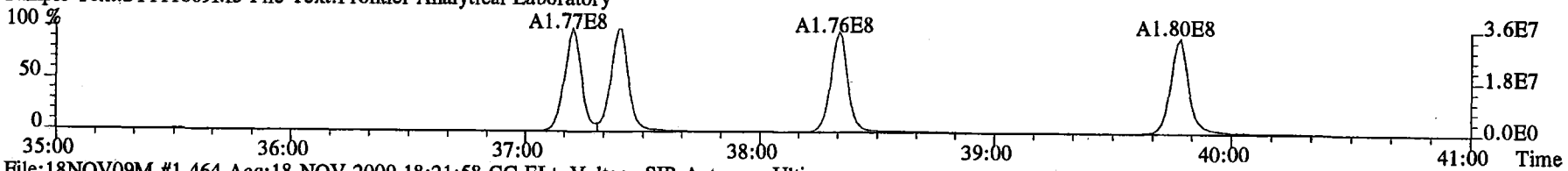
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



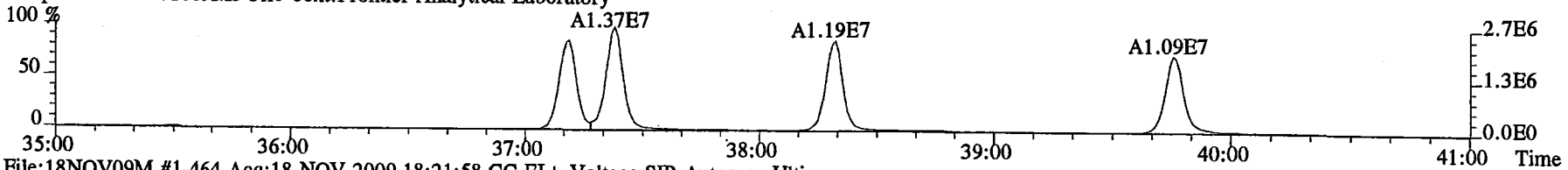
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



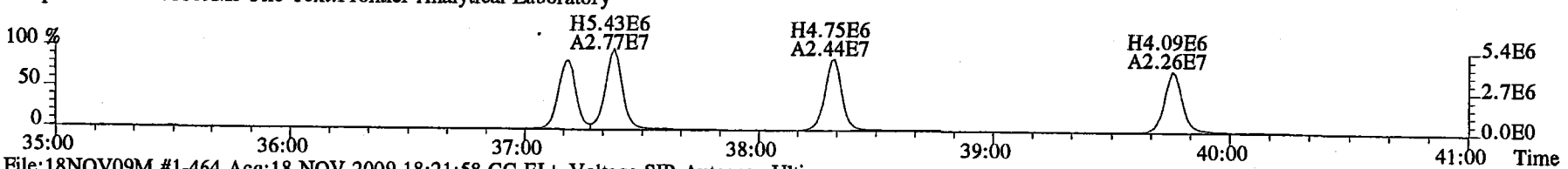
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



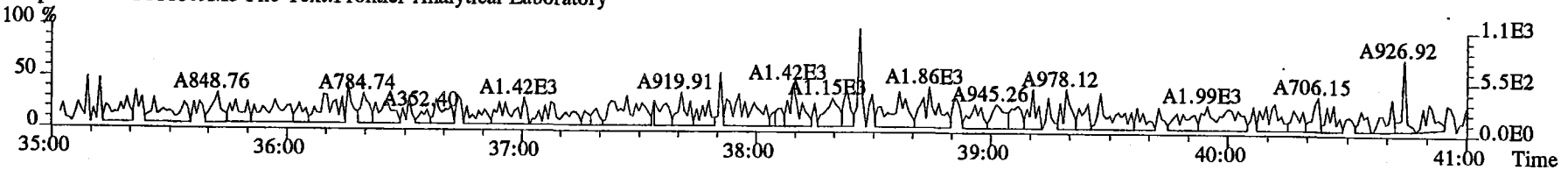
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



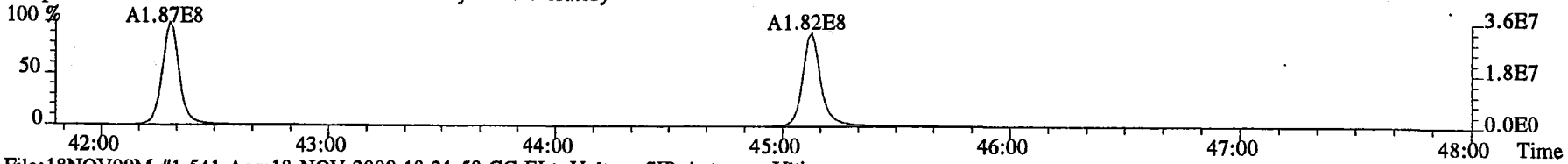
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



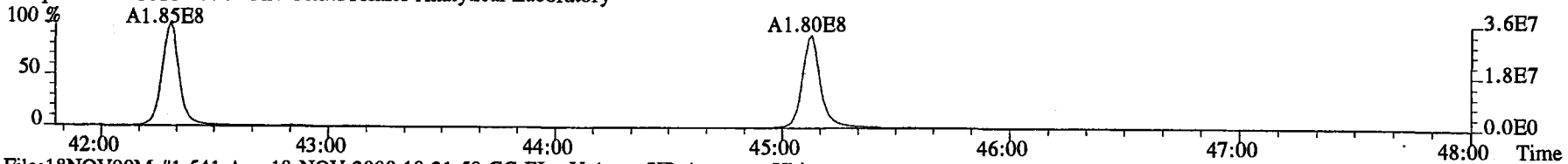
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



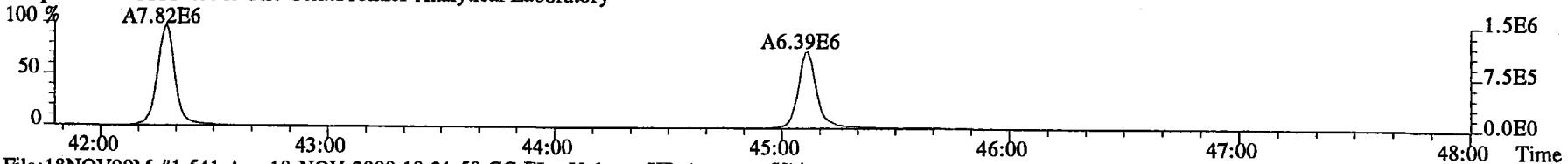
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



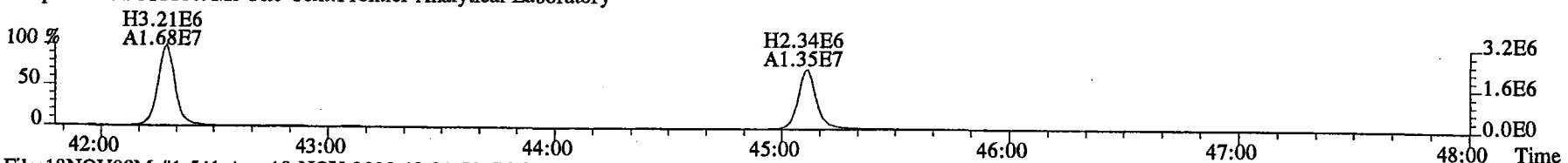
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



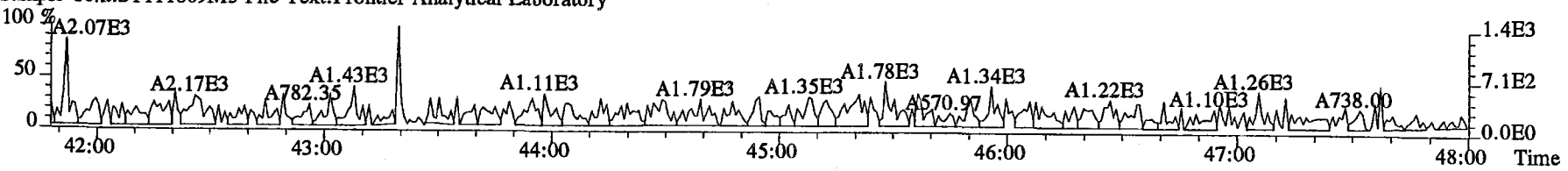
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



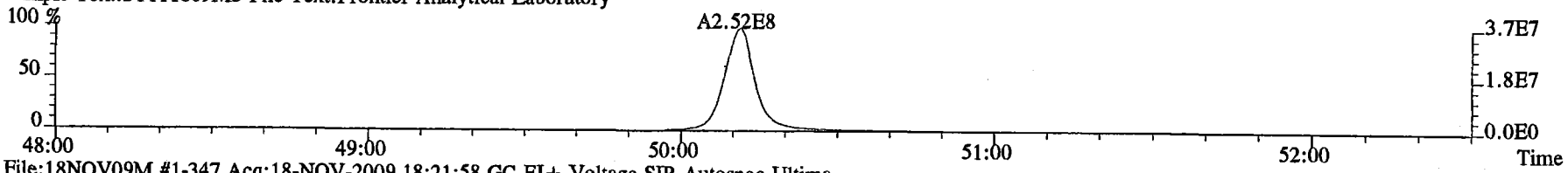
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



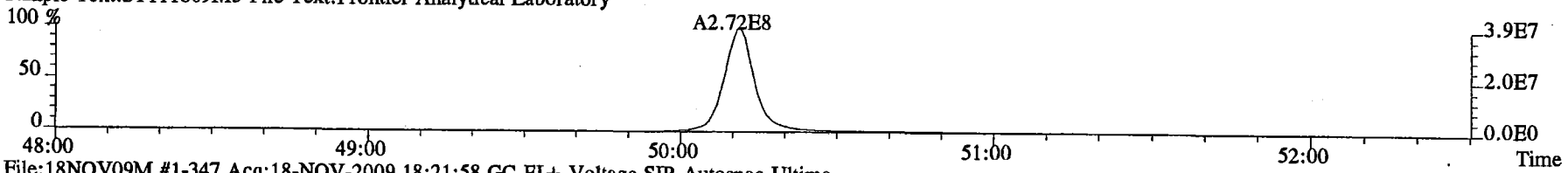
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



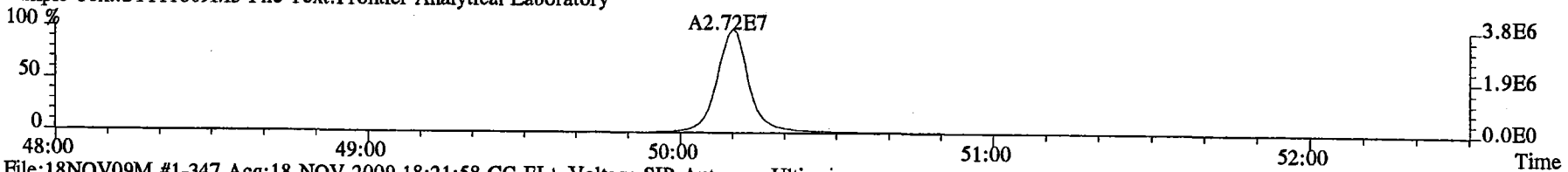
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



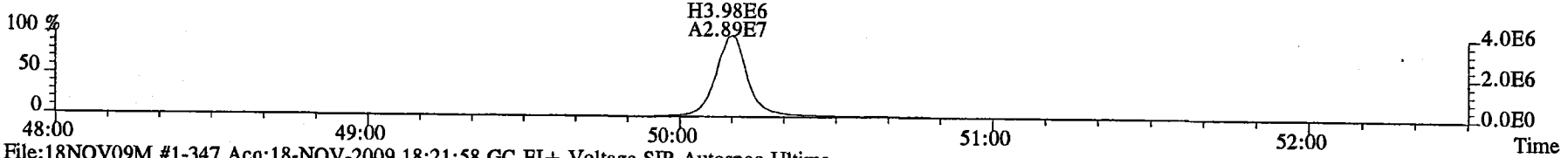
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



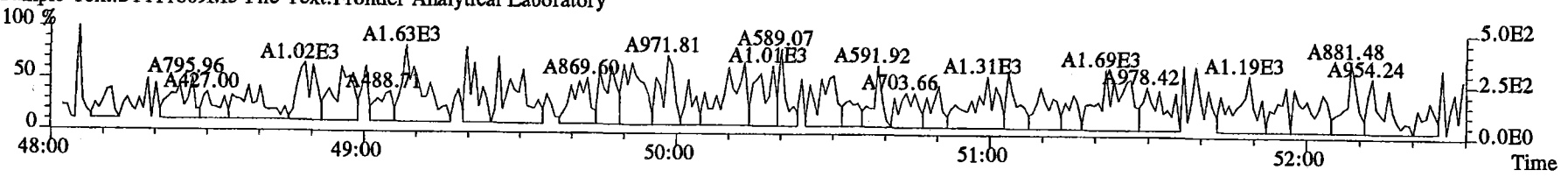
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



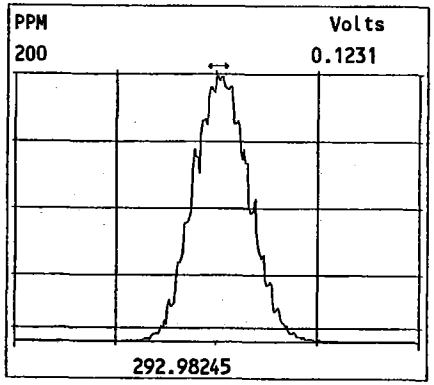
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

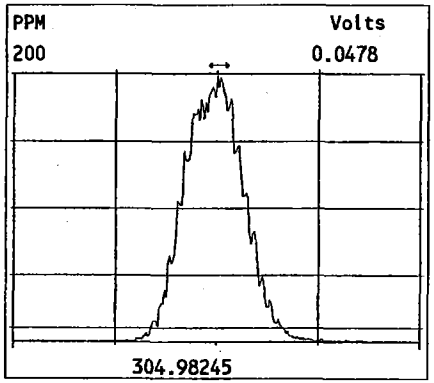


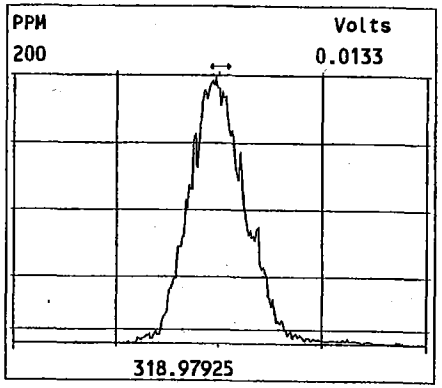
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

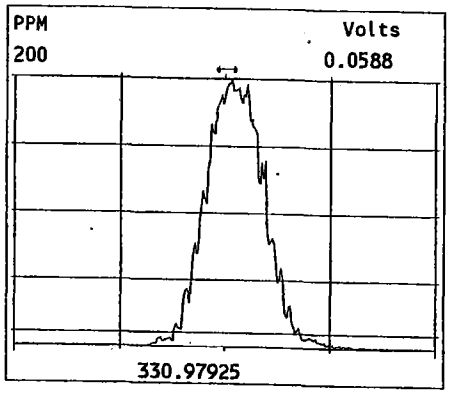


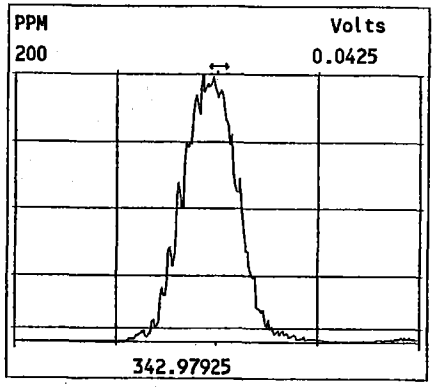
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

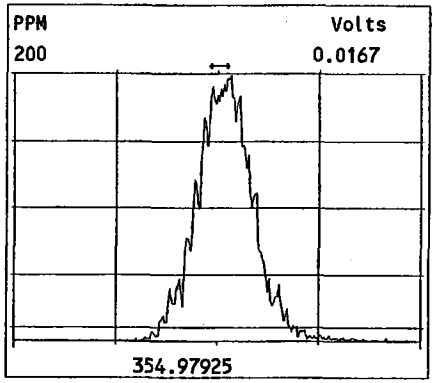


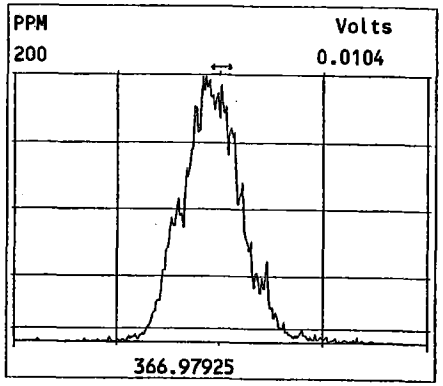


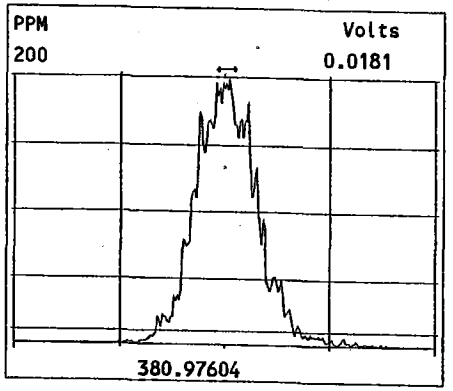


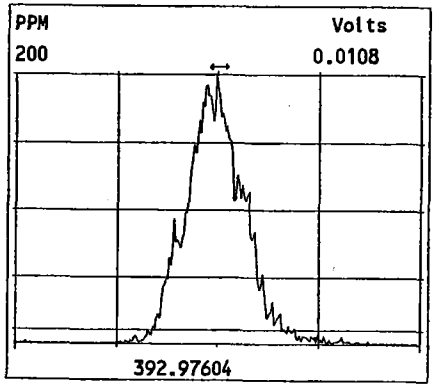


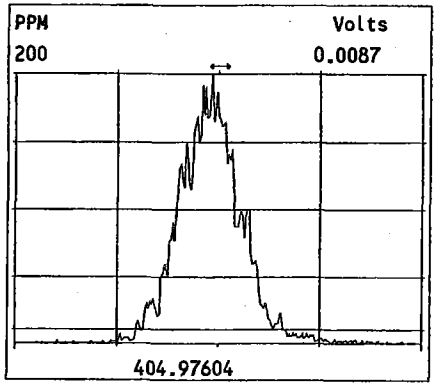


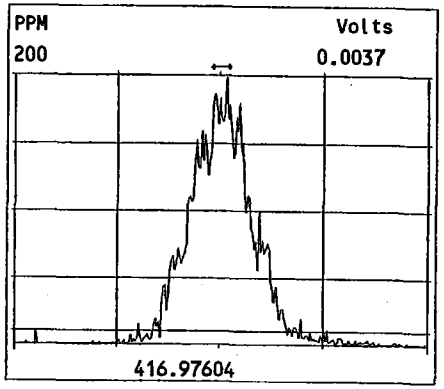




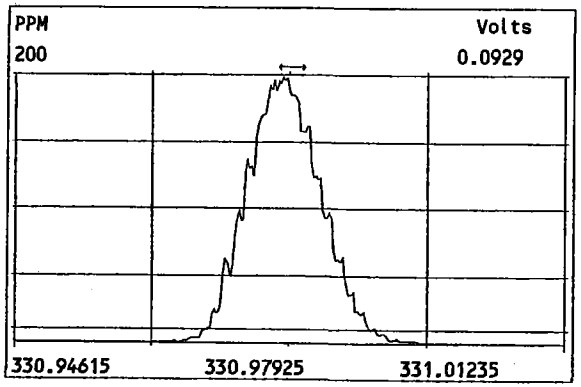


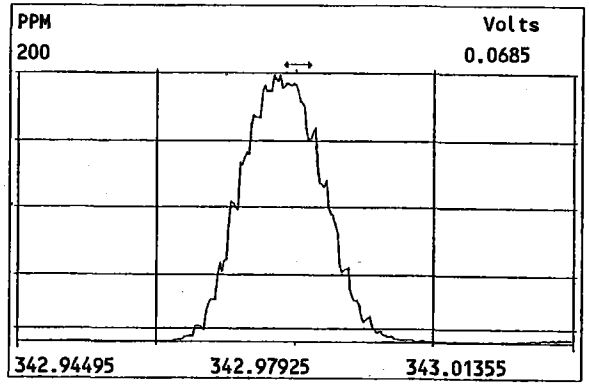


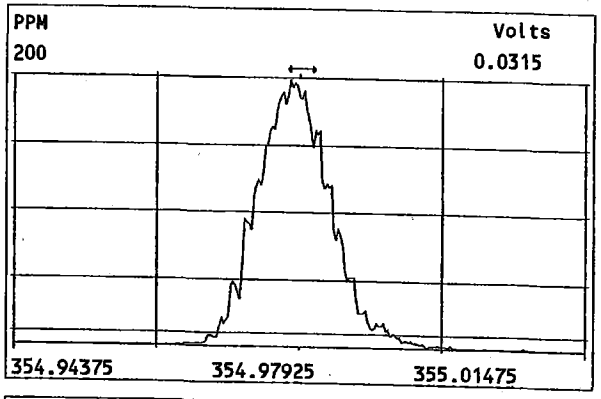


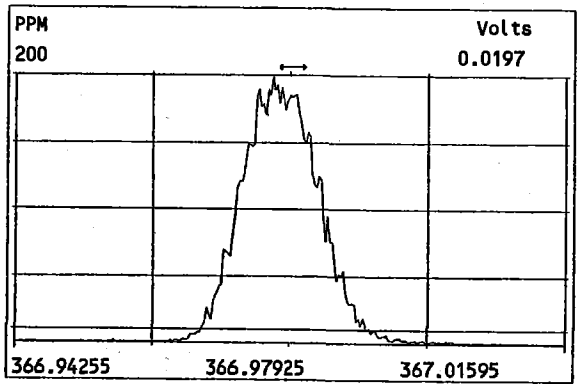


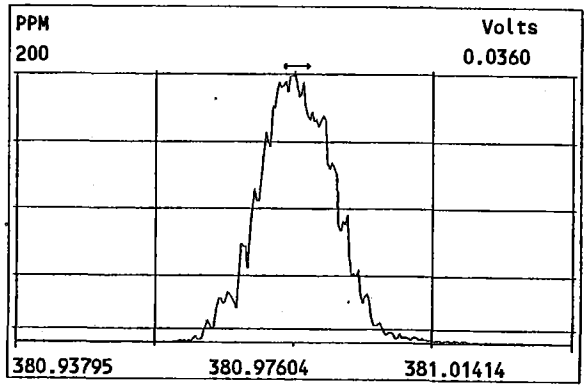
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

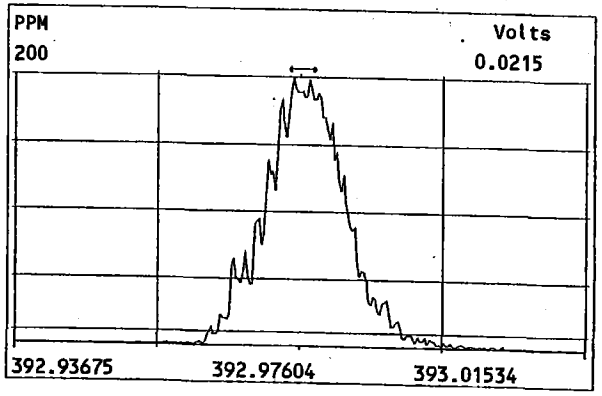


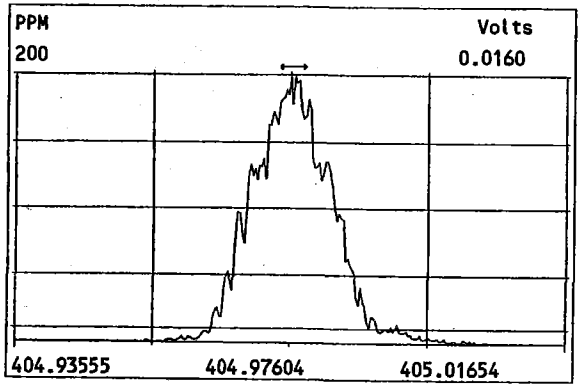


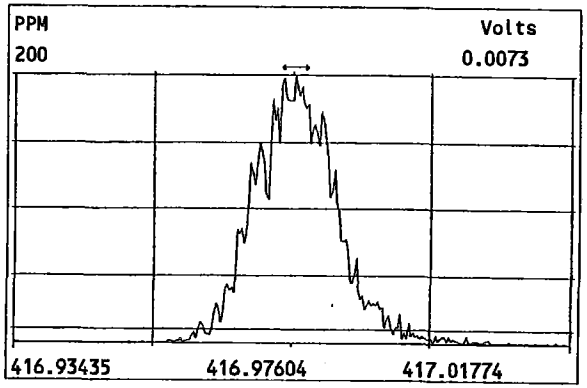




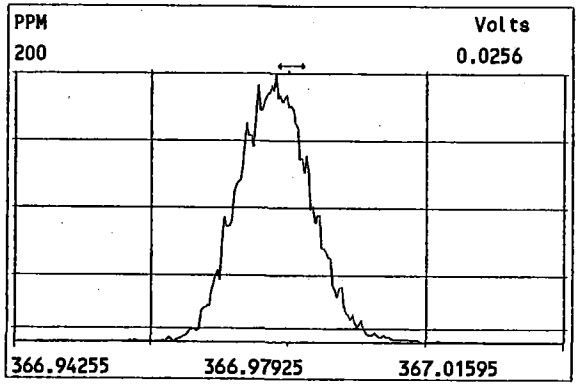


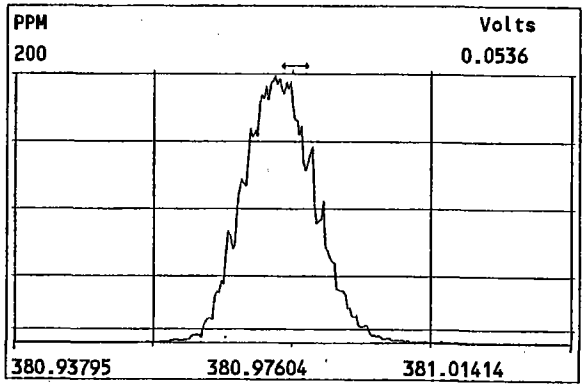


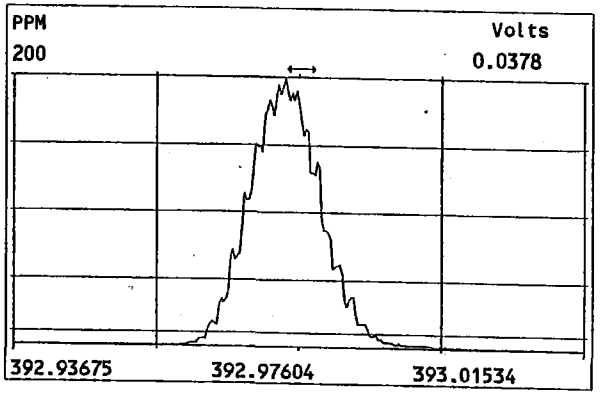


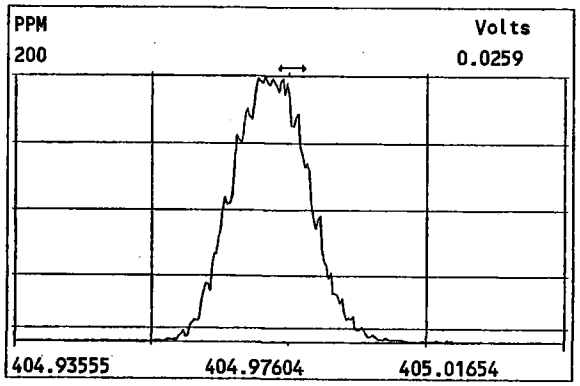


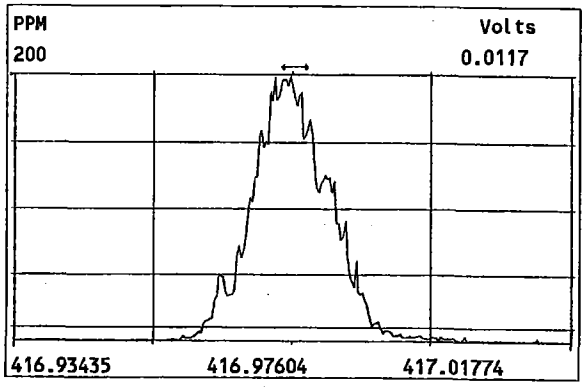
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

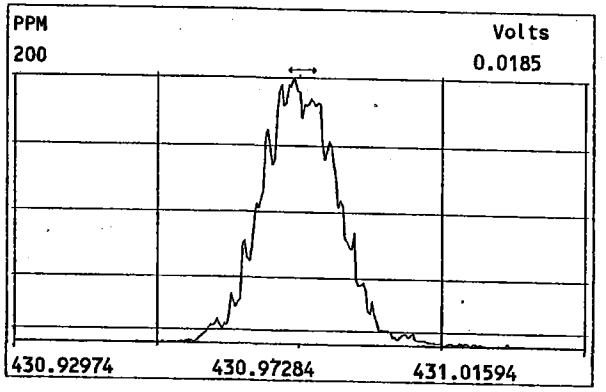


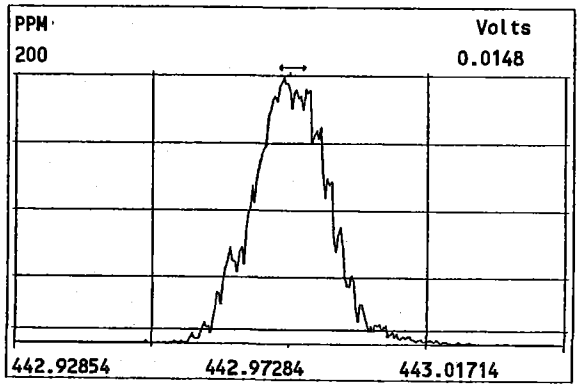


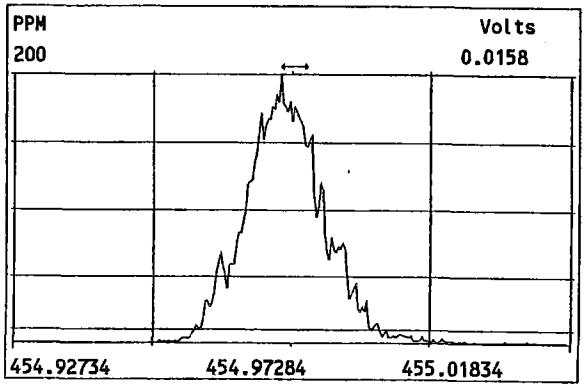




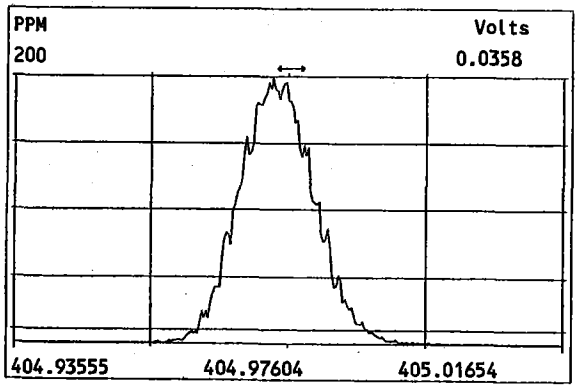


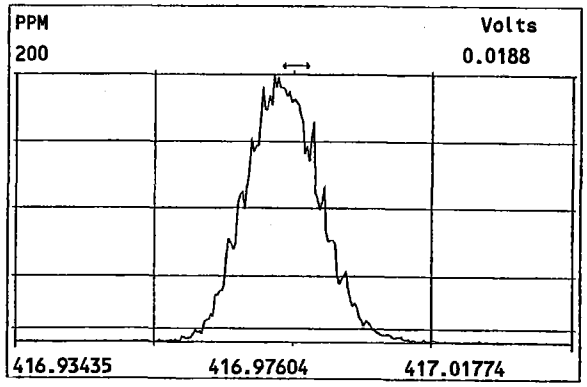


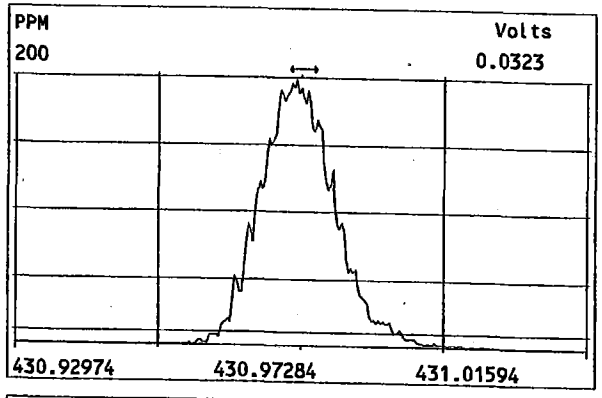


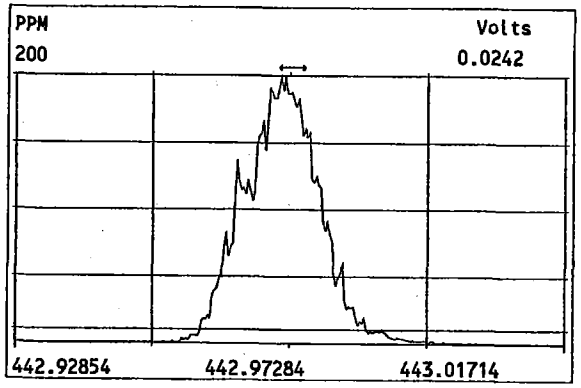


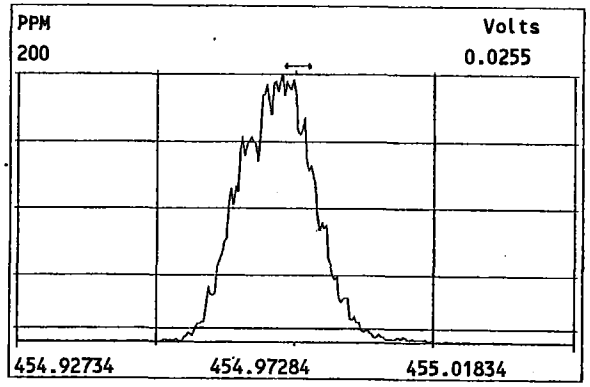
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

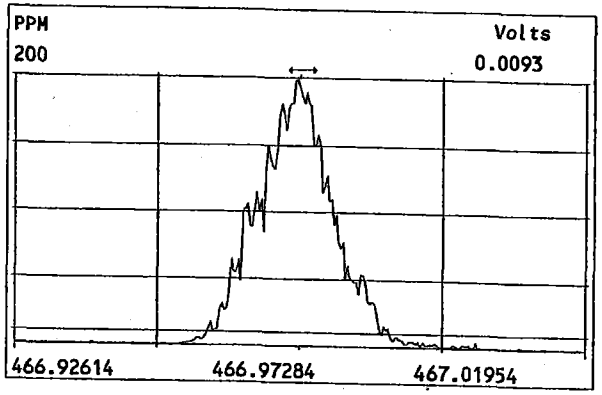


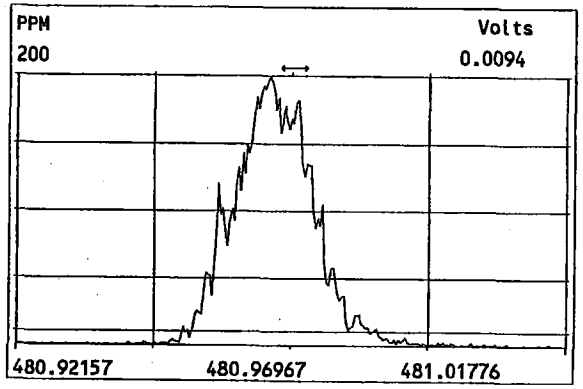






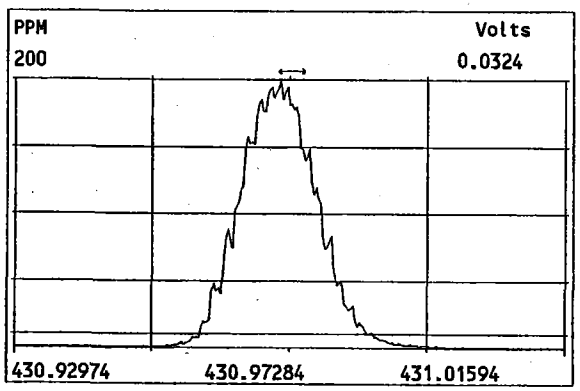


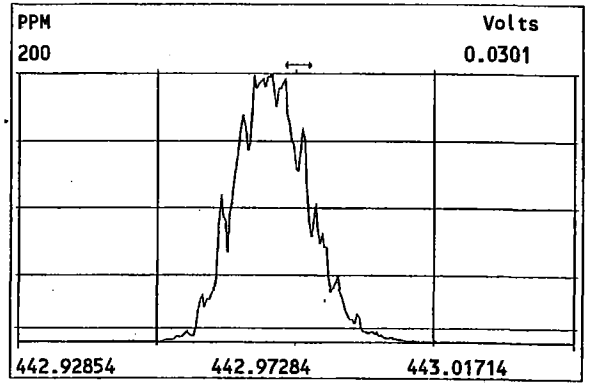


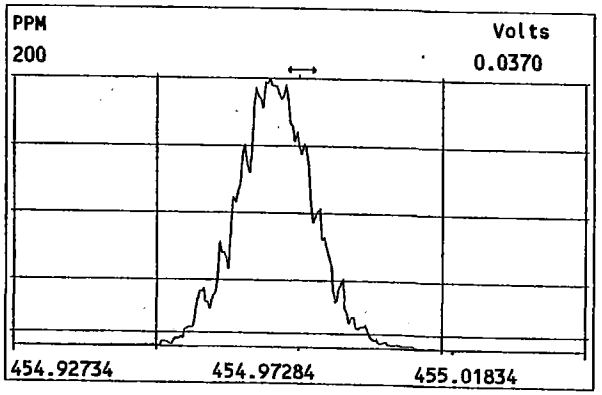


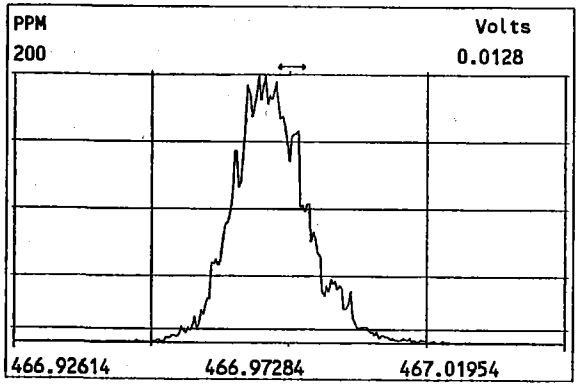
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK

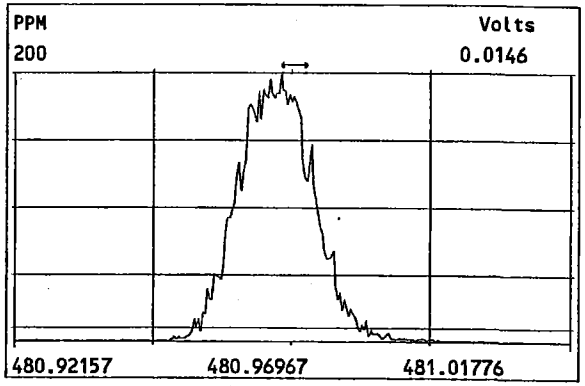
Experiment:PCDD Function:5 Reference:PFK

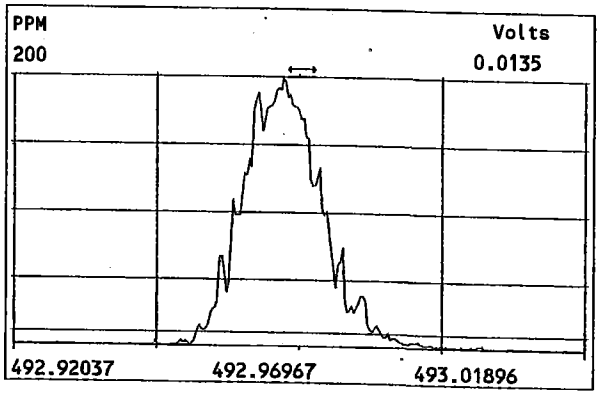


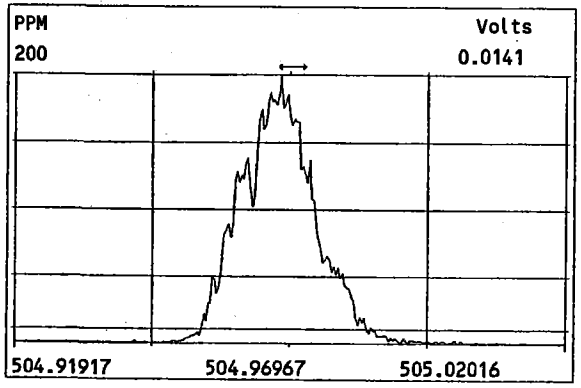


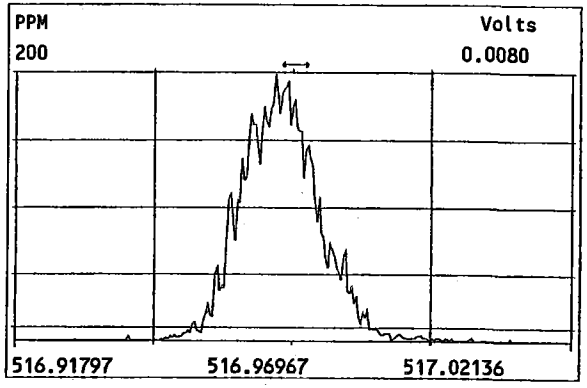












Continuing/Ending Calibration Results

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: 04JAN10M Sam:1 Analysis Date: 4-JAN-10 09:53:50

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	9.92	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.62	1.32-1.78	y	47.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	46.2	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	44.8	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.19	1.05-1.43	y	45.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.96	0.88-1.20	y	48.8	43.0 - 58.0
OCDD	M+2/M+4	0.92	0.76-1.02	y	99.7	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.67	0.65-0.89	y	9.79	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	51.3	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.71	1.32-1.78	y	49.7	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	50.4	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.18	1.05-1.43	y	49.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	50.5	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	50.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	51.5	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	51.1	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	101	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: 1/5/10

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: 04JAN10M Sam:1 Analysis Date: 4-JAN-10 09:53:50

	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	94.1	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.74	1.32-1.78	y	82.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	105	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	98.7	72.0 - 138
13C-OCDD	M+2/M+4	0.98	0.76-1.02	y	180	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.84	0.65-0.89	y	92.7	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	80.8	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	79.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	111	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	110	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.47	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	88.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.47	0.37-0.51	y	97.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	89.7	77.0 - 129
13C-OCDF	M+2/M+4	0.95	0.76-1.02	y	172	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.38	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: 1/5/10

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: 04JAN10M Sam:1 Analysis Date: 4-JAN-10 Time: 09:53:50

DB-5 IS Data Filename: 04JAN10M Sam:1 Analysis Date: 4-JAN-10 Time: 09:53:50

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

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:21	1,3,6,8-TCDF (F)	23:00
1,2,8,9-TCDD (L)	28:17	1,2,8,9-TCDF (L)	28:30
1,2,4,7,9-PeCDD (F)	30:11	1,3,4,6,8-PeCDF (F)	28:22
1,2,3,8,9-PeCDD (L)	33:45	1,2,3,8,9-PeCDF (L)	34:09
1,2,4,6,7,9-HxCDD (F)	36:05	1,2,3,4,6,8-HxCDF (F)	35:12
1,2,3,7,8,9-HxCDD (L)	39:08	1,2,3,7,8,9-HxCDF (L)	39:43
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:14
1,2,3,4,6,7,8-HpCDD (L)	44:08	1,2,3,4,7,8,9-HpCDF (L)	45:03

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

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: _____ Date: 11/5/10

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: 4-JAN-10 09:53:50 CS3 or VER Data Filename: 04JAN10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	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		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	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: [signature] Date: 1/5/10

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: 4-JAN-10 09:53:50 CS3 or VER Data Filename: 04JAN10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	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	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	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: 1/5/10

FAL ID: STO10410M1 Filename: 04JAN10M Sam:1 Acquired: 4-JAN-10 09:53:50 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (090918J) ConCal: STO10410M1 EndCal: STO10410M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.7
WHO 1998 Tox: 121 WHO 2005 Tox: 111

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.80e+06	0.80 y	27:21	1.02	9.92		2.50	-	-	*
1,2,3,7,8-PeCDD	1.20e+07	1.62 y	33:10	0.96	47.8		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.11e+07	1.23 y	38:32	1.37	46.2		2.50	-	-	*
1,2,3,6,7,8-HxCDD	9.68e+06	1.24 y	38:42	1.34	44.8		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.05e+07	1.19 y	39:08	1.37	45.7		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.56e+06	0.96 y	44:08	1.17	48.8		2.50	-	-	*
OCDD	1.23e+07	0.92 y	49:42	1.21	99.7		2.50	-	-	*
2,3,7,8-TCDF	5.70e+06	0.67 y	26:36	1.29	9.79		2.50	-	-	*
1,2,3,7,8-PeCDF	1.80e+07	1.69 y	31:26	0.89	51.3		2.50	-	-	*
2,3,4,7,8-PeCDF	1.69e+07	1.71 y	32:45	0.91	49.7		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.63e+07	1.20 y	37:09	1.00	50.4		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.70e+07	1.18 y	37:20	0.92	49.7		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.50e+07	1.22 y	38:17	0.99	50.5		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.24e+07	1.23 y	39:43	1.09	50.6		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.27e+07	1.05 y	42:14	1.36	51.5		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.05e+07	1.03 y	45:03	1.61	51.1		2.50	-	-	*
OCDF	1.45e+07	0.93 y	50:04	0.84	101		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.78e+07	0.73 y	27:20	0.94	94.1					94.1
13C-1,2,3,7,8-PeCDD	2.62e+07	1.74 y	33:09	1.02	82.0					82.0
13C-1,2,3,4,7,8-HxCDD	1.75e+07	1.24 y	38:31	0.98	105					105
13C-1,2,3,6,7,8-HxCDD	1.61e+07	1.24 y	38:41	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.50e+07	1.03 y	44:07	0.90	98.7					98.7
13C-OCDD	2.03e+07	0.98 y	49:40	0.67	180					90.0
13C-2,3,7,8-TCDF	4.53e+07	0.84 y	26:35	0.88	92.7					92.7
13C-1,2,3,7,8-PeCDF	3.95e+07	1.68 y	31:25	0.88	80.8					80.8
13C-2,3,4,7,8-PeCDF	3.75e+07	1.68 y	32:44	0.85	79.3					79.3
13C-1,2,3,4,7,8-HxCDF	3.24e+07	0.48 y	37:07	1.72	111					111
13C-1,2,3,6,7,8-HxCDF	3.73e+07	0.48 y	37:20	2.00	110					110
13C-2,3,4,6,7,8-HxCDF	3.01e+07	0.47 y	38:15	1.74	102					102
13C-1,2,3,7,8,9-HxCDF	2.25e+07	0.49 y	39:41	1.51	88.2					88.2
13C-1,2,3,4,6,7,8-HpCDF	1.81e+07	0.47 y	42:13	1.10	97.4					97.4
13C-1,2,3,4,7,8,9-HpCDF	1.29e+07	0.46 y	45:02	0.85	89.7					89.7
13C-OCDF	3.41e+07	0.95 y	50:02	1.17	172					85.8
37Cl-2,3,7,8-TCDD	2.86e+06		27:21	0.97	9.38					93.8
13C-1,2,3,4-TCDD	3.13e+07	0.74 y	26:45	-	120					
13C-1,2,3,4-TCDF	5.56e+07	0.85 y	25:30	-	120					
13C-1,2,3,7,8,9-HxCDD	1.69e+07	1.22 y	39:07	-	82.5					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.55e+07		24:21	1.02	54.8	2.50	-	-	*		17
Total Penta-Dioxins	2.77e+07		30:11	0.96	110	2.50	-	-	*		12
Total Hexa-Dioxins	3.64e+07		36:05	1.36	159	2.50	-	-	*		27
Total Hepta-Dioxins	1.88e+07		42:46	1.17	107	2.50	-	-	*		19
Total Tetra-Furans	2.50e+07		23:00	1.29	42.9	2.50	-	-	*		16
1st Fn. Tot Penta-Furans	2.23e+07		28:22	0.90	64.6	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.01e+07		30:08	0.90	145	2.50	-	-	*	210	18
Total Hexa-Furans	7.14e+07		35:12	0.99	237	2.50	-	-	*		26
Total Hepta-Furans	2.38e+07		42:14	1.47	105	2.50	-	-	*		12

Analyst: _____ Date: 1/5/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:04JAN10M Instrument: FAL3 GC: DB5 Experiment:PCDD

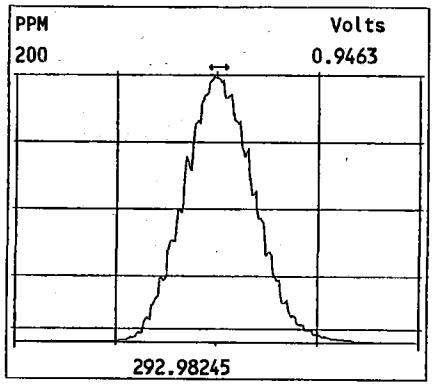
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
04JAN10M	1	ST010410M1	1613 CS3 (090918J)	4-JAN-10 09:53:50	ST010410M1	ST010410M2	DV
04JAN10M	2	SB010410M1	Solvent Blank	4-JAN-10 10:49:04	ST010410M1	ST010410M2	DV
04JAN10M	3	1910-001-0001-OPR	OPR	4-JAN-10 11:45:09	ST010410M1	ST010410M2	DV
04JAN10M	4	SB010410M2	Solvent Blank	4-JAN-10 12:40:28	ST010410M1	ST010410M2	DV
04JAN10M	5	1910-001-0001-MB	Method Blank	4-JAN-10 13:44:26	ST010410M1	ST010410M2	DV
04JAN10M	6	5887-001-0001-SA	CB4857-121009-SED	4-JAN-10 14:39:41	ST010410M1	ST010410M2	DV
04JAN10M	7	5873-001-0001-SA	9120577-01	4-JAN-10 15:35:00	ST010410M1	ST010410M2	DV
04JAN10M	8	5873-001-0001-MS	9120577-01	4-JAN-10 16:30:18	ST010410M1	ST010410M2	DV
04JAN10M	9	5873-001-0001-MSD	9120577-01	4-JAN-10 17:25:36	ST010410M1	ST010410M2	DV
04JAN10M	10	SB010410M3	Solvent Blank	4-JAN-10 18:20:51	ST010410M1	ST010410M2	DV
04JAN10M	11	ST010410M2	1613 CS3 (090918J)	4-JAN-10 19:16:06	ST010410M1	ST010410M2	DV

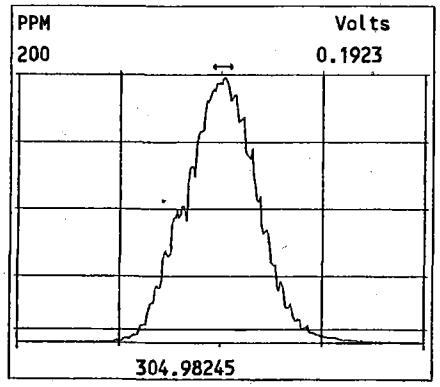
1/5/10

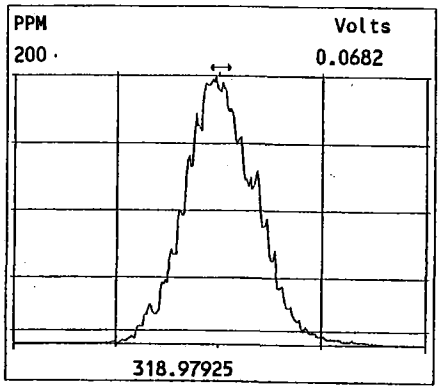
Data Backed Up:_____

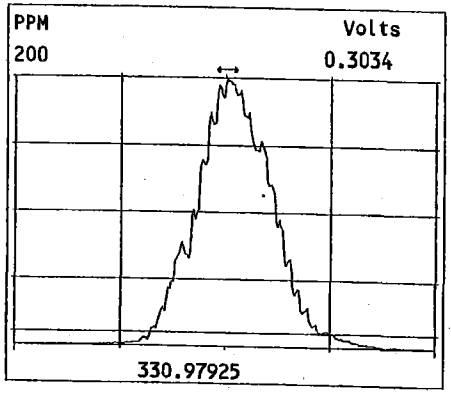
Date:_____

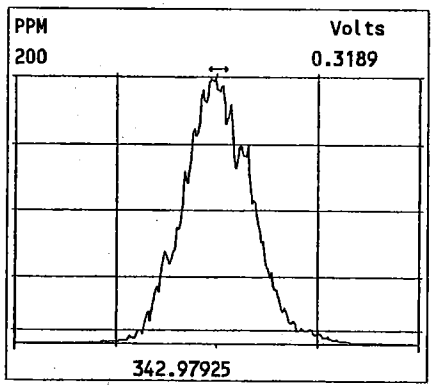
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:1 Reference:PFK

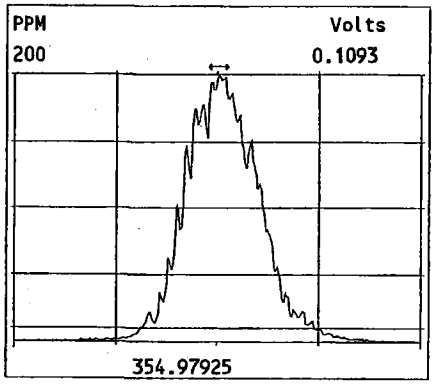


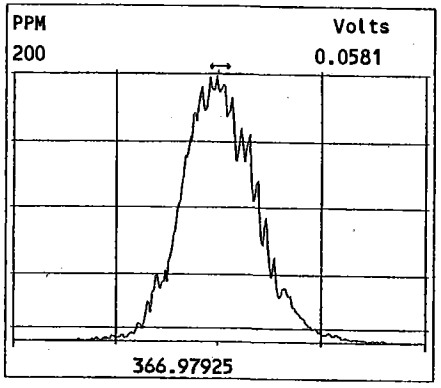


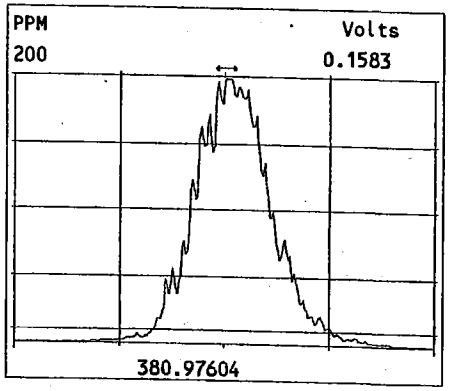


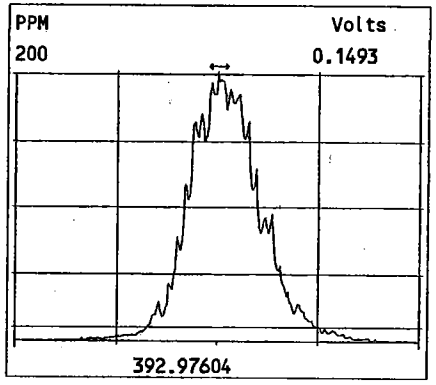


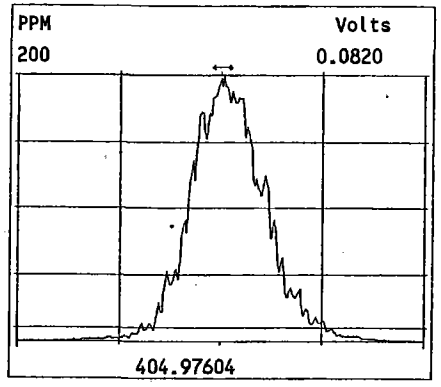


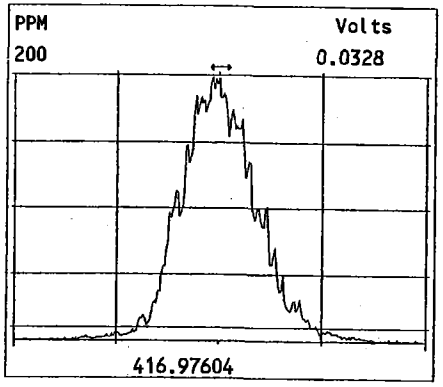




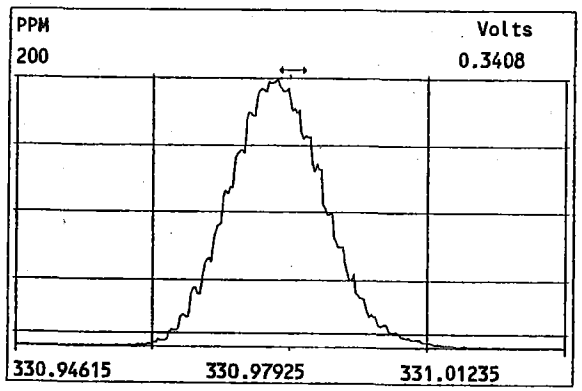


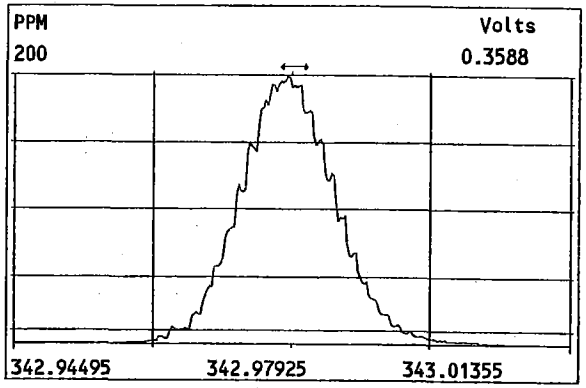


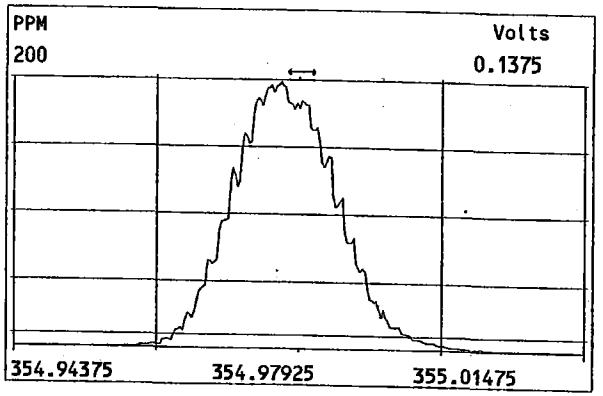


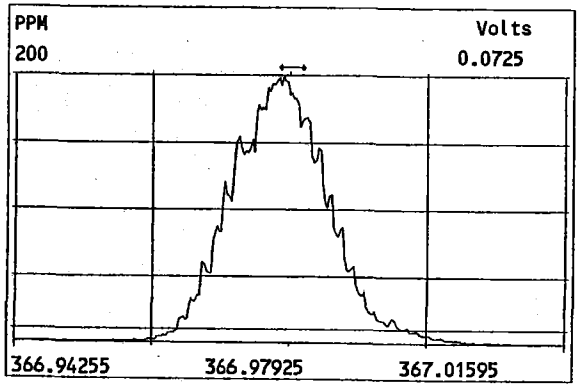


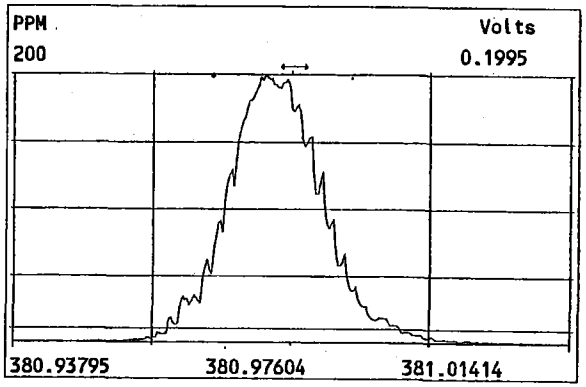
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:2 Reference:PFK

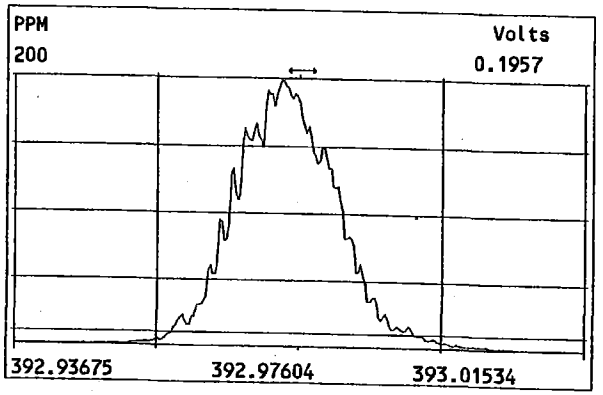


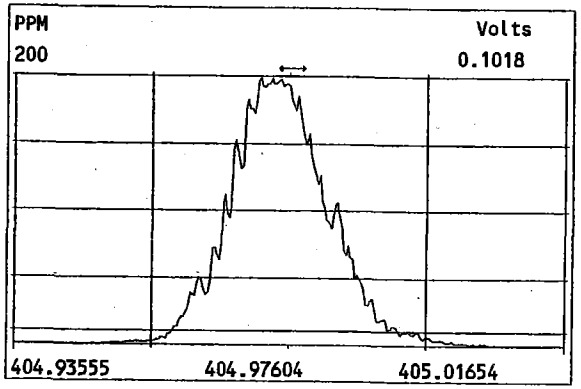


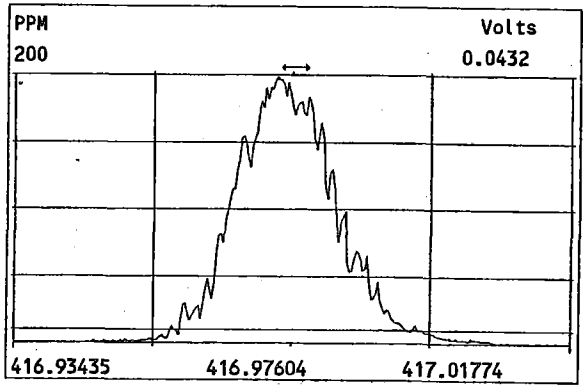




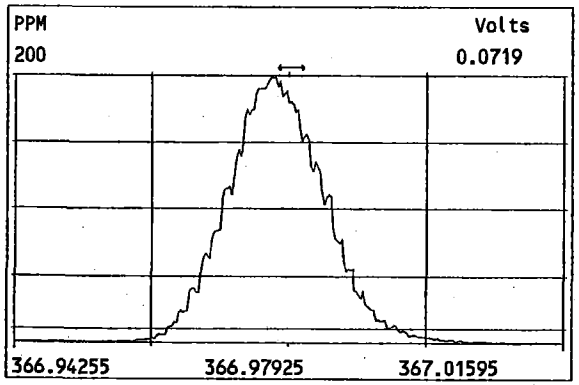


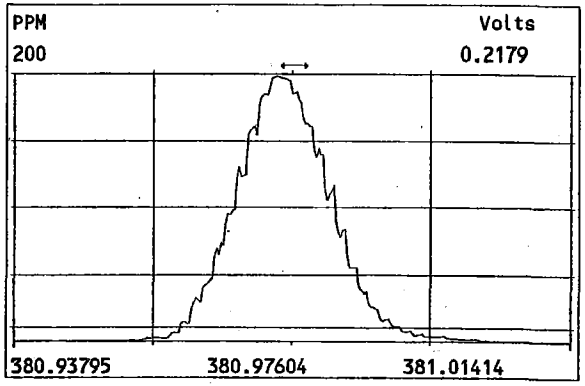


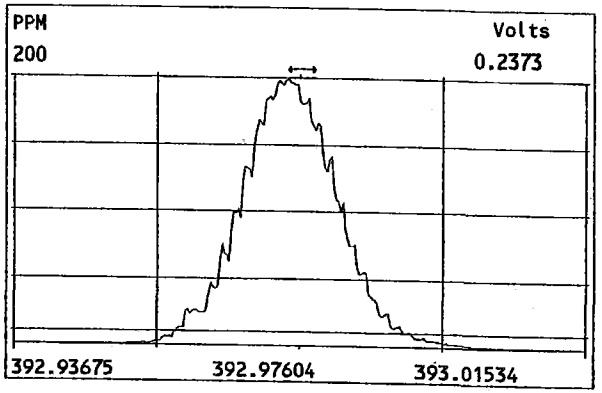


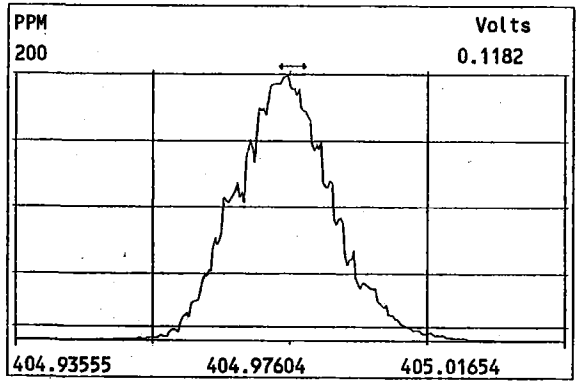


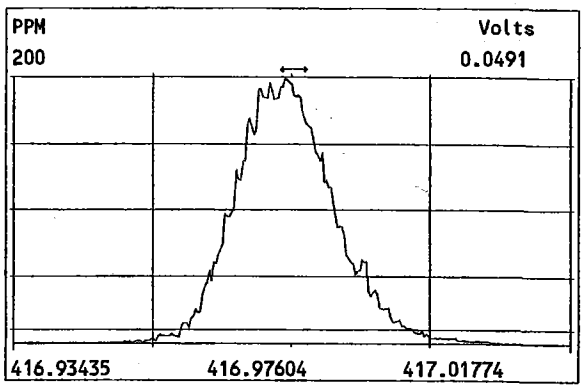
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:3 Reference:PFK

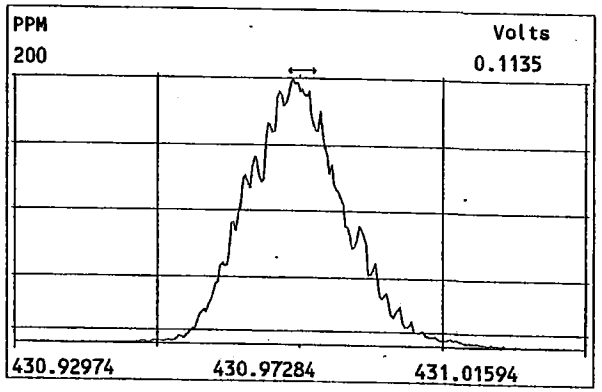


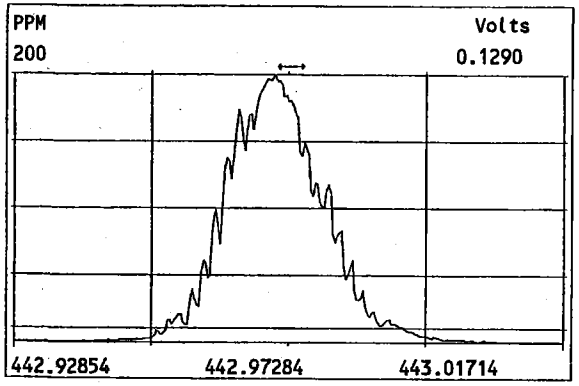


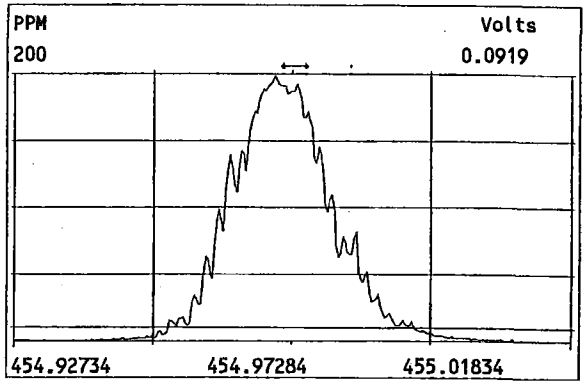




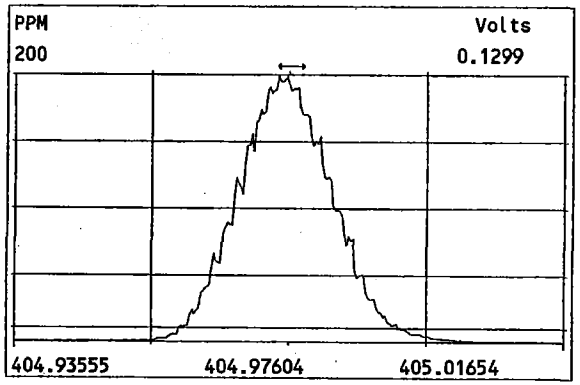


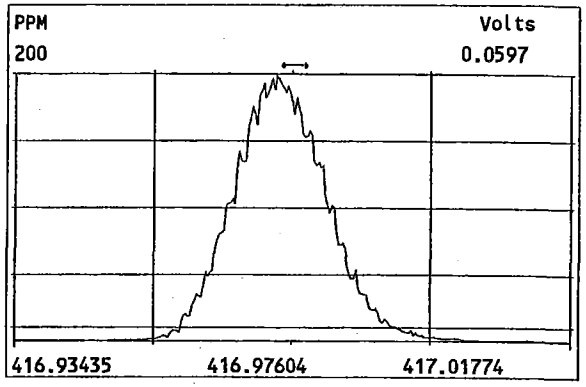


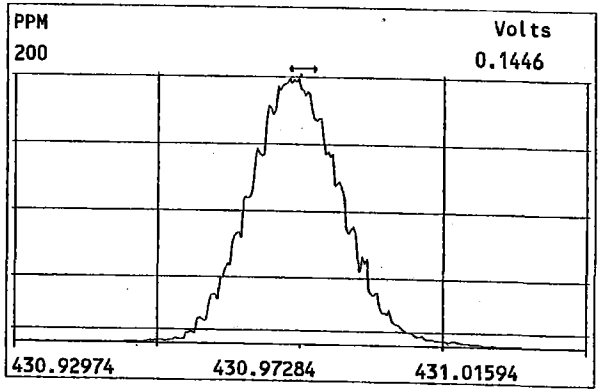


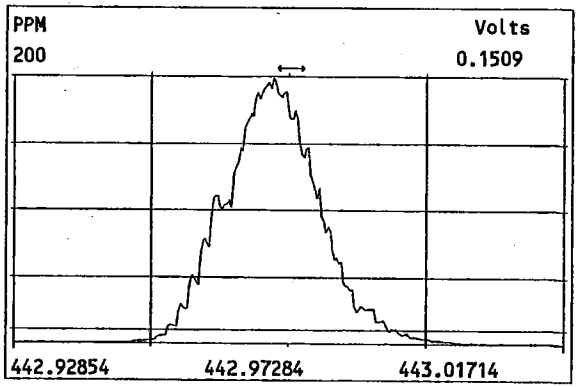


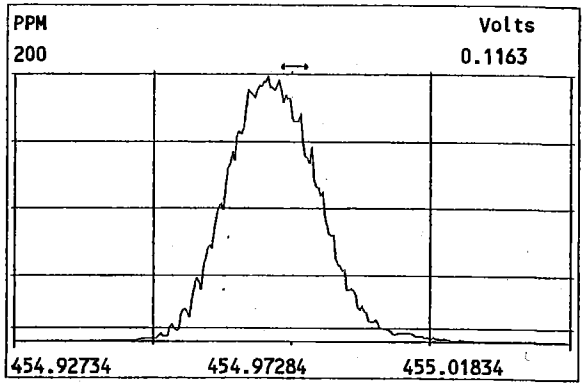
Peak Locate Examination: 4-JAN-2010:09:53 File:04JAN10M
Experiment:PCDD Function:4 Reference:PFK

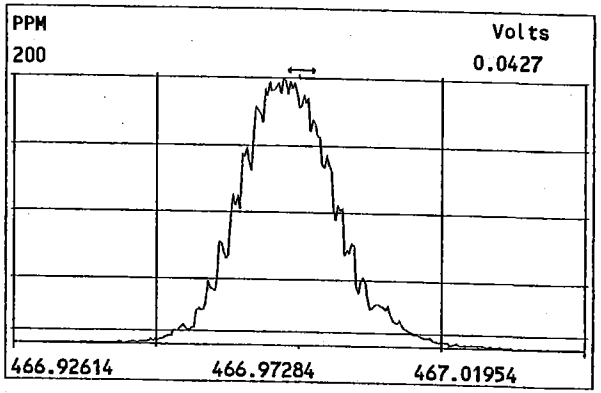


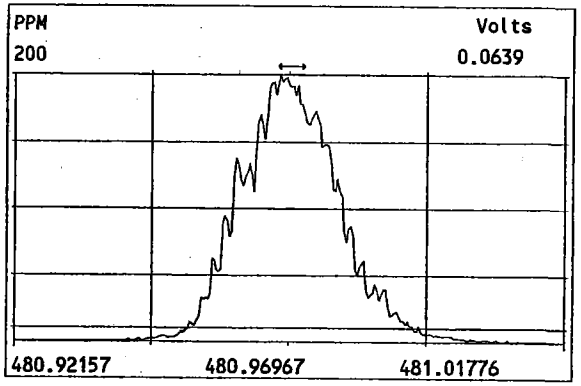




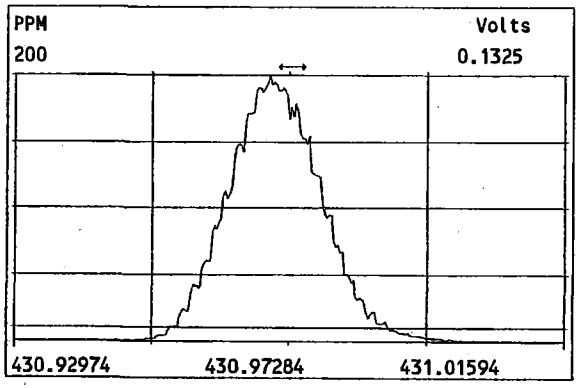


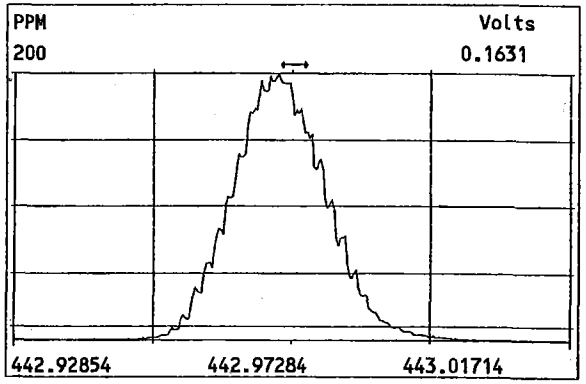


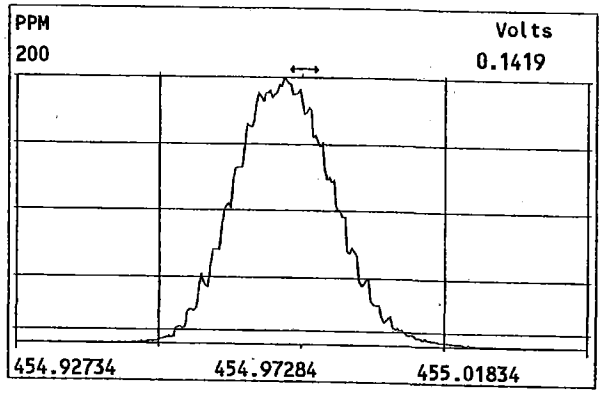


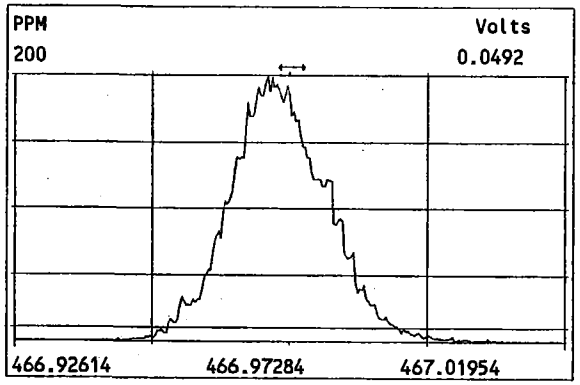


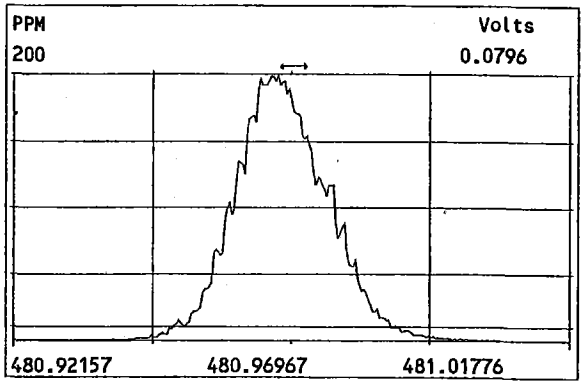
Peak Locate Examination: 4-JAN-2010:09:53 File:04JAN10M
Experiment:PCDD Function:5 Reference:PFK

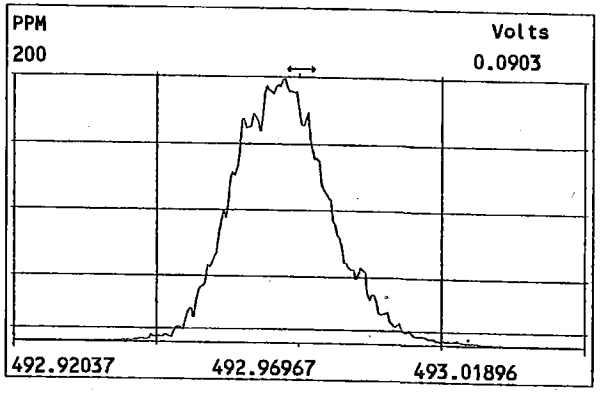


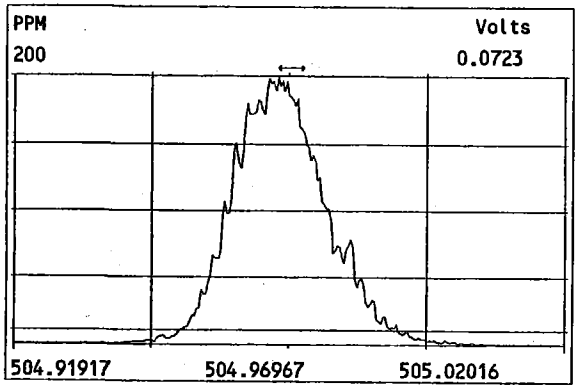


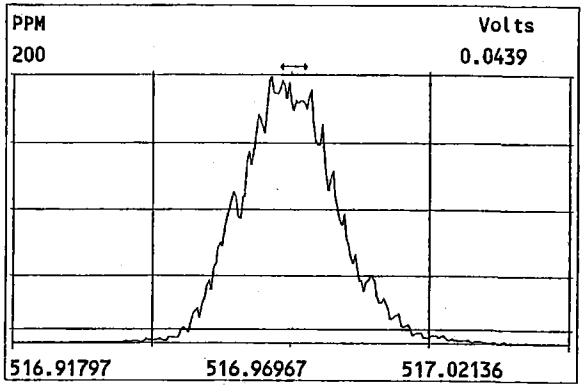




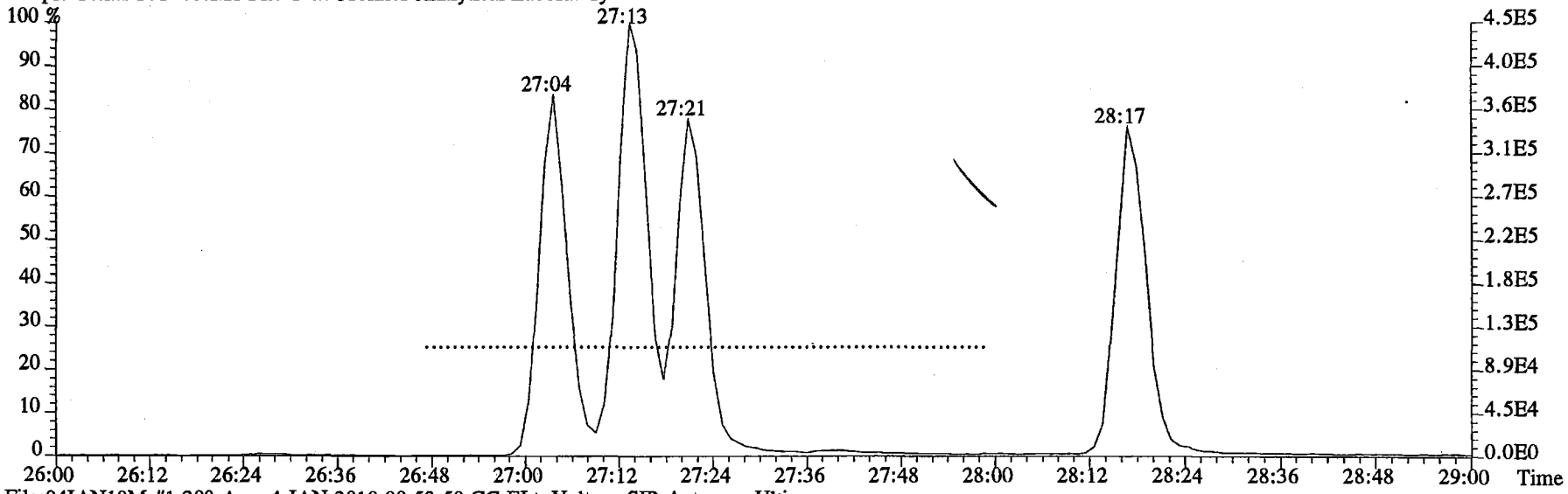




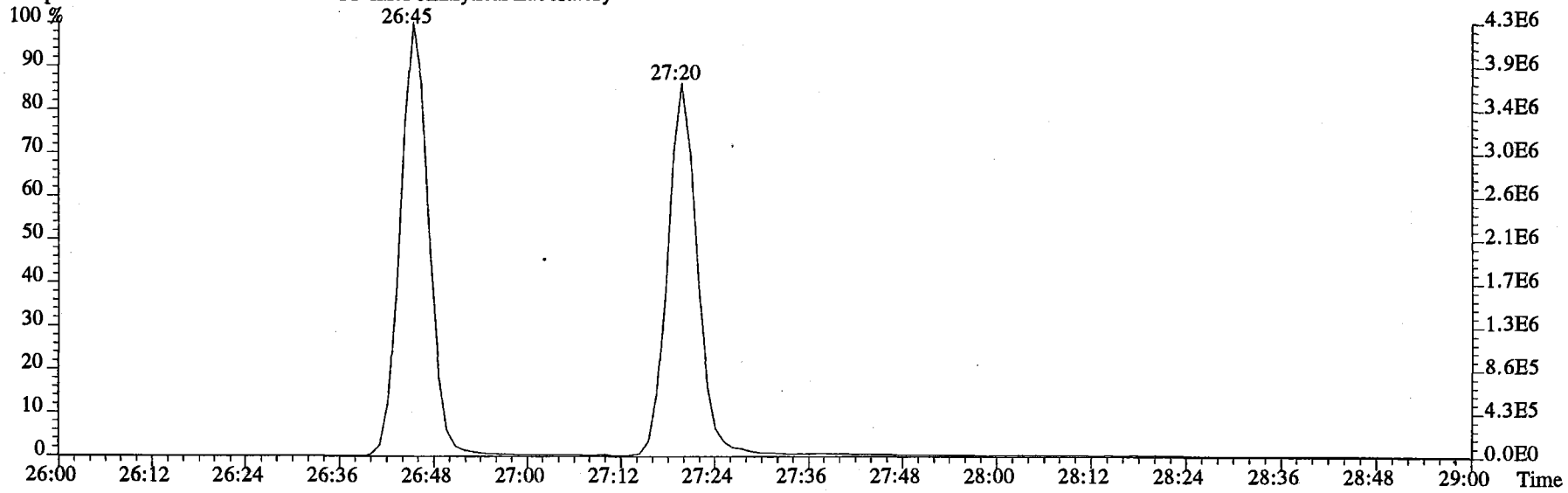




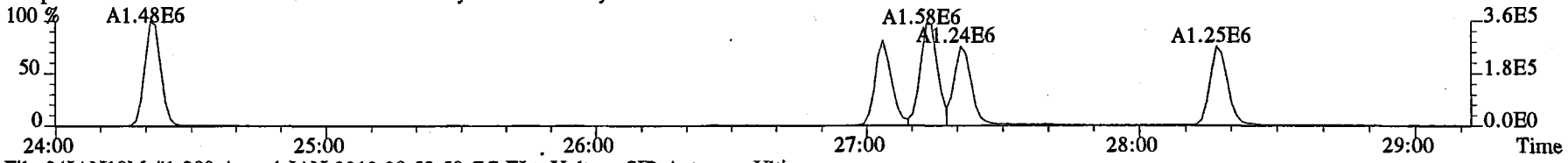
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



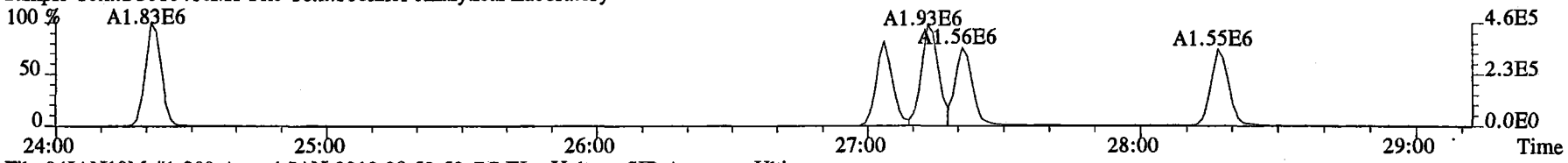
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



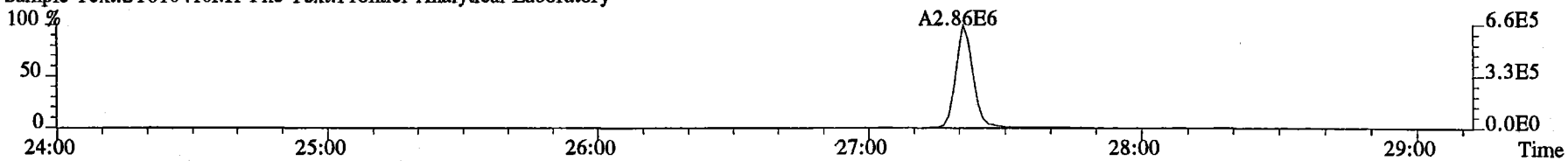
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



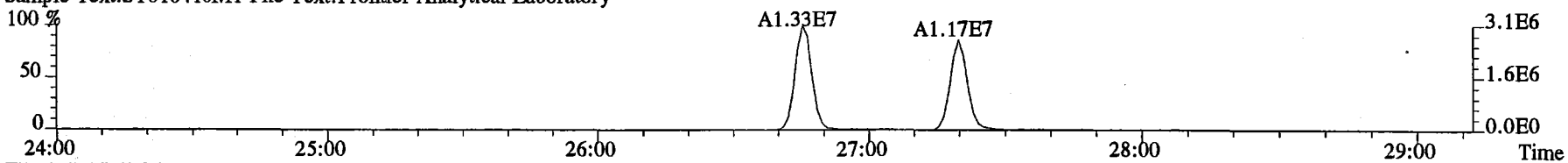
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



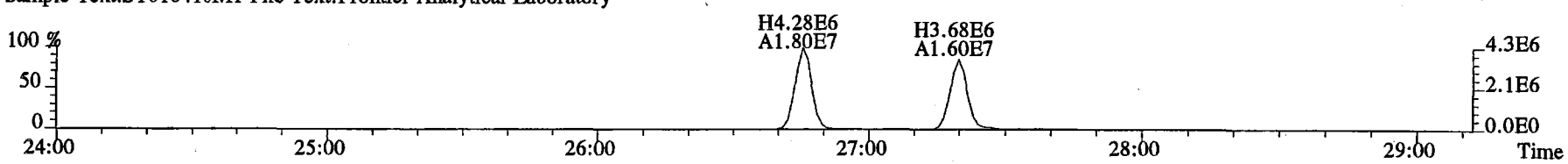
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



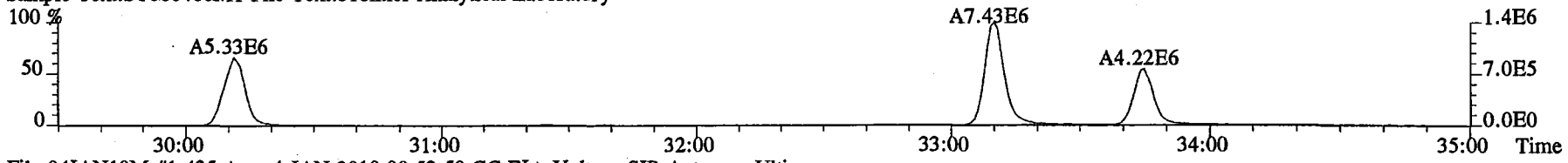
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



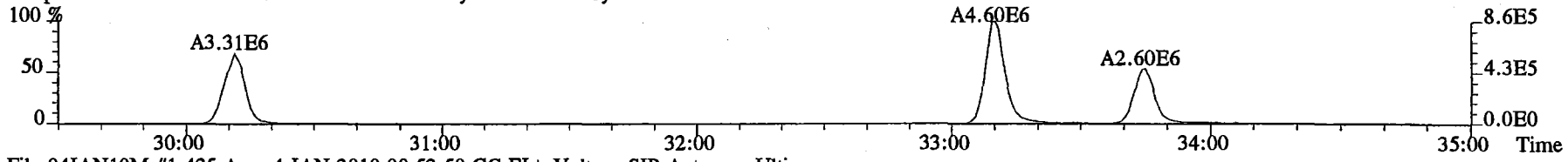
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



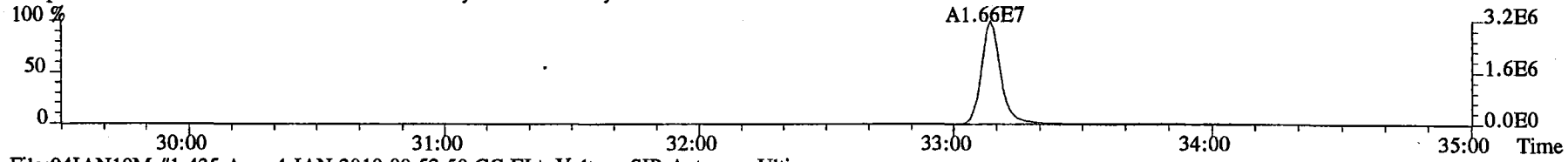
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



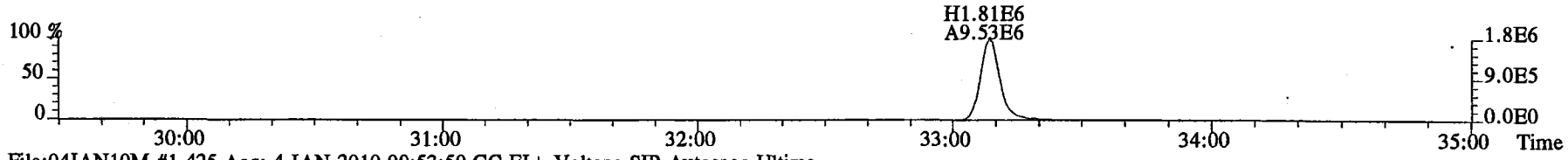
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



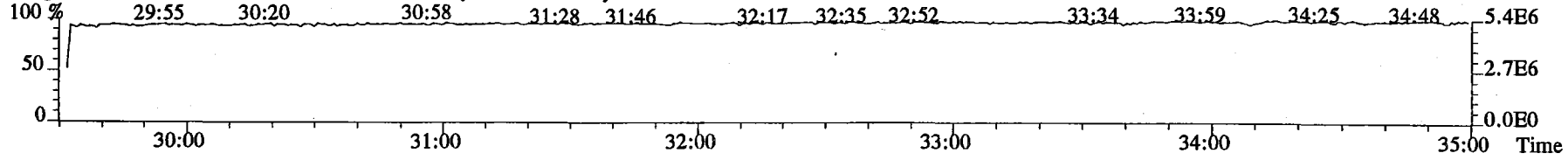
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



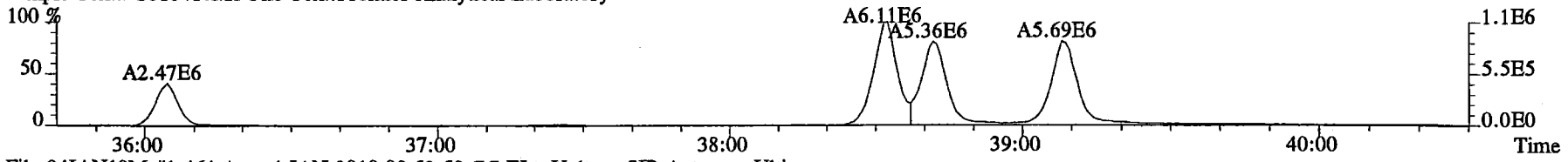
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



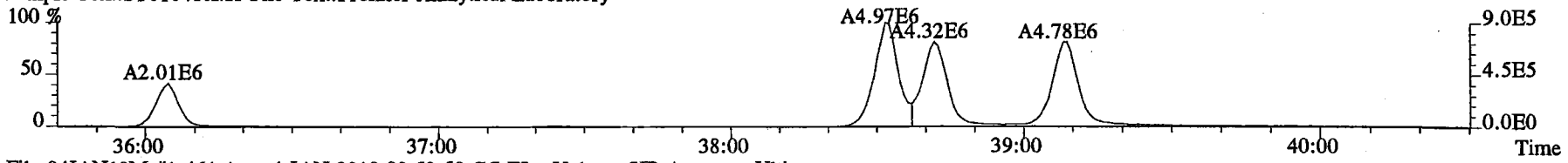
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



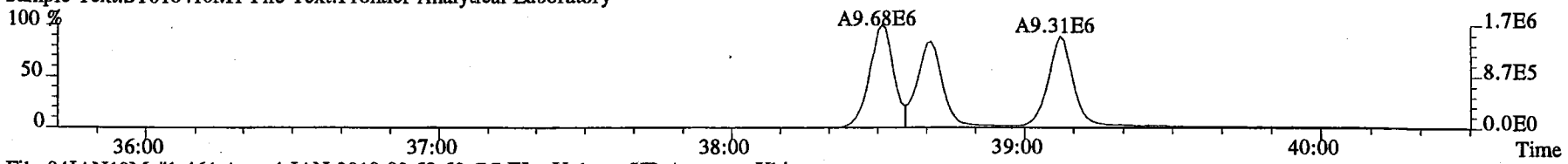
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



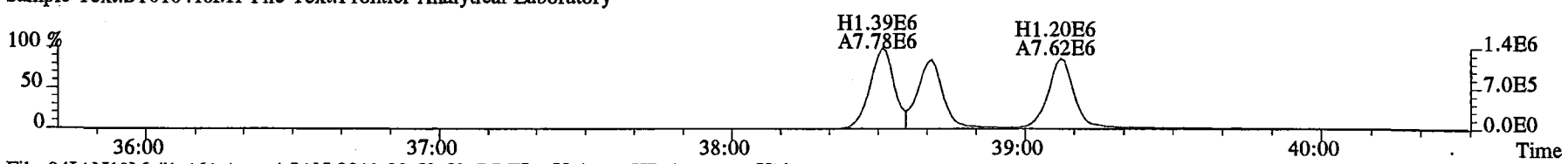
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



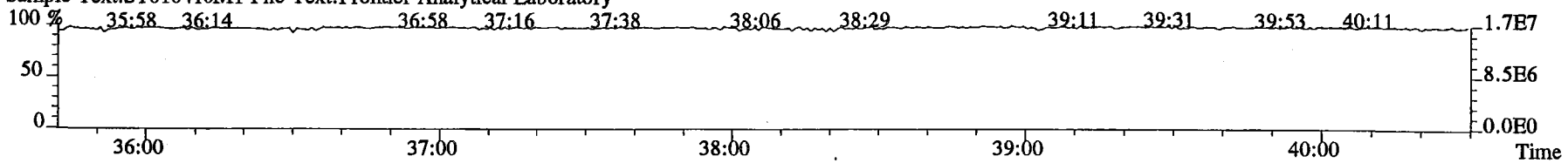
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



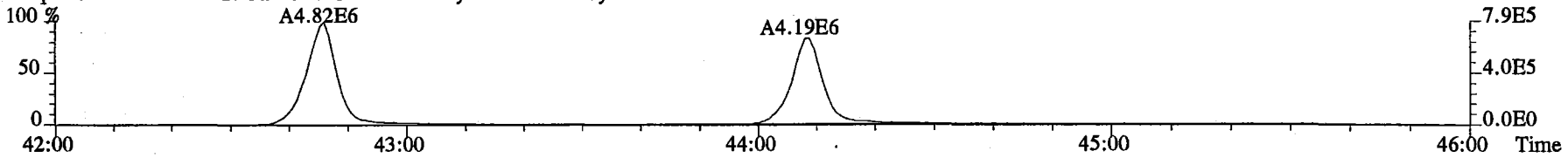
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



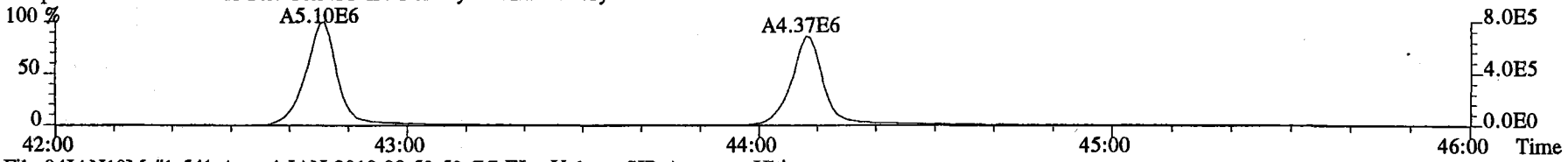
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



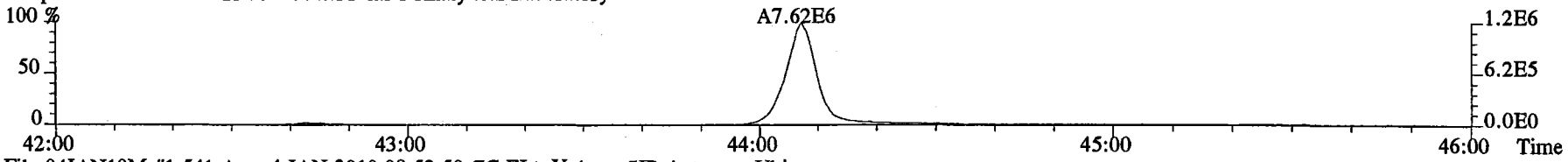
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



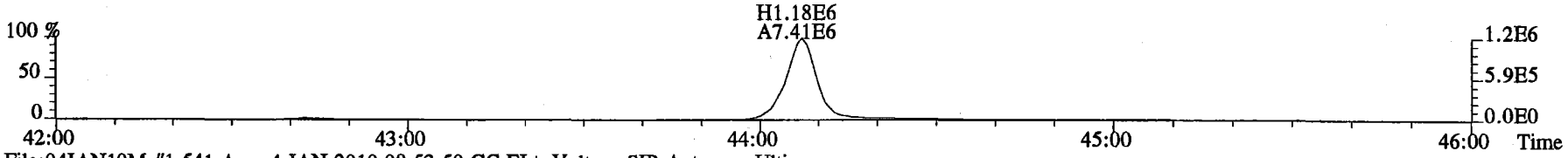
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



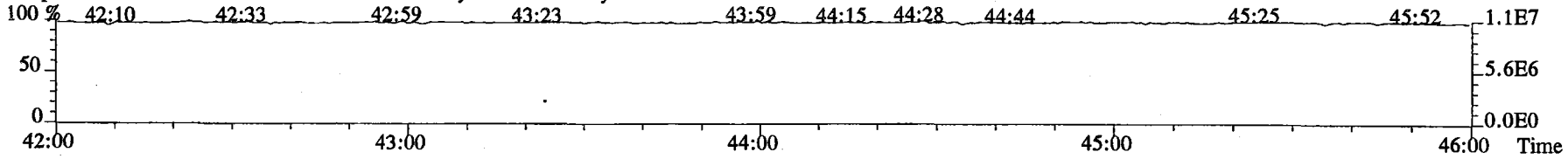
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



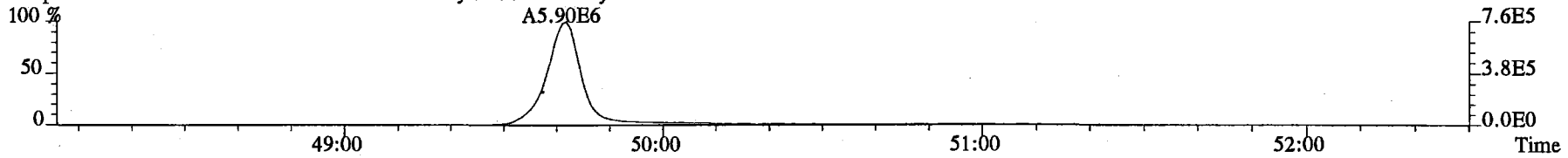
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



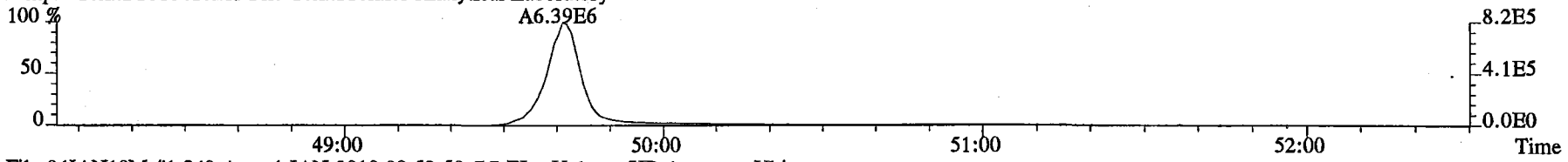
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



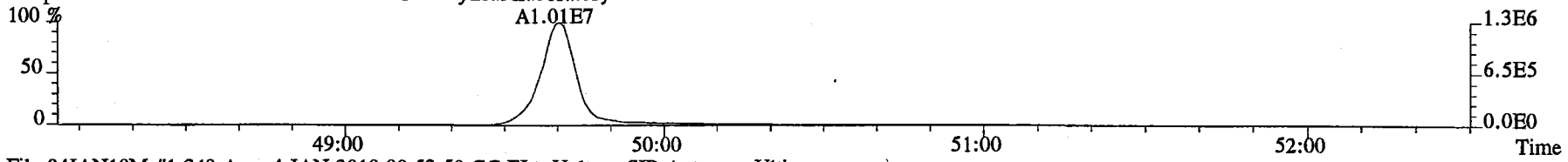
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



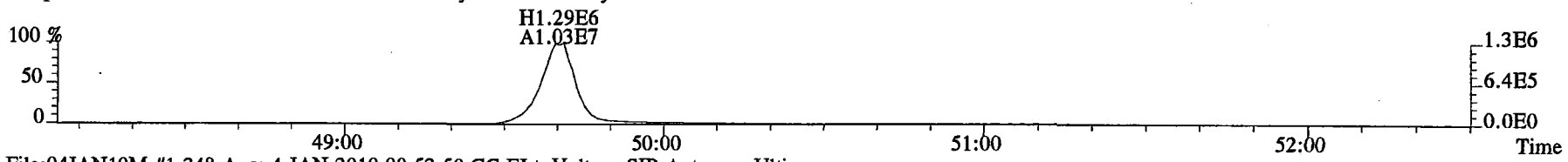
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



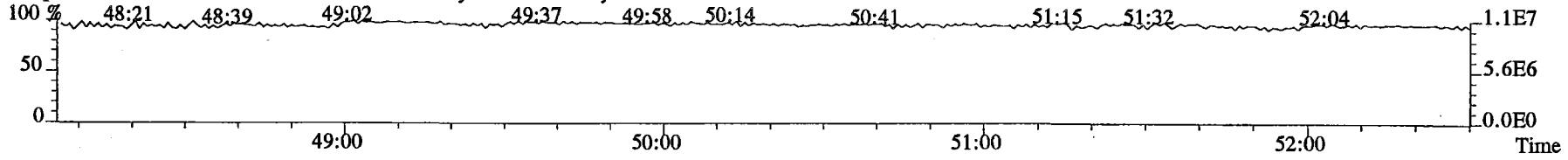
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



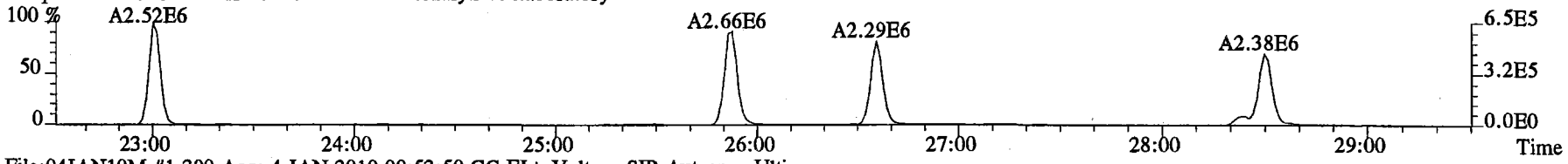
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



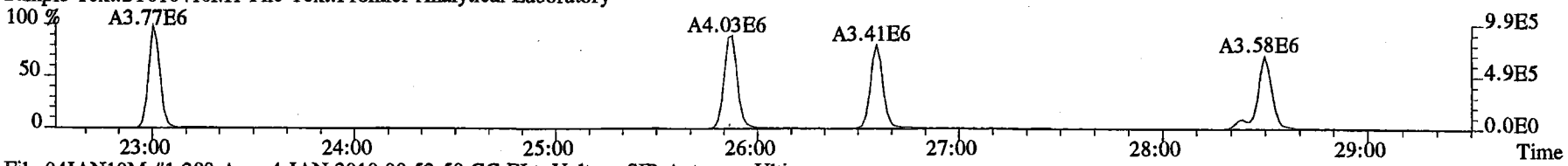
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



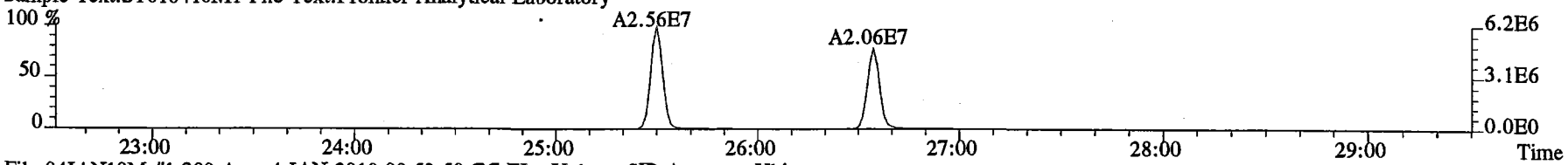
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



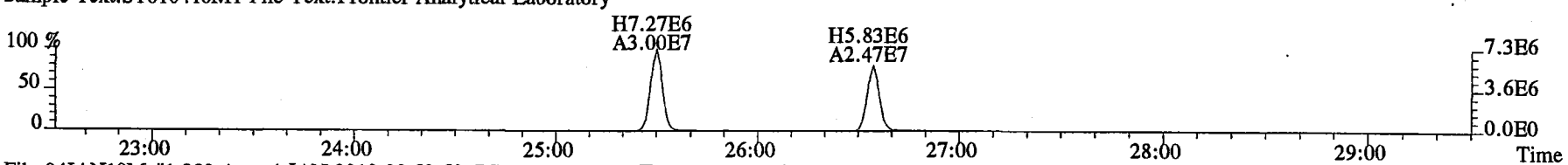
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



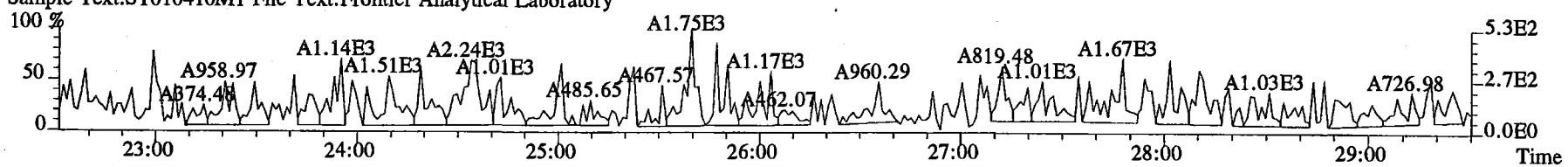
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



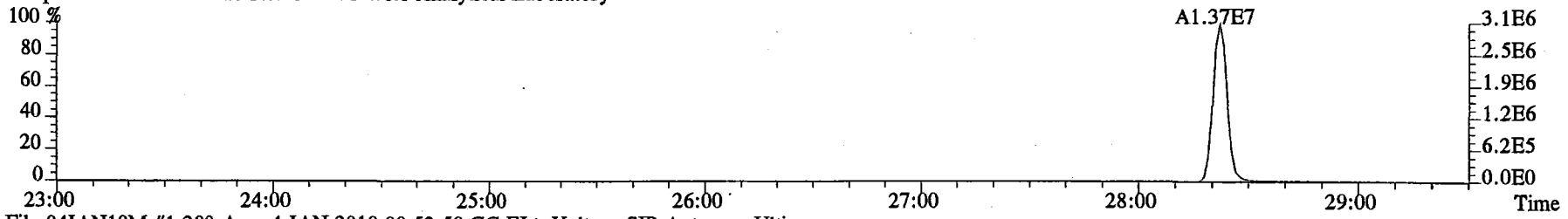
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



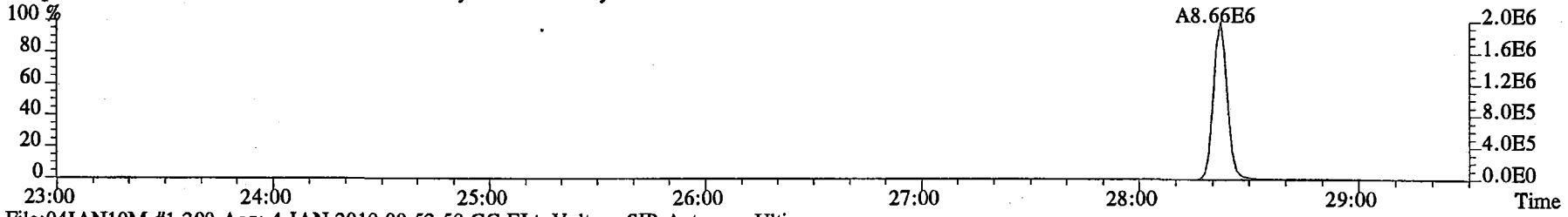
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



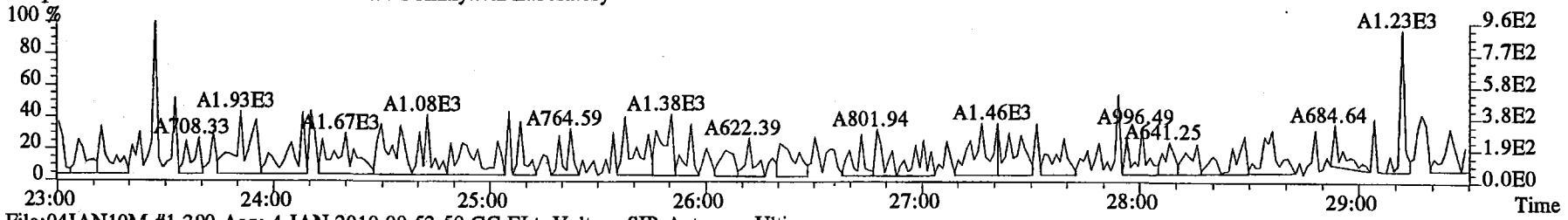
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



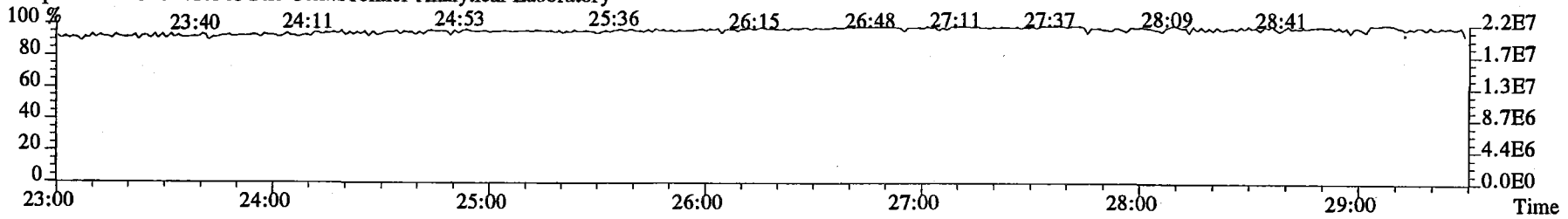
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



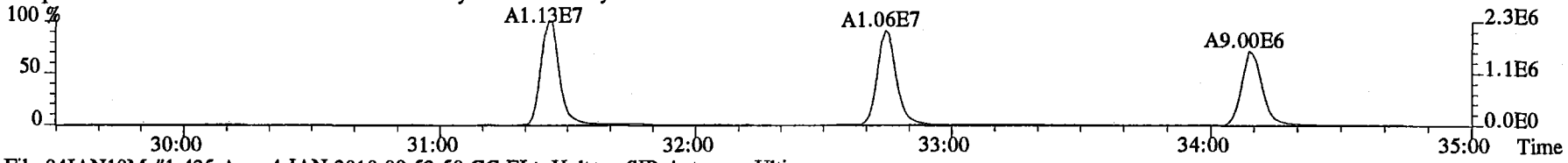
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



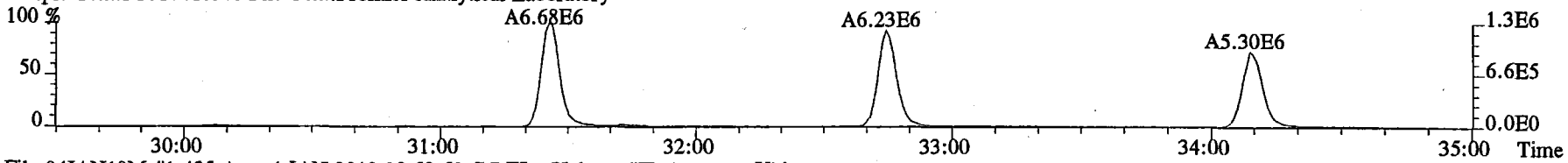
File:04JAN10M #1-390 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



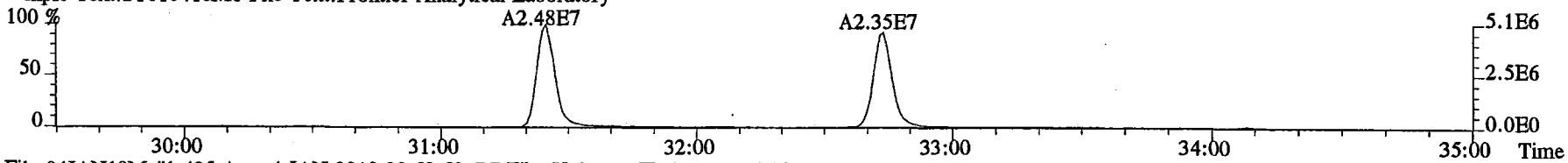
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



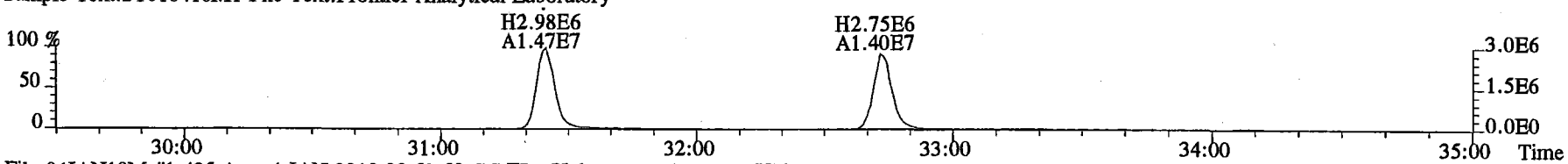
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



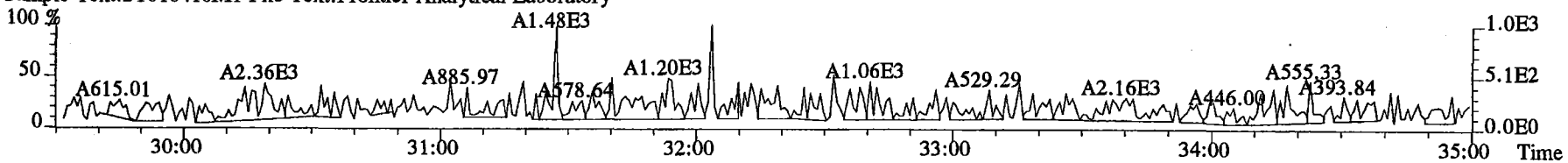
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



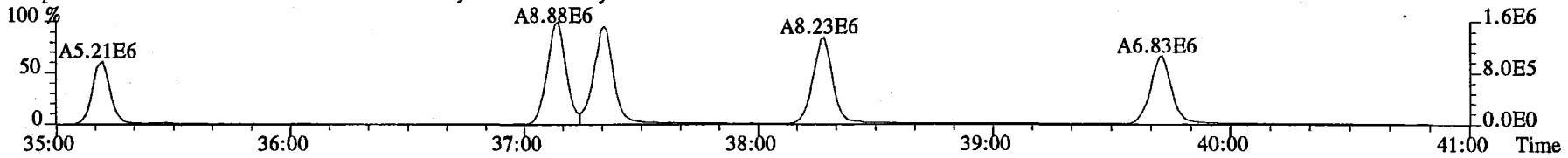
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



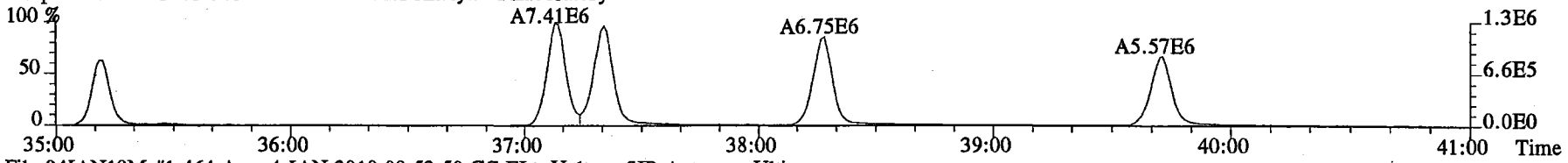
File:04JAN10M #1-425 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



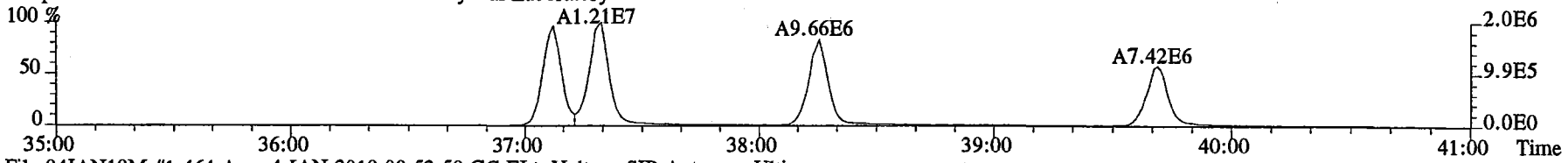
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



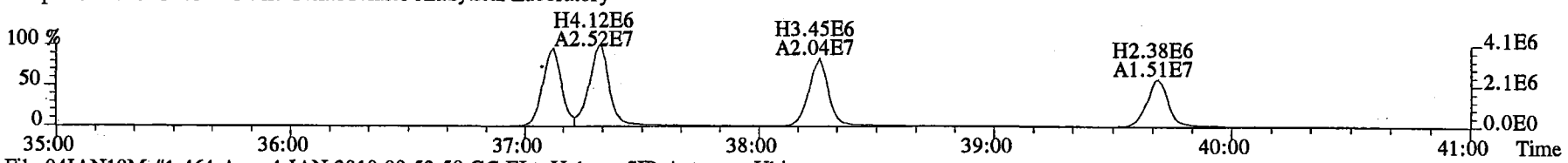
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



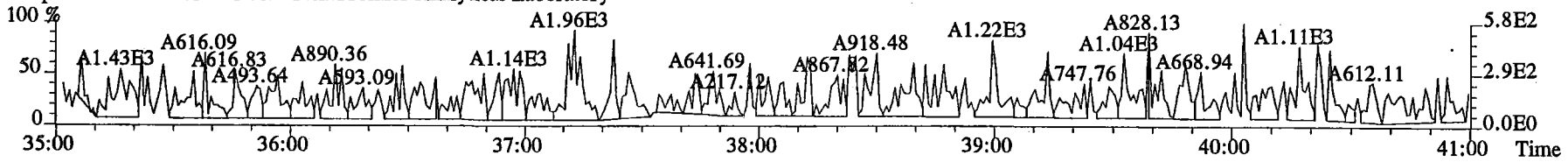
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



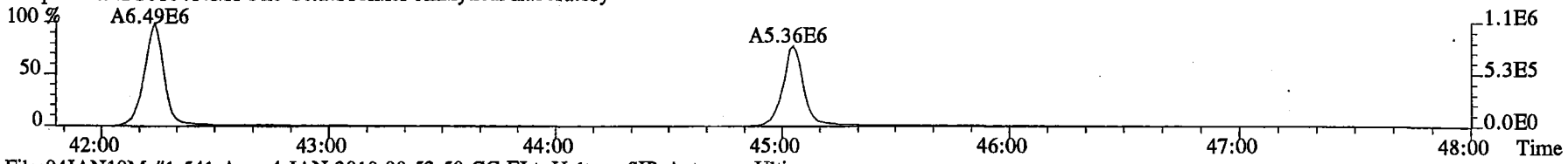
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



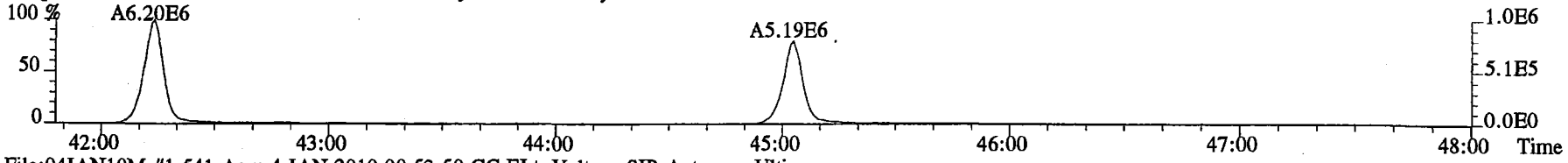
File:04JAN10M #1-464 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



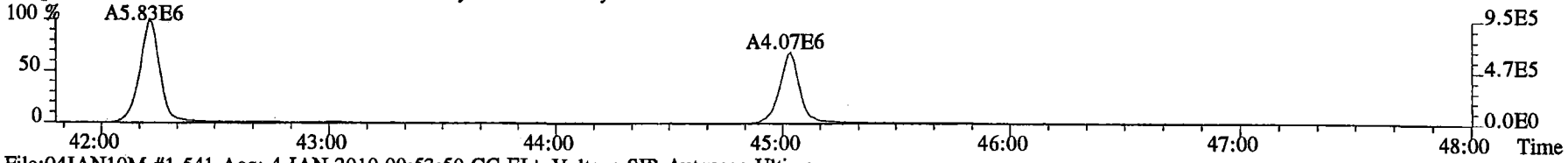
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



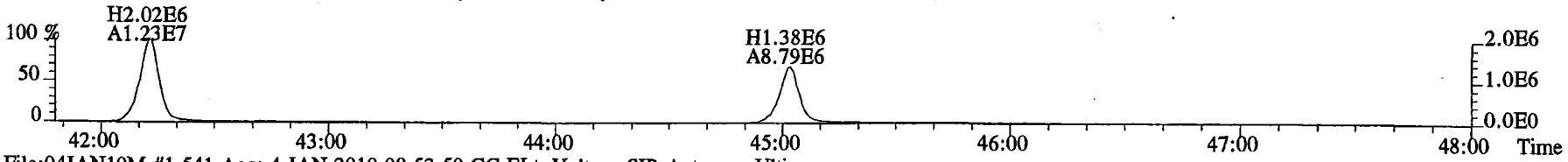
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



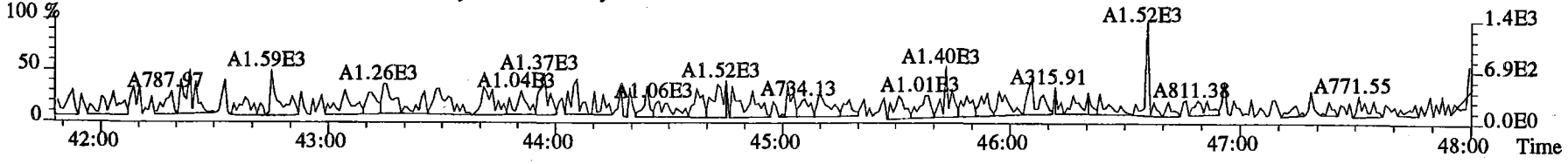
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



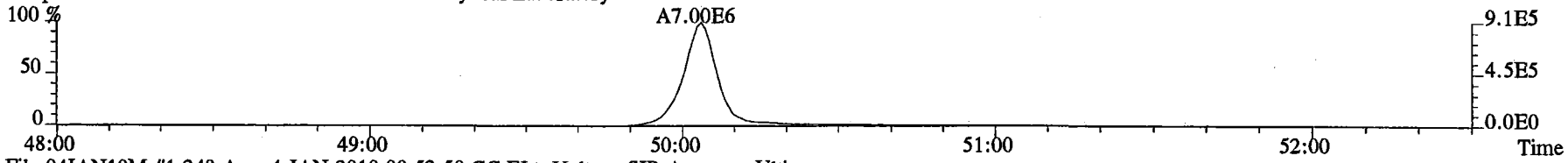
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



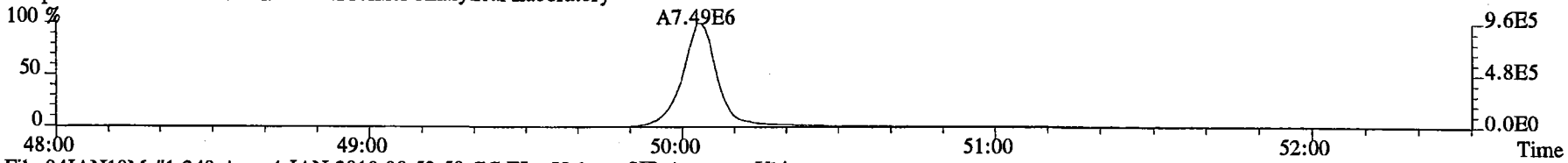
File:04JAN10M #1-541 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



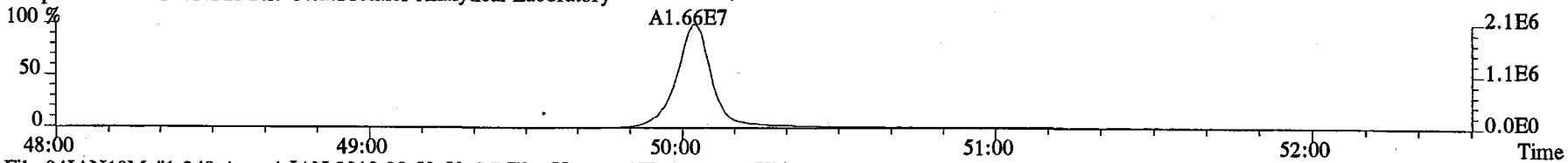
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



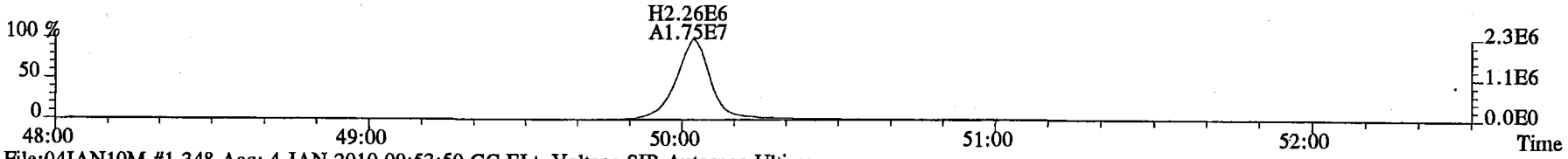
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



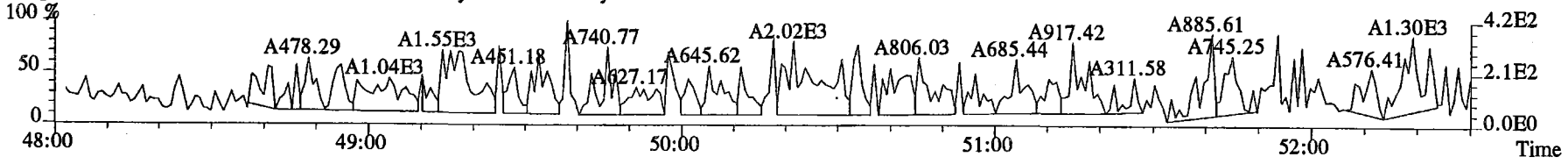
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory



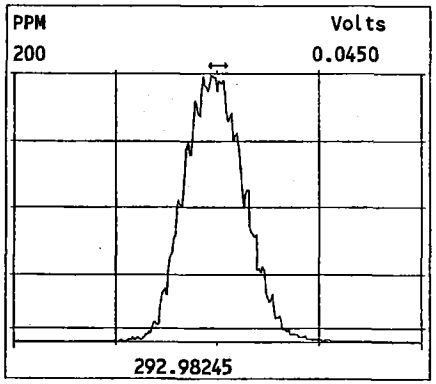
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory

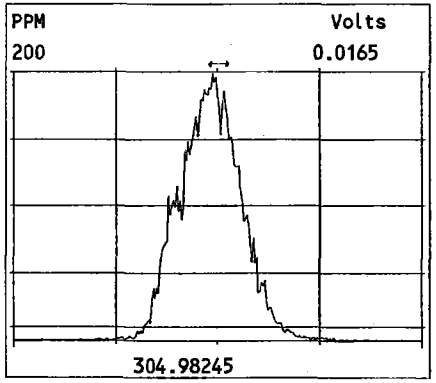


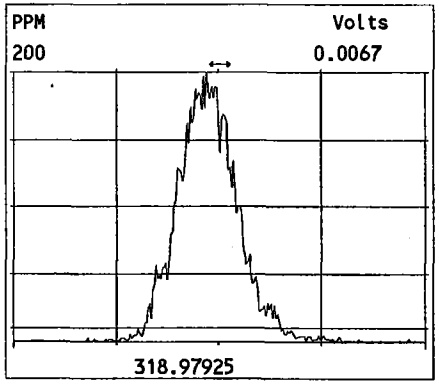
File:04JAN10M #1-348 Acq: 4-JAN-2010 09:53:50 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M1 File Text:Frontier Analytical Laboratory

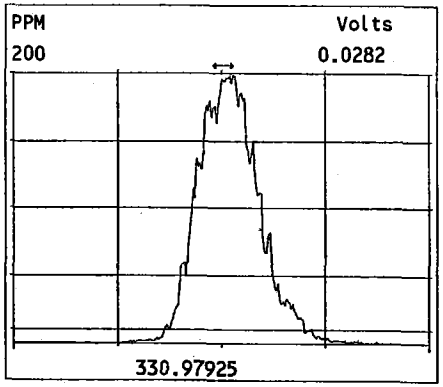


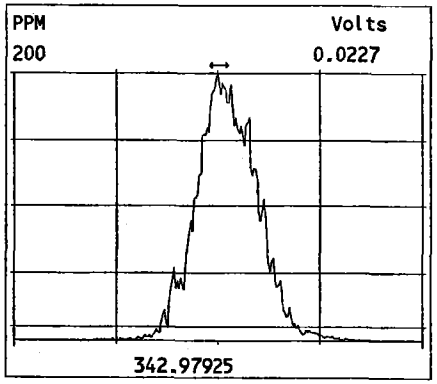
Peak Locate Examination: 5-JAN-2010:06:54 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

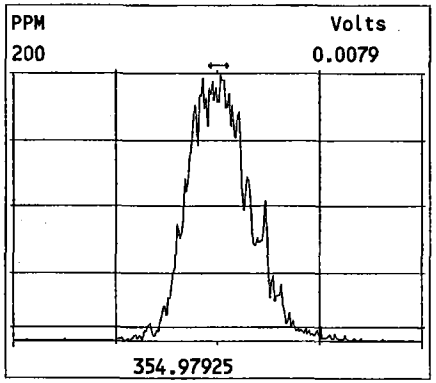


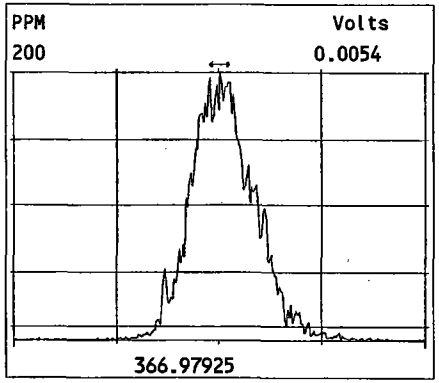


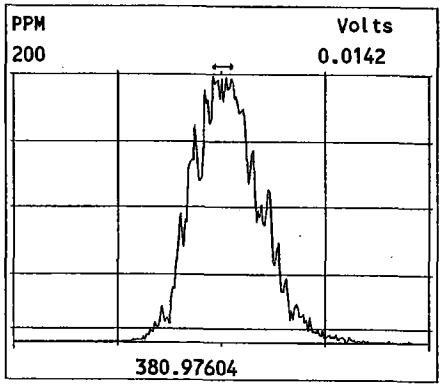


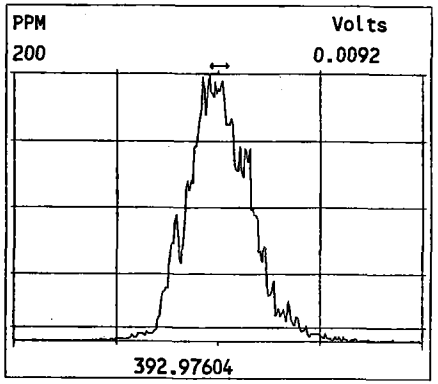


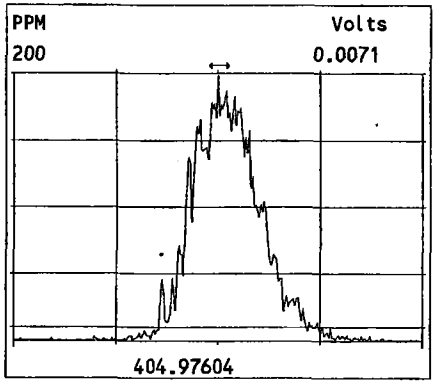


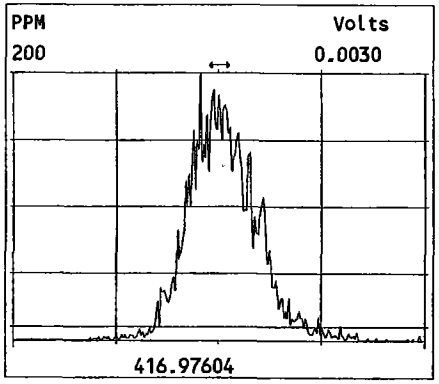




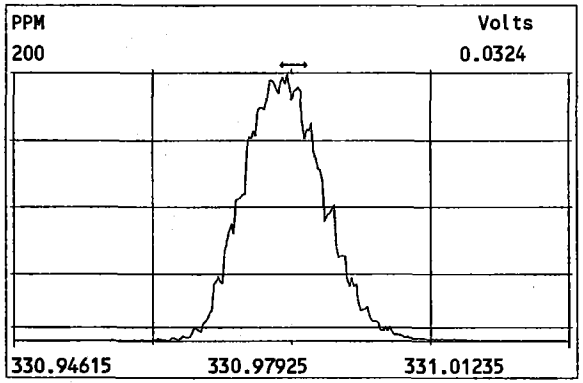


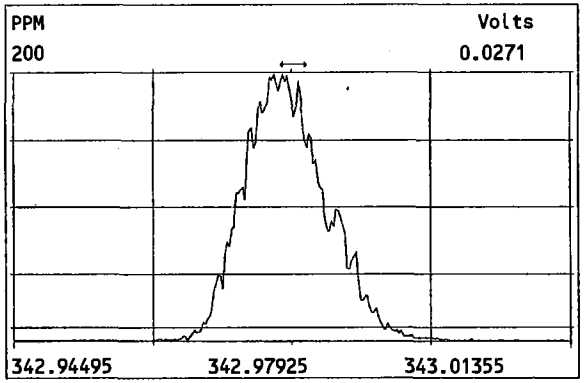


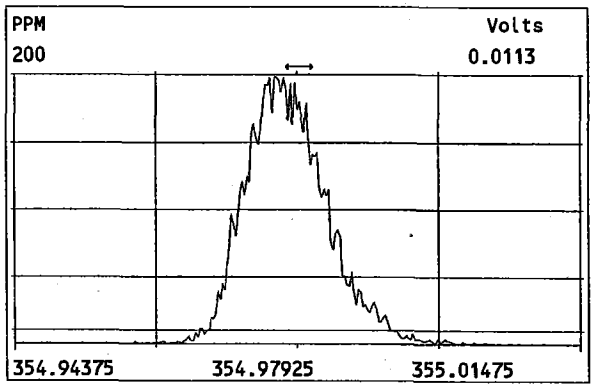


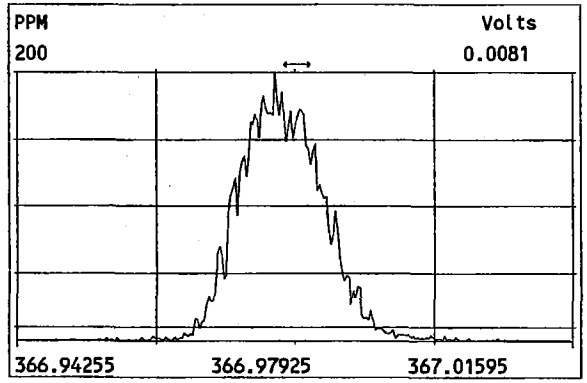


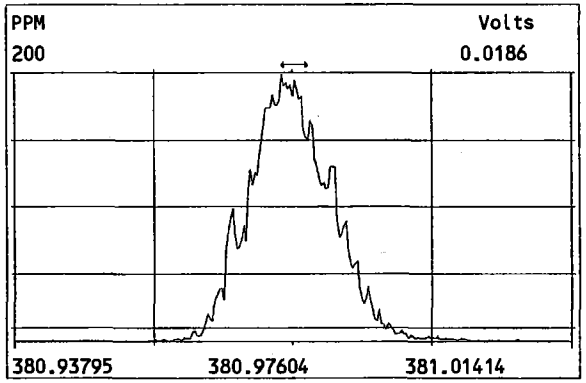
Peak Locate Examination: 5-JAN-2010:06:55 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

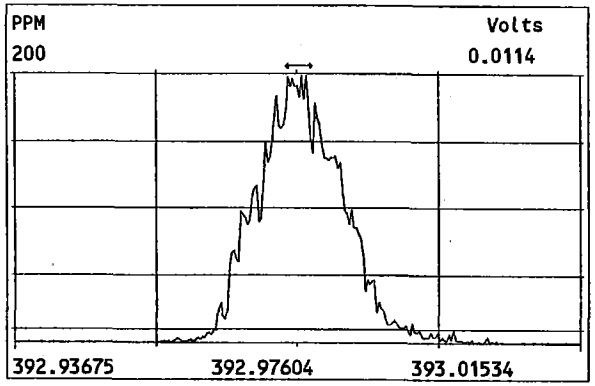


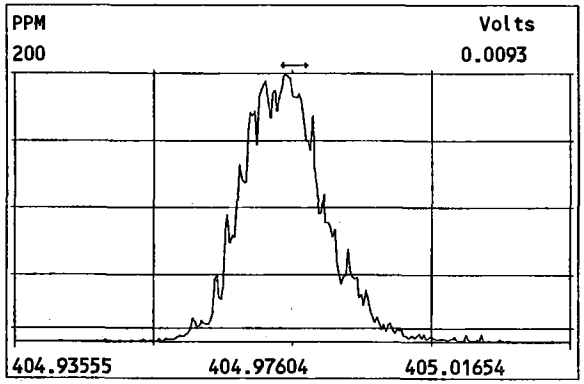


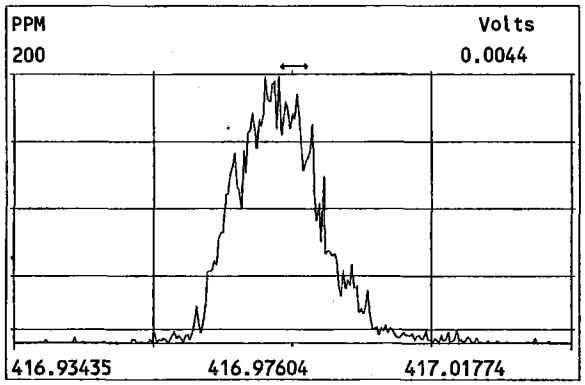




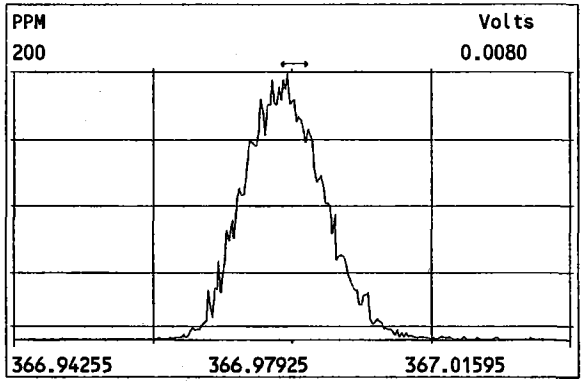


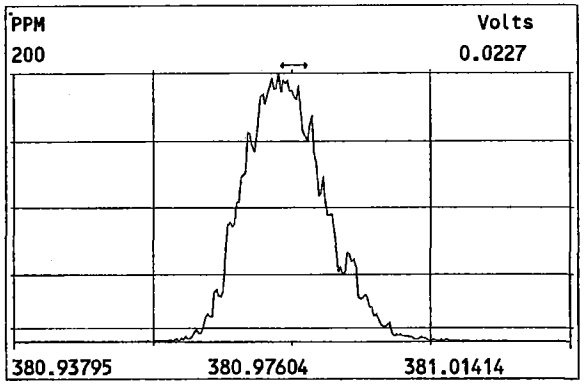


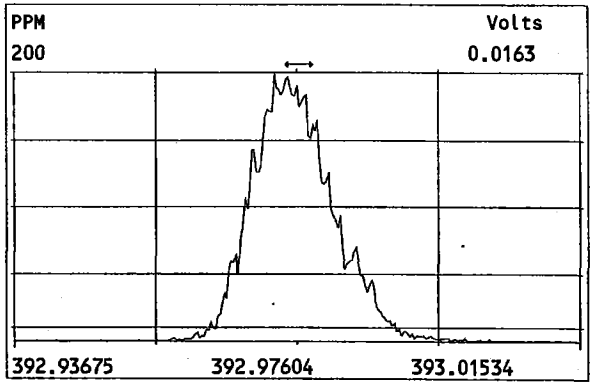


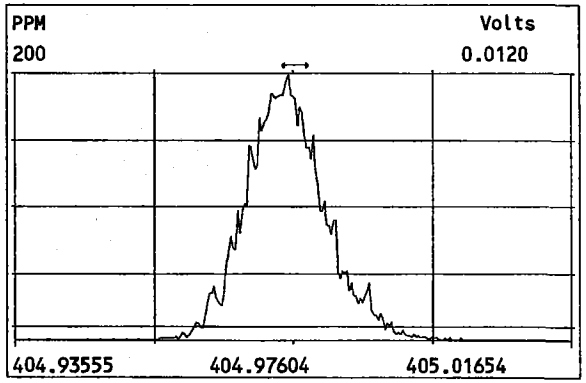


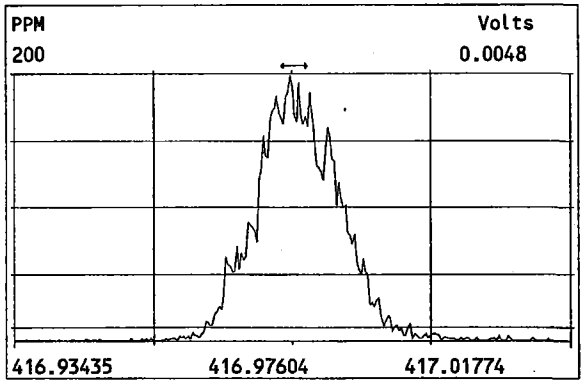
Peak Locate Examination: 5-JAN-2010:06:55 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

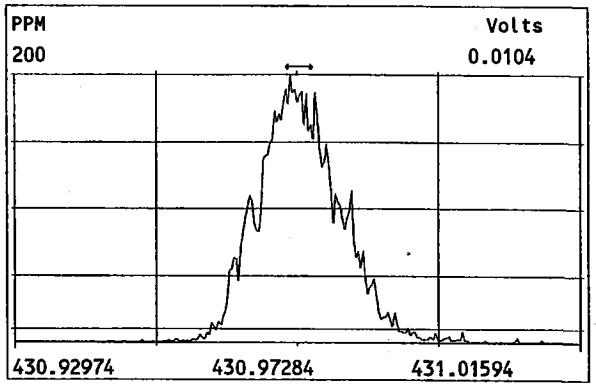


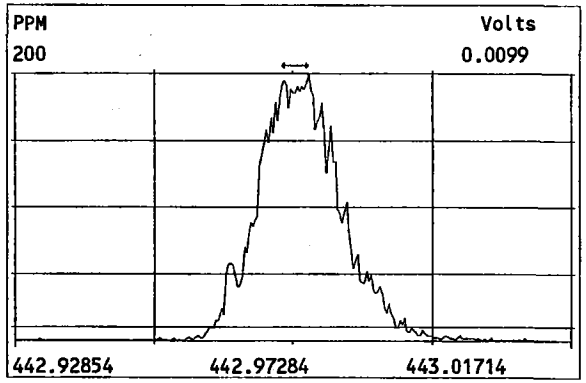


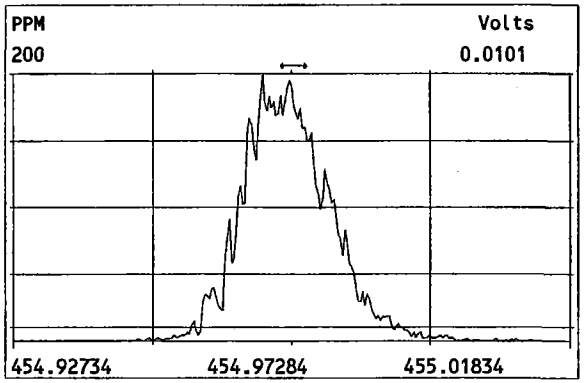




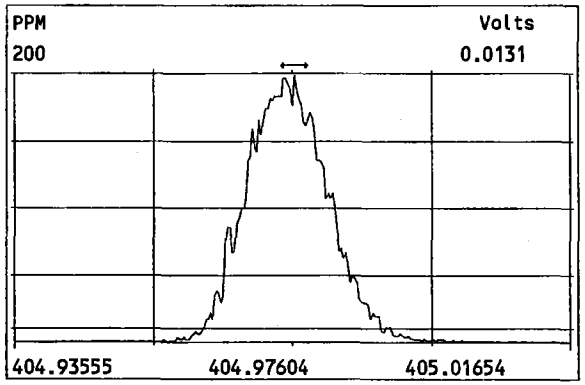


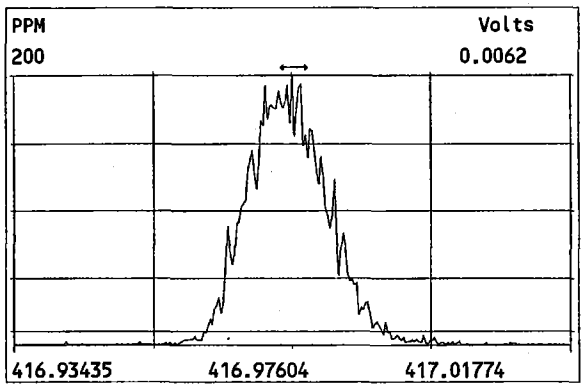


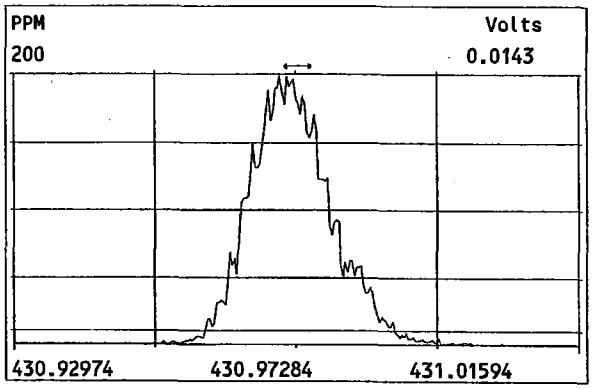


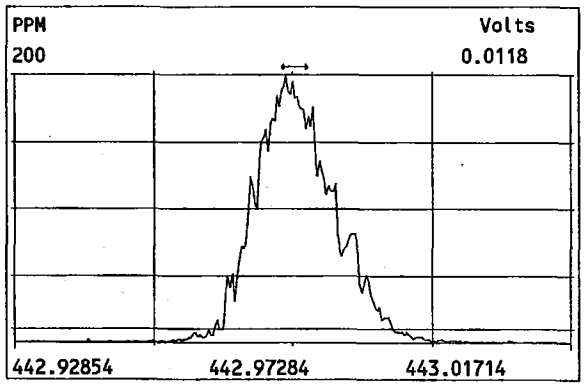


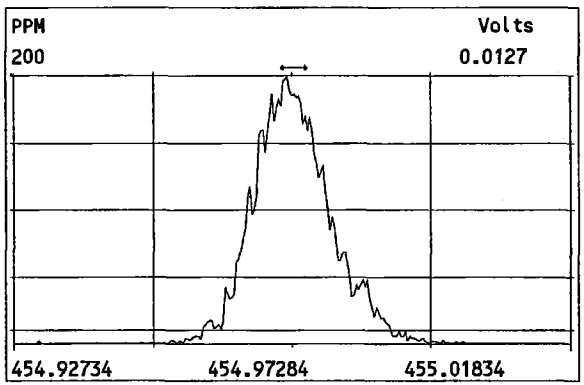
Peak Locate Examination: 5-JAN-2010:06:56 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

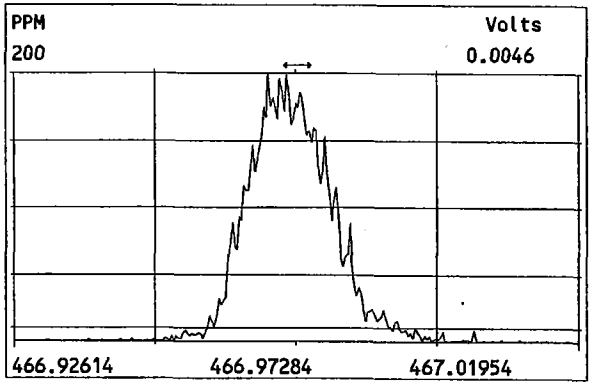


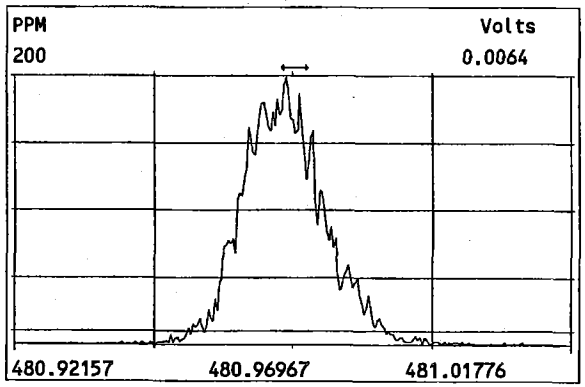




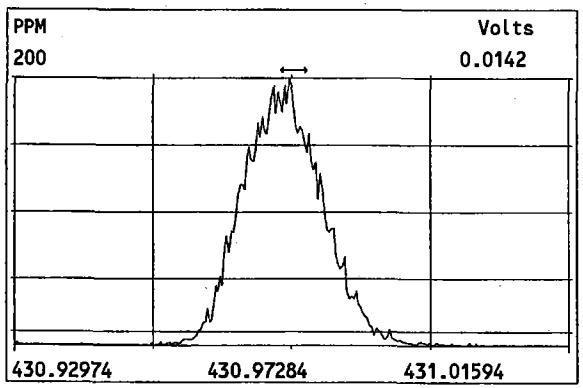


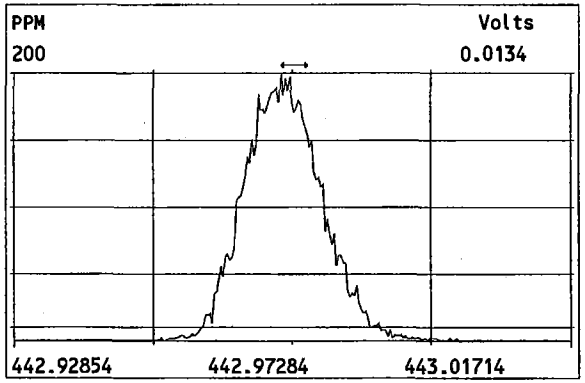


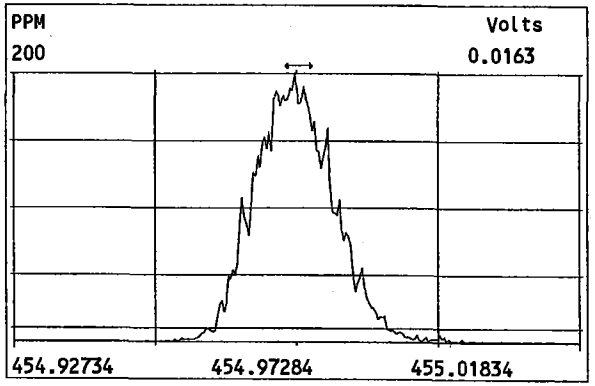


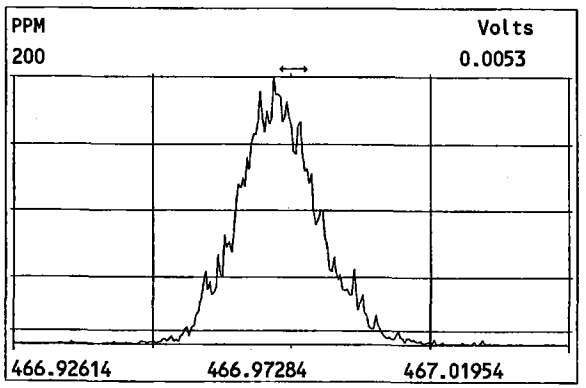


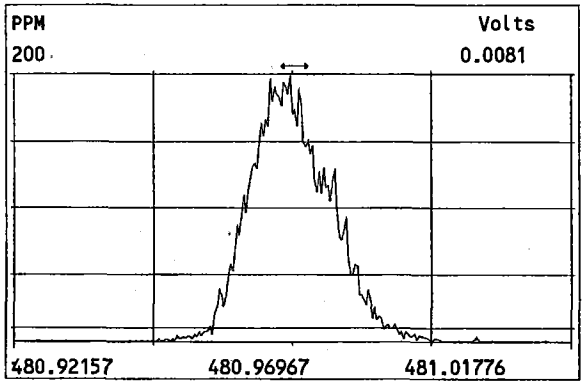
Peak Locate Examination: 5-JAN-2010:06:56 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

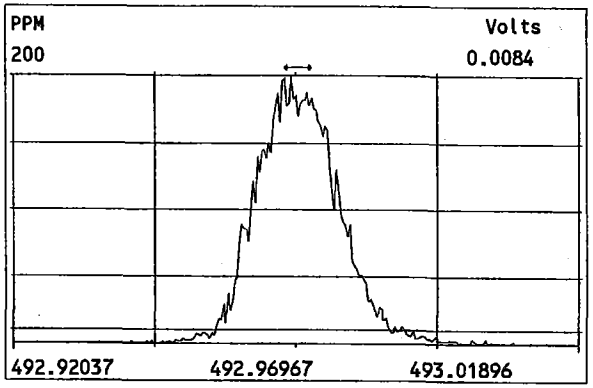


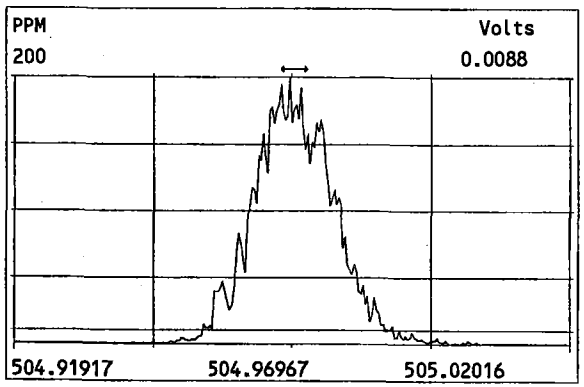


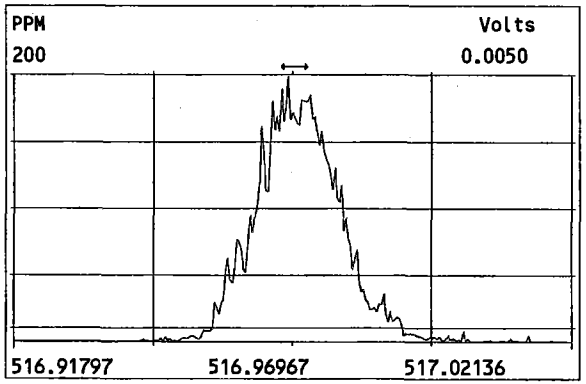












USEPA - ITD

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: 04JAN10M Sam:11 Analysis Date: 4-JAN-10 19:16:06

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	10.2	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	y	49.7	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	45.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	47.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	y	46.5	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.96	0.88-1.20	y	49.2	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	98.1	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.68	0.65-0.89	y	10.3	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.67	1.32-1.78	y	50.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	49.5	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	49.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	50.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.19	1.05-1.43	y	49.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05-1.43	y	49.0	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.99	0.88-1.20	y	50.5	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	y	50.6	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	101	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: 1/5/10

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: 04JAN10M Sam:11 Analysis Date: 4-JAN-10 19:16:06

	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	95.4	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.71	1.32-1.78	y	83.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	104	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	97.1	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	102	72.0 - 138
13C-OCDD	M+2/M+4	1.02	0.76-1.02	y	178	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.85	0.65-0.89	y	96.3	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.66	1.32-1.78	y	86.7	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.69	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	102	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.48	0.43-0.59	y	98.8	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	99.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.49	0.43-0.59	y	89.3	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	98.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	92.7	77.0 - 129
13C-OCDF	M+2/M+4	0.95	0.76-1.02	y	162	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.45	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: 1/5/10

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: 04JAN10M Sam:11 Analysis Date: 4-JAN-10 Time: 19:16:06

DB-5 IS Data Filename: 04JAN10M Sam:11 Analysis Date: 4-JAN-10 Time: 19:16:06

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)	30:12	1,3,4,6,8-PeCDF (F)	28:23
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)	36:05	1,2,3,4,6,8-HxCDF (F)	35:12
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)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:09	1,2,3,4,7,8,9-HpCDF (L)	45:04

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

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: _____ Date: 1/5/10

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: 4-JAN-10 19:16:06 CS3 or VER Data Filename: 04JAN10M Sam:11

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002 ✓
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003 ✓
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002 ✓
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002 ✓
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002 ✓
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052 ✓
13C-2,3,7,8-TCDD		1.021	0.976-1.043 ✓
13C-2,3,7,8-TCDF		0.993	0.923-1.103 ✓
13C-1,2,3,7,8-PeCDD		1.238	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: 1/5/10

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: 4-JAN-10 19:16:06 CS3 or VER Data Filename: 04JAN10M Sam:11

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	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	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	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		1.269	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: 1/5/10

FAL ID: STO10410M2 Filename: 04JAN10M Sam:11 Acquired: 4-JAN-10 19:16:06 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (090918J) ConCal: STO10410M1 EndCal: STO10410M2
Results: 5873 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 98.7
WHO 1998 Tox: 123 WHO 2005 Tox: 113

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.44e+06	0.81 y	27:22	1.02	10.2		2.50	-	-	*
1,2,3,7,8-PeCDD	1.06e+07	1.55 y	33:11	0.96	49.7		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.01e+07	1.26 y	38:32	1.37	45.3		2.50	-	-	*
1,2,3,6,7,8-HxCDD	9.24e+06	1.26 y	38:42	1.34	47.5		2.50	-	-	*
1,2,3,7,8,9-HxCDD	9.77e+06	1.25 y	39:10	1.37	46.5		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	8.38e+06	0.96 y	44:09	1.17	49.2		2.50	-	-	*
OCDD	1.12e+07	0.91 y	49:42	1.21	98.1		2.50	-	-	*
2,3,7,8-TCDF	5.01e+06	0.68 y	26:37	1.29	10.3		2.50	-	-	*
1,2,3,7,8-PeCDF	1.53e+07	1.67 y	31:26	0.89	50.4		2.50	-	-	*
2,3,4,7,8-PeCDF	1.45e+07	1.66 y	32:45	0.91	49.5		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.37e+07	1.22 y	37:09	1.00	49.1		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.45e+07	1.21 y	37:21	0.92	50.4		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.33e+07	1.19 y	38:17	0.99	49.3		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.14e+07	1.21 y	39:43	1.09	49.0		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.18e+07	0.99 y	42:15	1.36	50.5		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.02e+07	1.01 y	45:04	1.61	50.6		2.50	-	-	*
OCDF	1.28e+07	0.93 y	50:03	0.84	101		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.35e+07	0.72 y	27:21	0.94	95.4					95.4
13C-1,2,3,7,8-PeCDD	2.21e+07	1.71 y	33:09	1.02	83.0					83.0
13C-1,2,3,4,7,8-HxCDD	1.63e+07	1.26 y	38:32	0.98	104					104
13C-1,2,3,6,7,8-HxCDD	1.45e+07	1.25 y	38:42	0.94	97.1					97.1
13C-1,2,3,4,6,7,8-HpCDD	1.46e+07	1.04 y	44:08	0.90	102					102
13C-OCDD	1.88e+07	1.02 y	49:40	0.67	178					88.8
13C-2,3,7,8-TCDF	3.79e+07	0.85 y	26:35	0.88	96.3					96.3
13C-1,2,3,7,8-PeCDF	3.41e+07	1.66 y	31:26	0.88	86.7					86.7
13C-2,3,4,7,8-PeCDF	3.23e+07	1.69 y	32:44	0.85	84.7					84.7
13C-1,2,3,4,7,8-HxCDF	2.80e+07	0.49 y	37:08	1.72	102					102
13C-1,2,3,6,7,8-HxCDF	3.15e+07	0.48 y	37:20	2.00	98.8					98.8
13C-2,3,4,6,7,8-HxCDF	2.74e+07	0.49 y	38:16	1.74	99.0					99.0
13C-1,2,3,7,8,9-HxCDF	2.14e+07	0.49 y	39:42	1.51	89.3					89.3
13C-1,2,3,4,6,7,8-HpCDF	1.72e+07	0.46 y	42:13	1.10	98.4					98.4
13C-1,2,3,4,7,8,9-HpCDF	1.25e+07	0.45 y	45:02	0.85	92.7					92.7
13C-OCDF	3.02e+07	0.95 y	50:03	1.17	162					80.8
37Cl-2,3,7,8-TCDD	2.41e+06		27:22	0.97	9.45					94.5
13C-1,2,3,4-TCDD	2.62e+07	0.73 y	26:46	-	100					
13C-1,2,3,4-TCDF	4.48e+07	0.85 y	25:30	-	97.1					
13C-1,2,3,7,8,9-HxCDD	1.59e+07	1.26 y	39:08	-	77.6					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.30e+07		24:22	1.02	54.5	2.50	-	-	*		17
Total Penta-Dioxins	2.37e+07		30:12	0.96	111	2.50	-	-	*		15
Total Hexa-Dioxins	3.38e+07		36:05	1.36	161	2.50	-	-	*		21
Total Hepta-Dioxins	1.80e+07		42:46	1.17	106	2.50	-	-	*		23
Total Tetra-Furans	2.17e+07		23:02	1.29	44.5	2.50	-	-	*		22
1st Fn. Tot Penta-Furans	1.83e+07		28:23	0.90	61.4	2.50	-	-	*	PeCDF	1
Total Penta-Furans	4.27e+07		30:09	0.90	143	2.50	-	-	*	205	17
Total Hexa-Furans	6.21e+07		35:12	0.99	232	2.50	-	-	*		21
Total Hepta-Furans	2.27e+07		42:15	1.47	104	2.50	-	-	*		16

Analyst: _____ Date: 1/5/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:04JAN10M Instrument: FAL3 GC: DB5 Experiment:PCDD

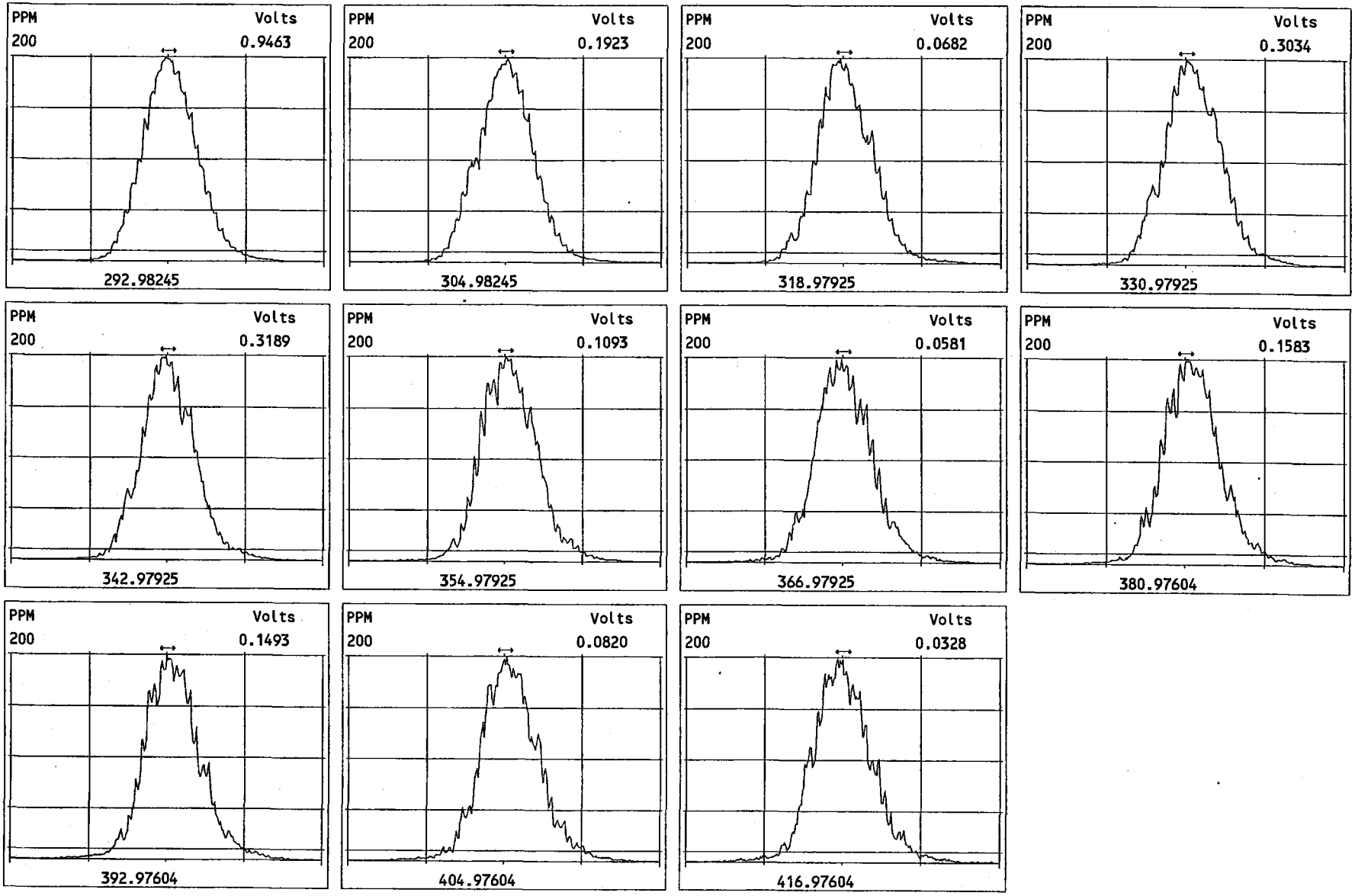
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
04JAN10M	1	ST010410M1	1613 CS3 (090918J)	4-JAN-10 09:53:50	ST010410M1	ST010410M2	DV
04JAN10M	2	SB010410M1	Solvent Blank	4-JAN-10 10:49:04	ST010410M1	ST010410M2	DV
04JAN10M	3	1910-001-0001-OPR	OPR	4-JAN-10 11:45:09	ST010410M1	ST010410M2	DV
04JAN10M	4	SB010410M2	Solvent Blank	4-JAN-10 12:40:28	ST010410M1	ST010410M2	DV
04JAN10M	5	1910-001-0001-MB	Method Blank	4-JAN-10 13:44:26	ST010410M1	ST010410M2	DV
04JAN10M	6	5887-001-0001-SA	CB4857-121009-SED	4-JAN-10 14:39:41	ST010410M1	ST010410M2	DV
04JAN10M	7	5873-001-0001-SA	9120577-01	4-JAN-10 15:35:00	ST010410M1	ST010410M2	DV
04JAN10M	8	5873-001-0001-MS	9120577-01	4-JAN-10 16:30:18	ST010410M1	ST010410M2	DV
04JAN10M	9	5873-001-0001-MSD	9120577-01	4-JAN-10 17:25:36	ST010410M1	ST010410M2	DV
04JAN10M	10	SB010410M3	Solvent Blank	4-JAN-10 18:20:51	ST010410M1	ST010410M2	DV
04JAN10M	11	ST010410M2	1613 CS3 (090918J)	4-JAN-10 19:16:06	ST010410M1	ST010410M2	DV

1/5/10

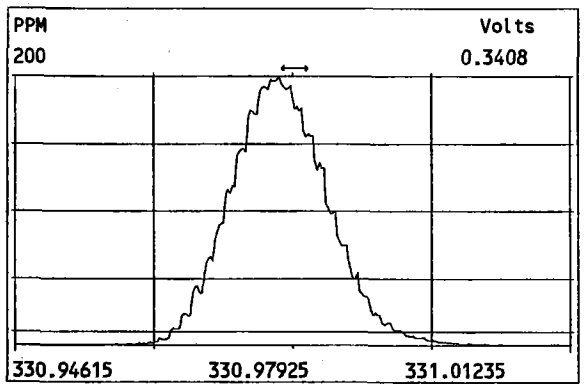
Data Backed Up:_____

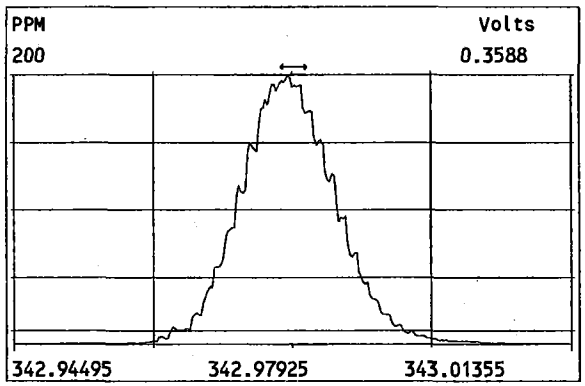
Date:_____

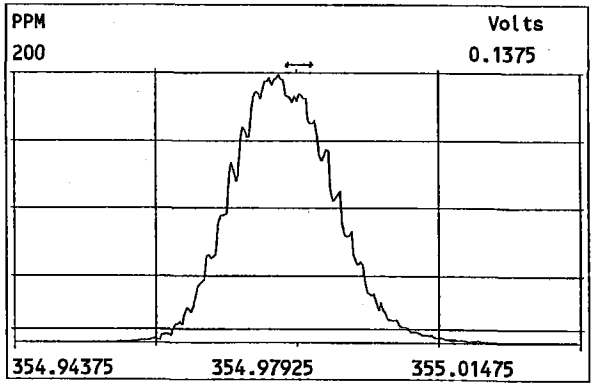
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:1 Reference:PFK

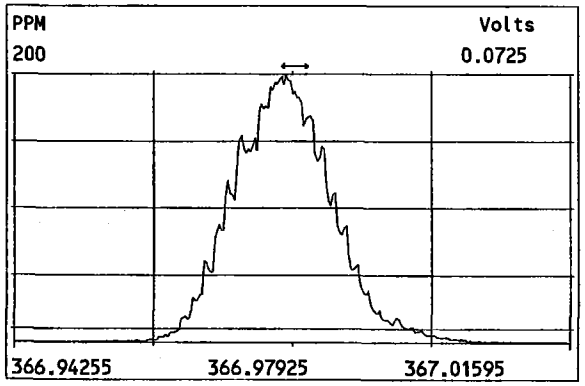


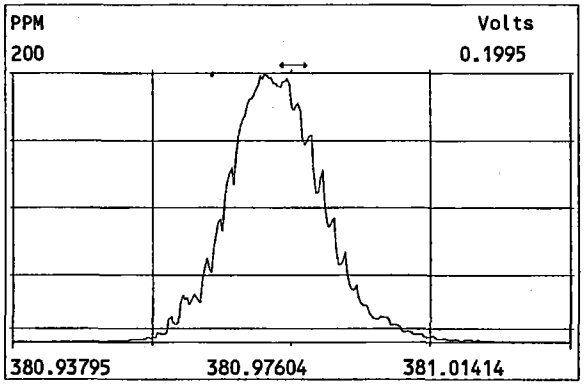
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:2 Reference:PFK

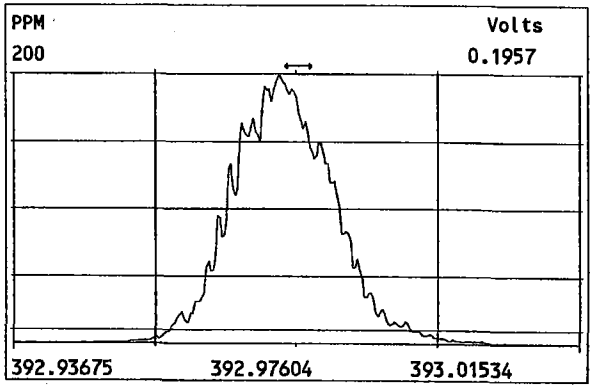


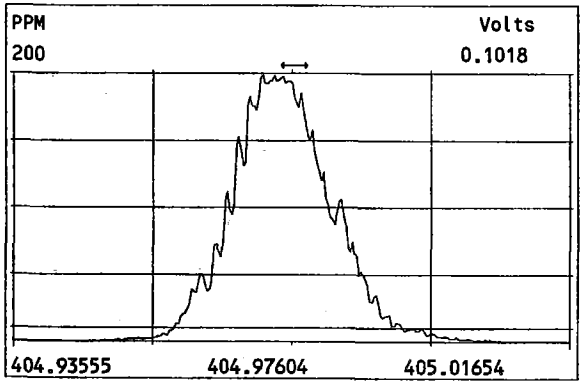


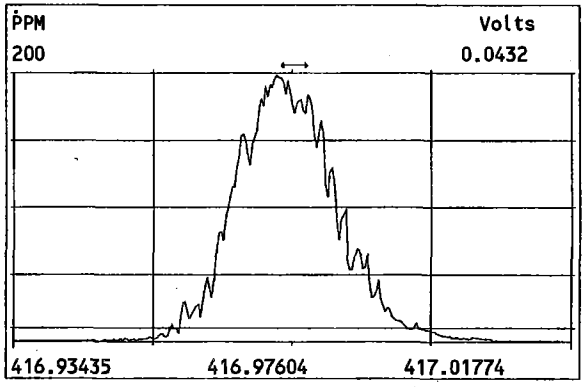




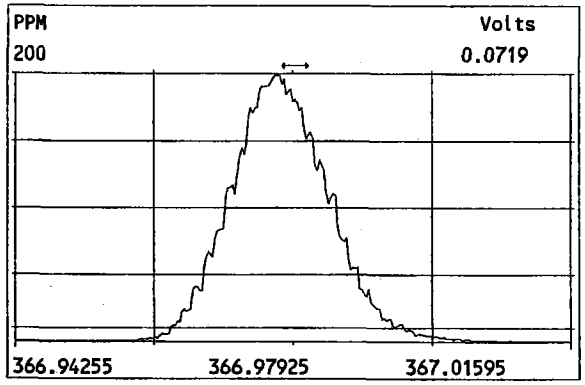


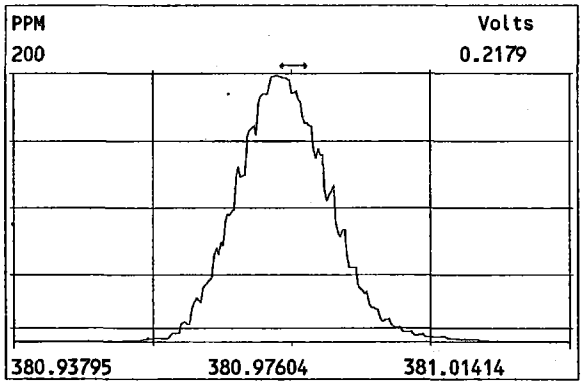


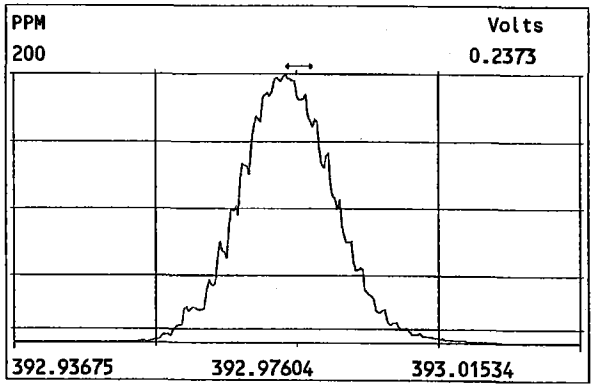


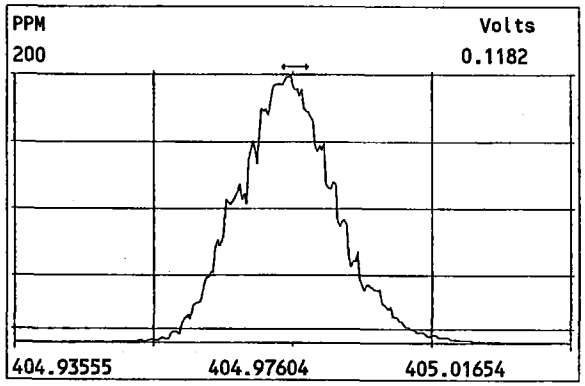


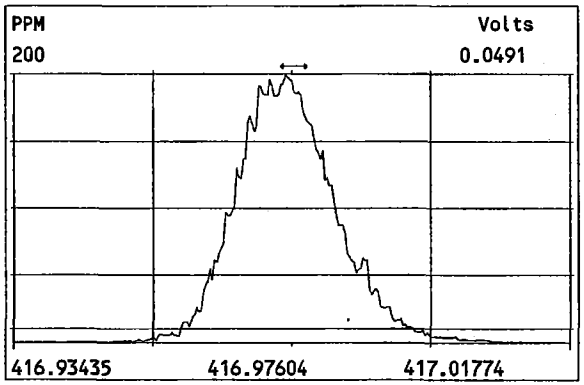
Peak Locate Examination: 4-JAN-2010:09:52 File:04JAN10M
Experiment:PCDD Function:3 Reference:PFK

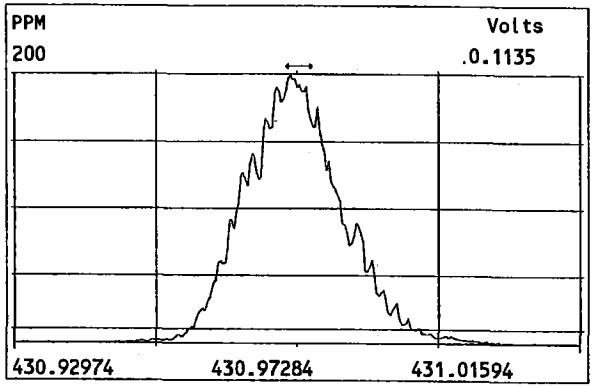


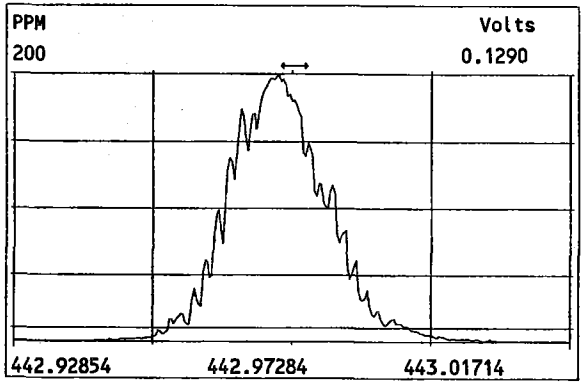


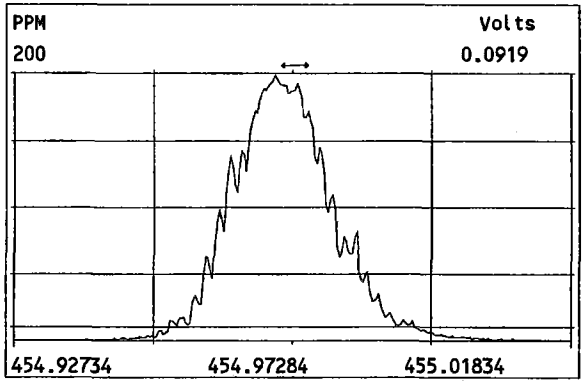




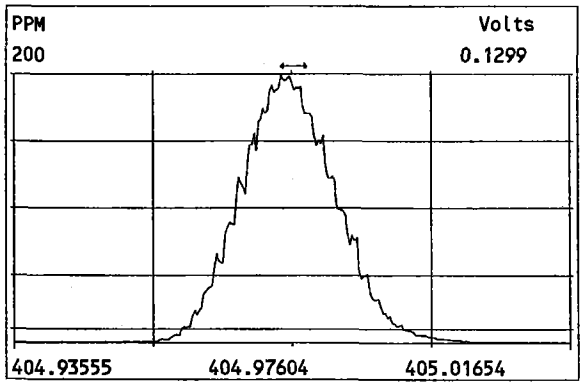


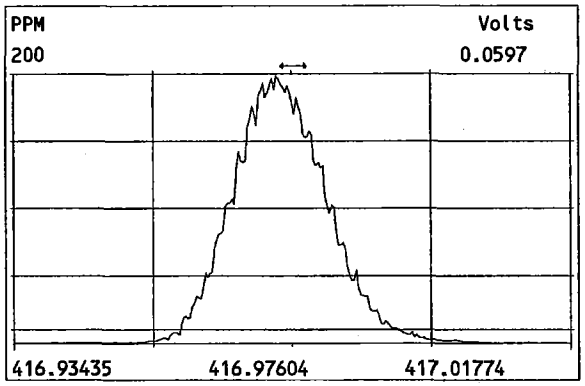


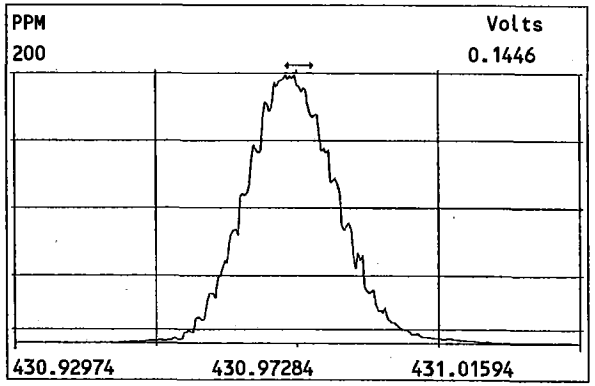


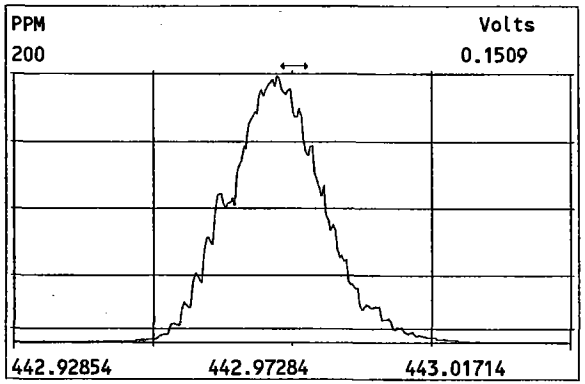


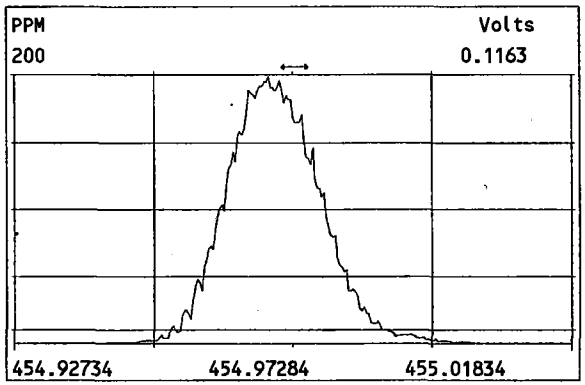
Peak Locate Examination: 4-JAN-2010:09:53 File:04JAN10M
Experiment:PCDD Function:4 Reference:PFK

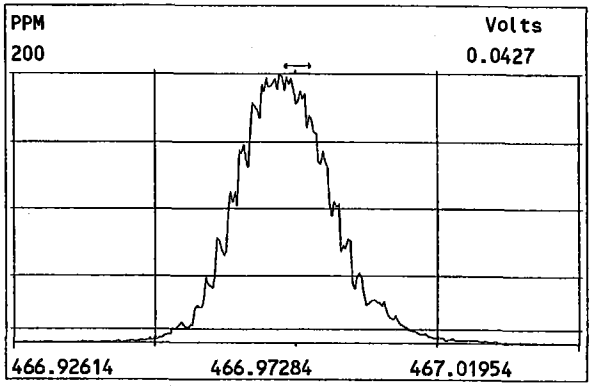


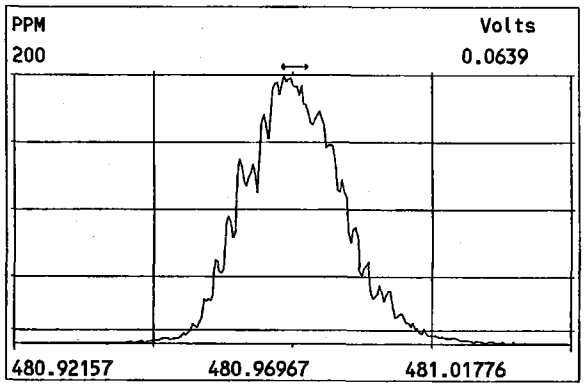




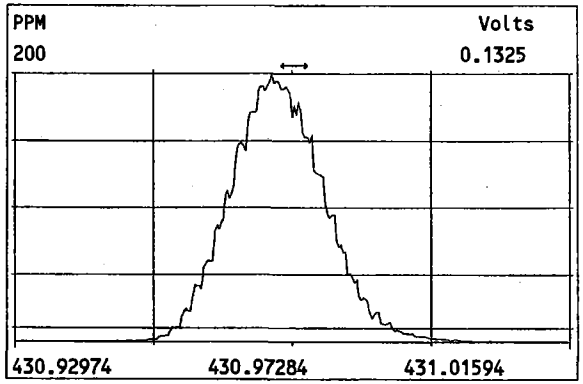


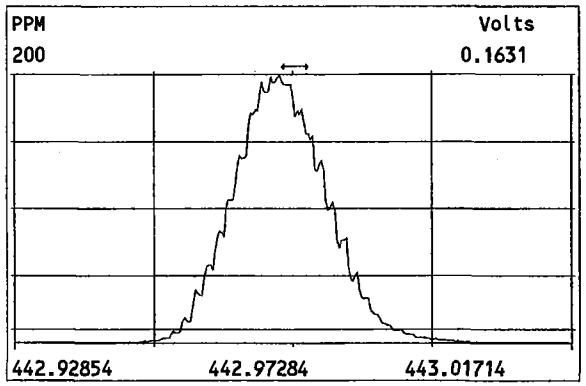


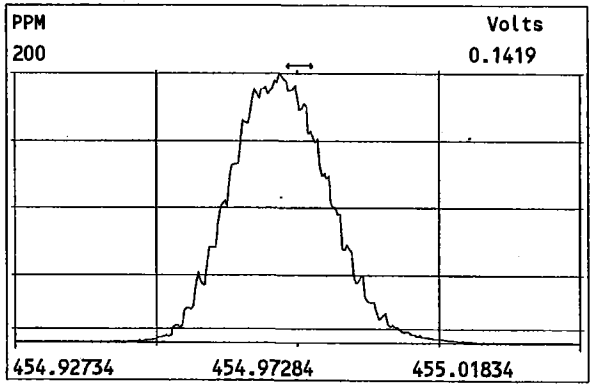


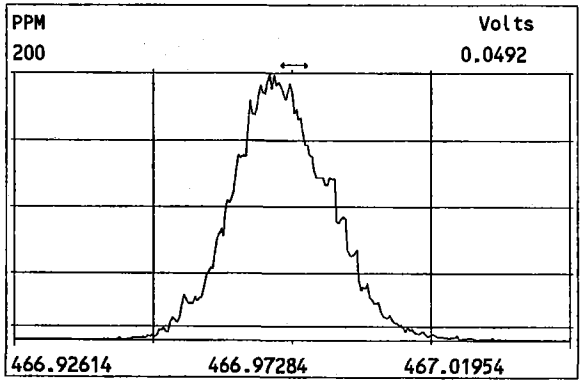


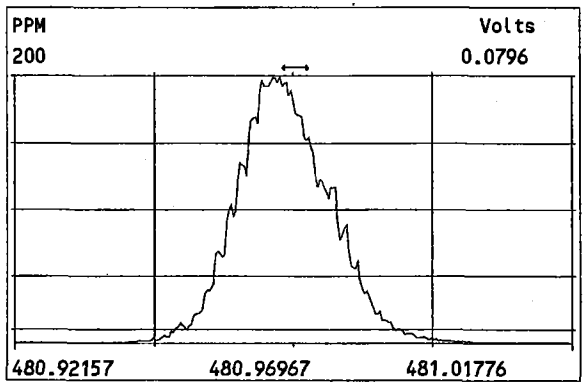
Peak Locate Examination: 4-JAN-2010:09:53 File:04JAN10M
Experiment:PCDD Function:5 Reference:PFK

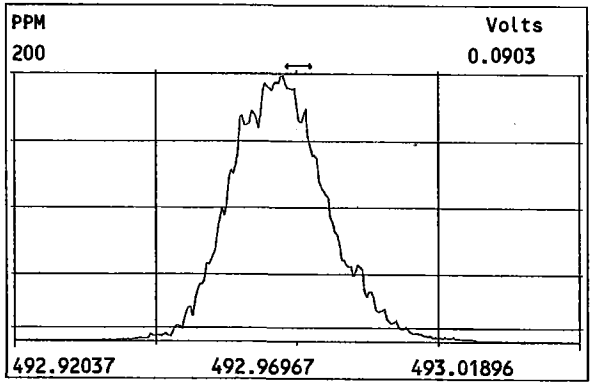


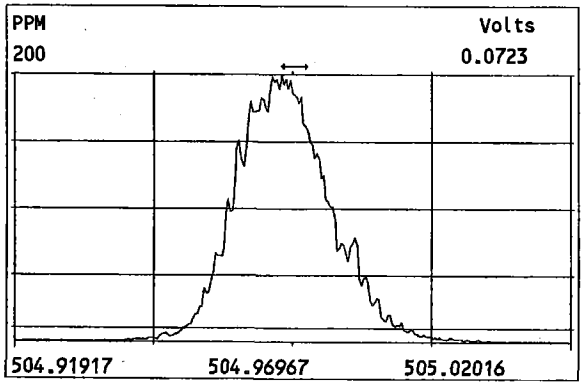


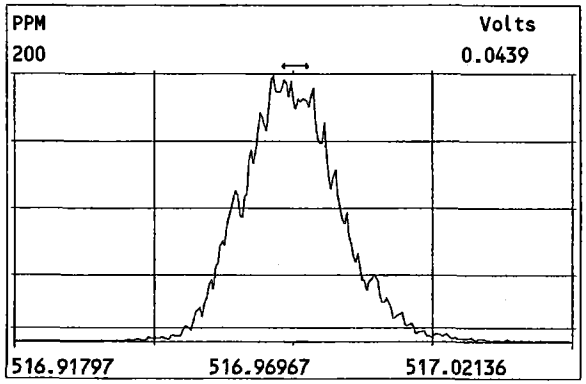




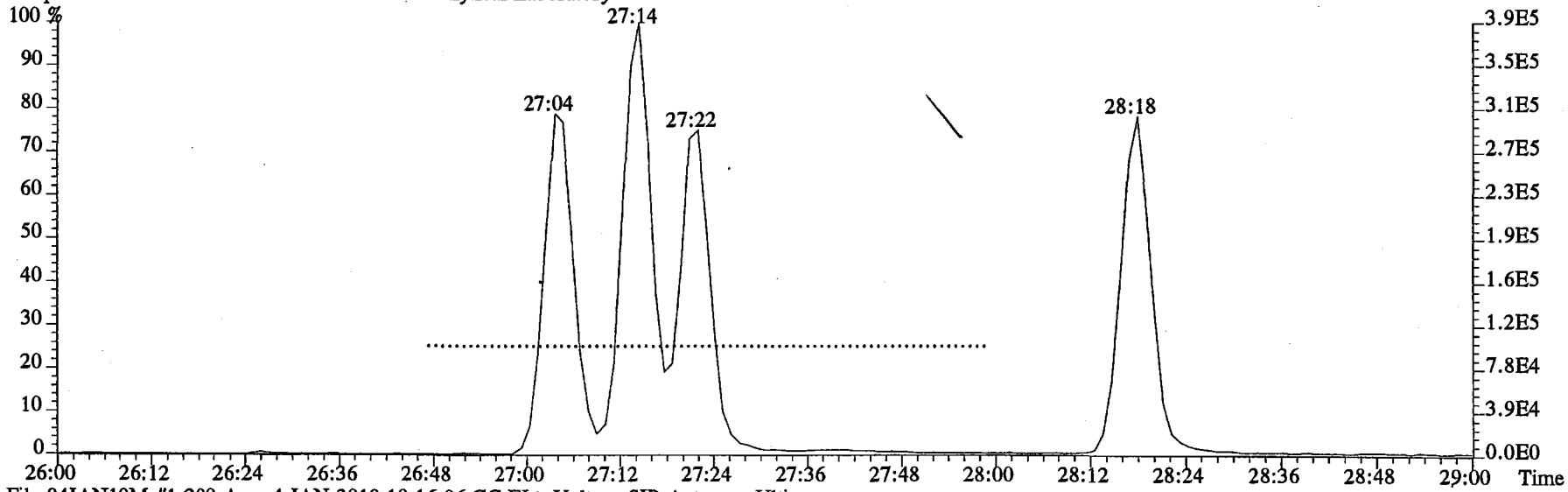




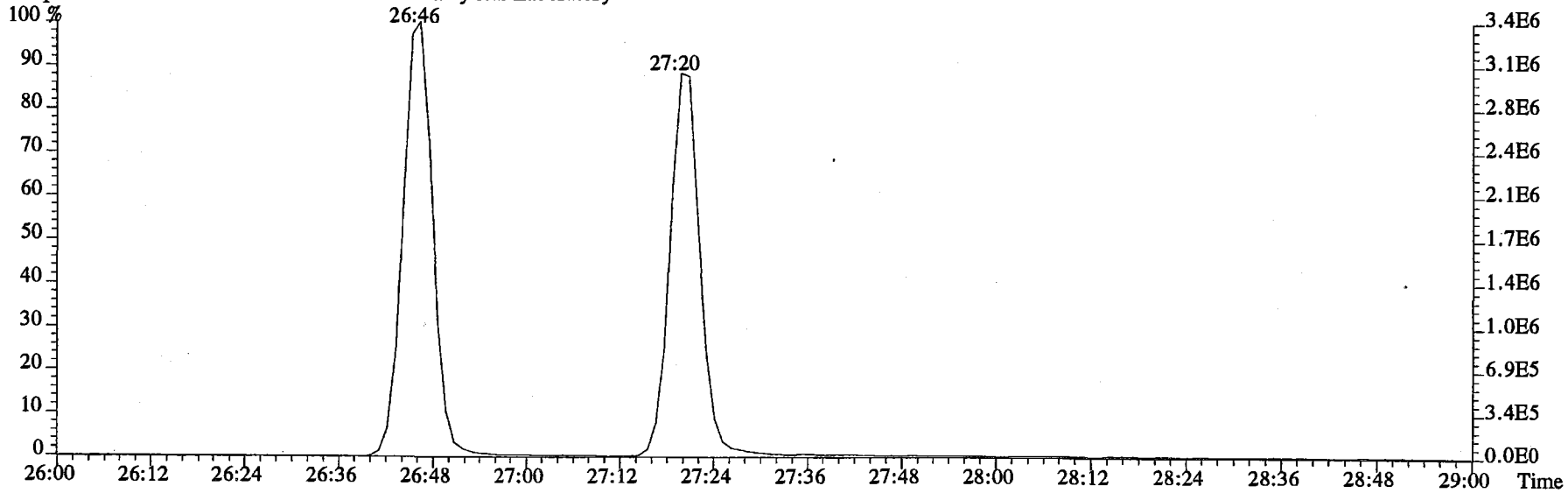




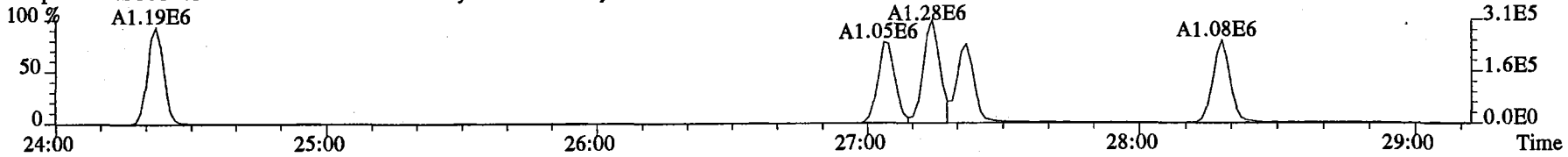
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:11 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



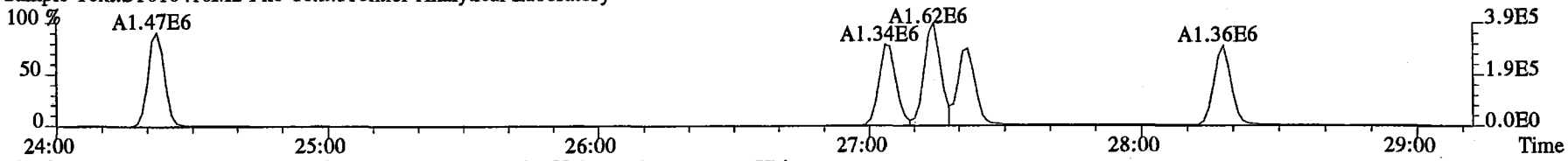
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:11 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



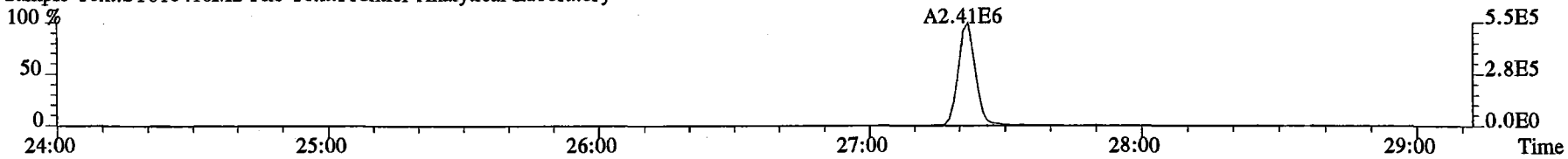
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 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:ST010410M2 File Text:Frontier Analytical Laboratory



File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 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:ST010410M2 File Text:Frontier Analytical Laboratory



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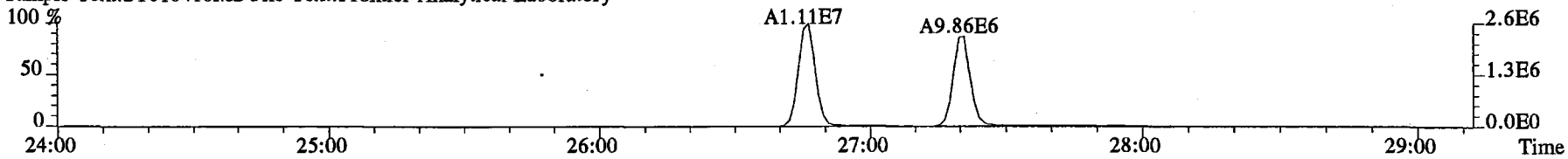
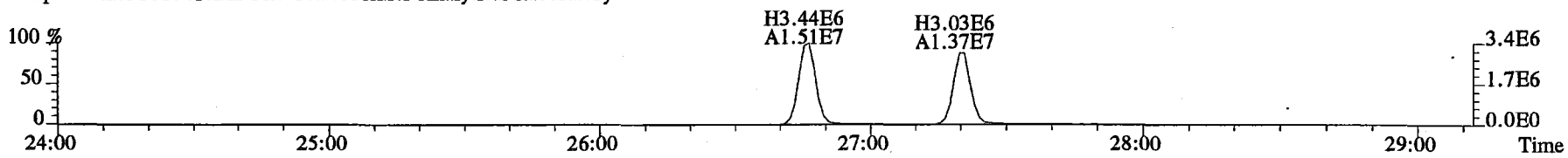
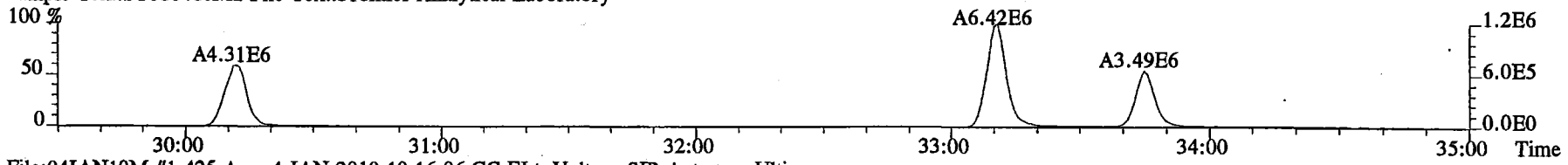
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



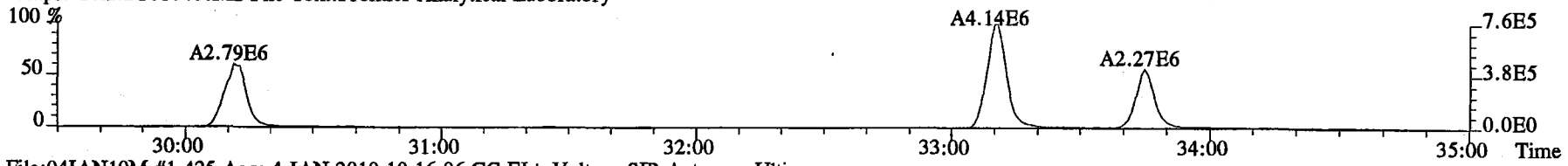
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



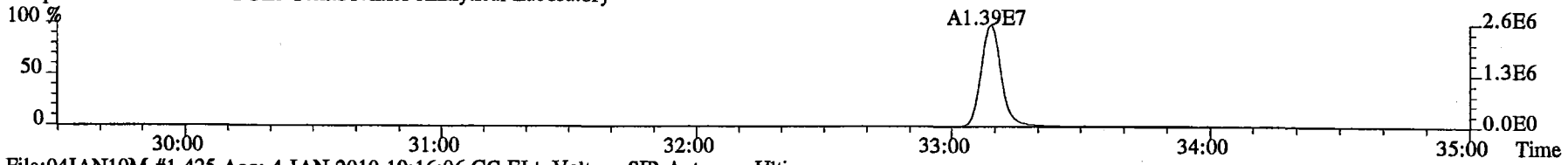
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



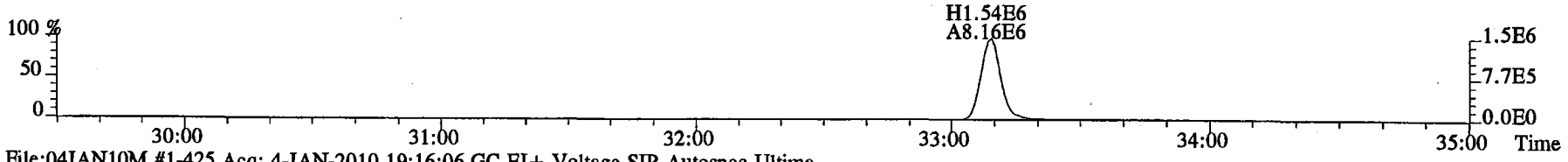
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



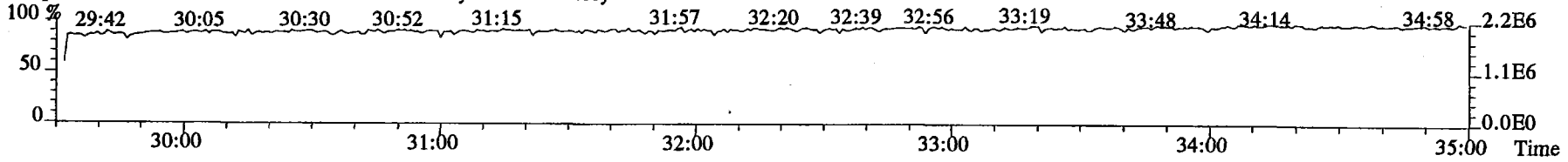
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



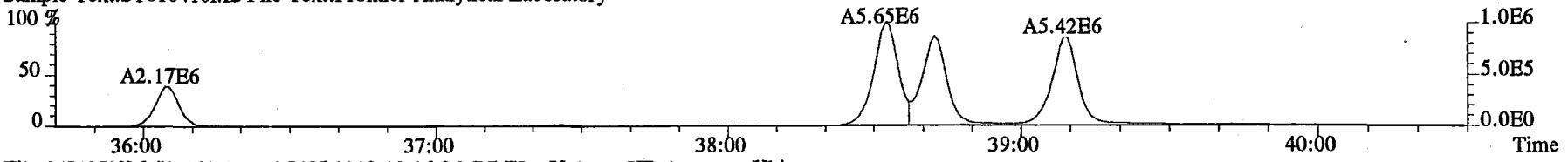
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



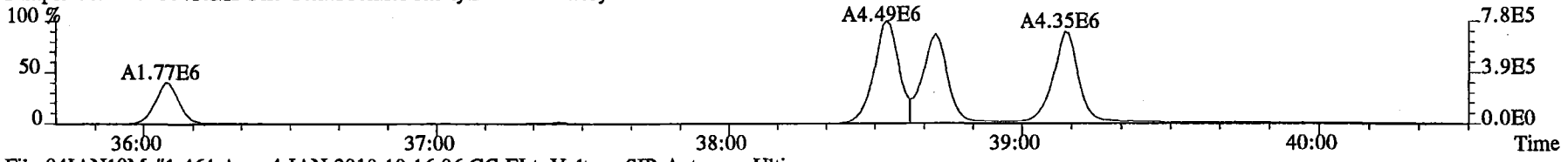
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:11 F:2 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



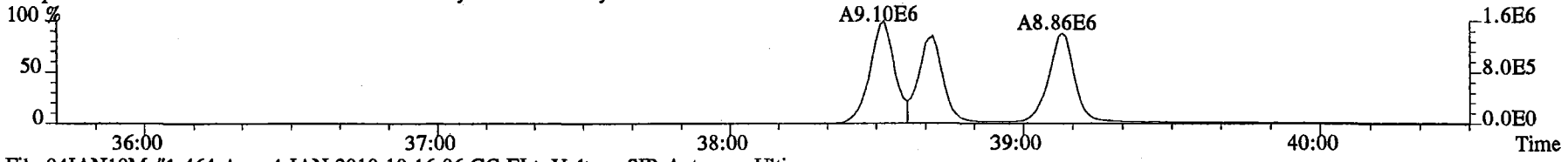
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



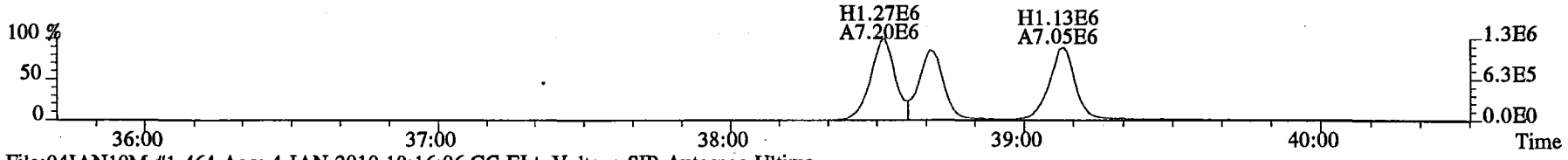
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



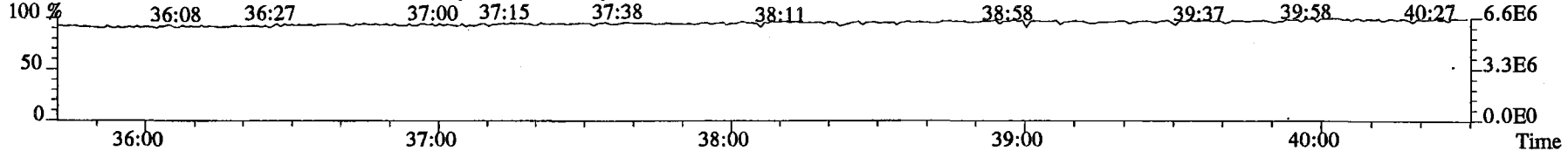
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



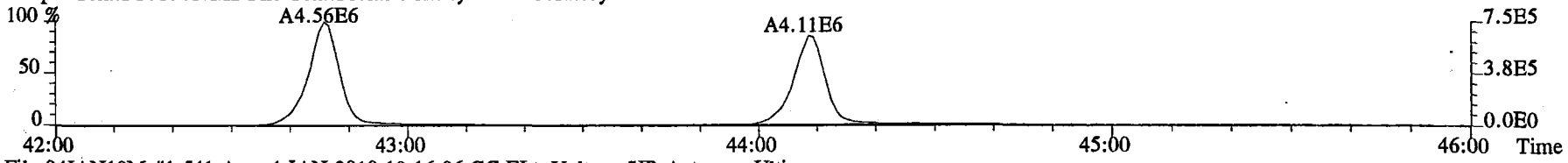
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



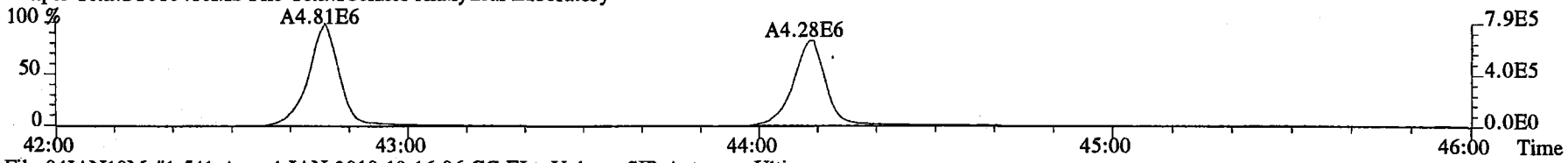
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:11 F:3 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



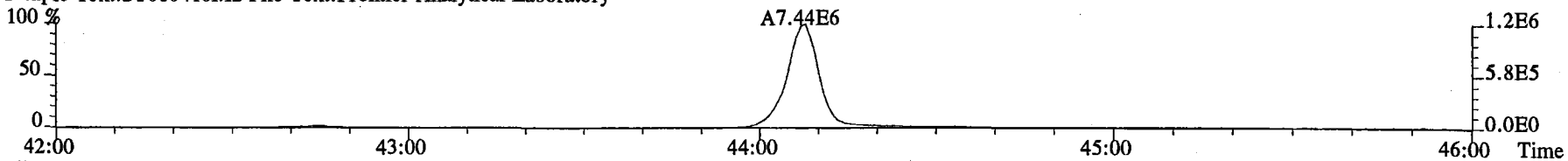
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



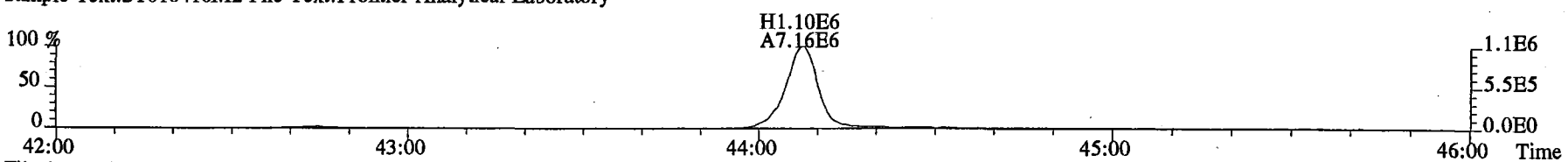
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



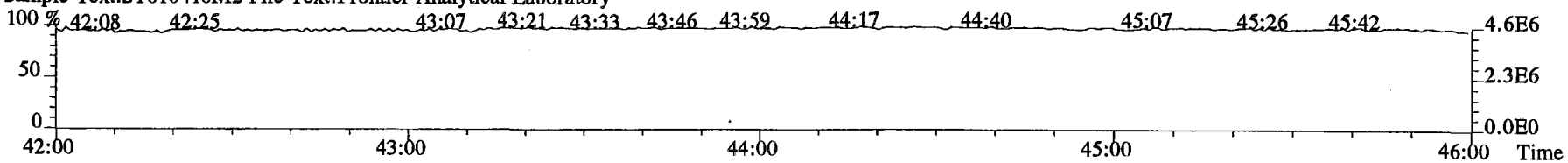
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



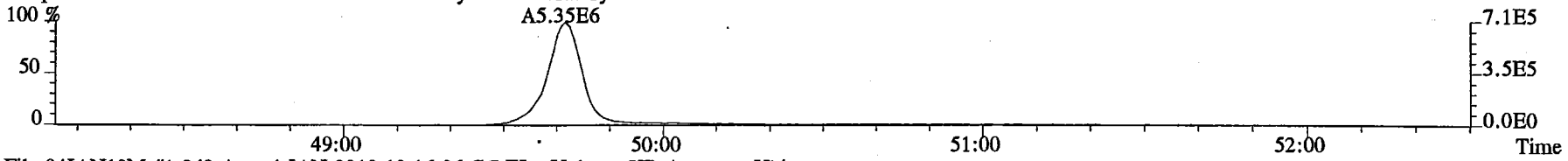
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



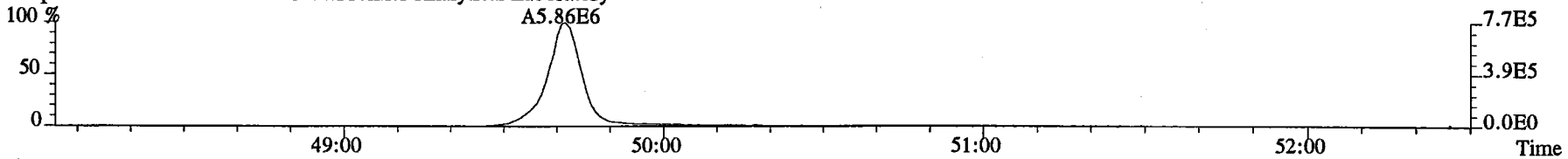
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:11 F:4 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



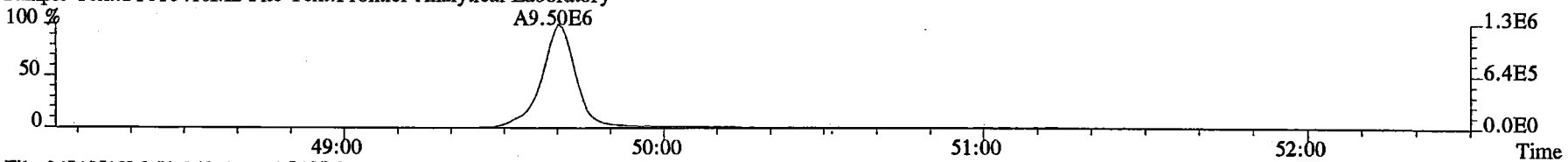
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



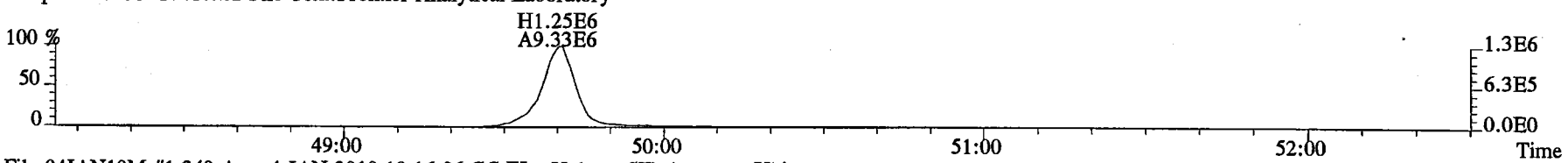
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



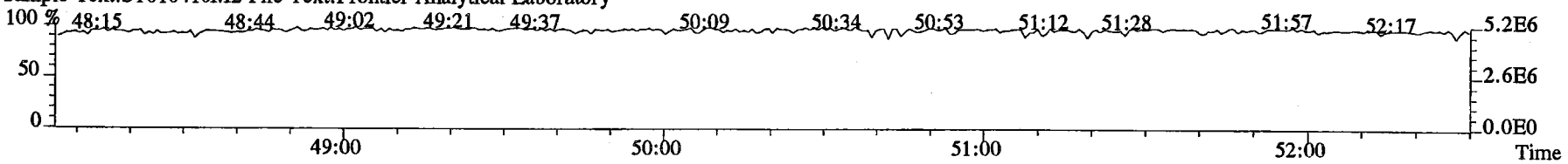
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



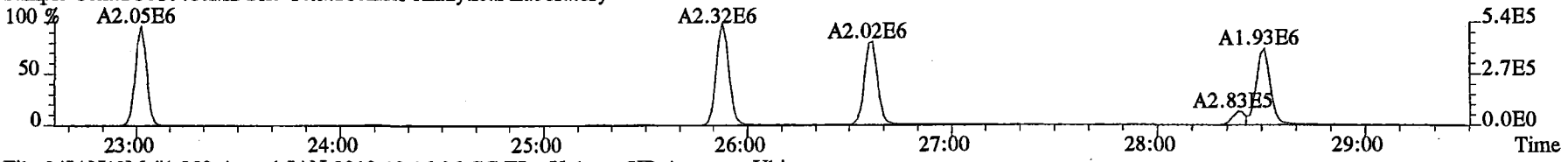
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



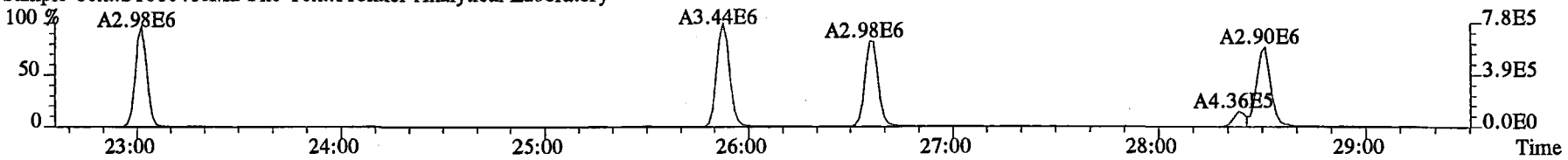
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:11 F:5 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



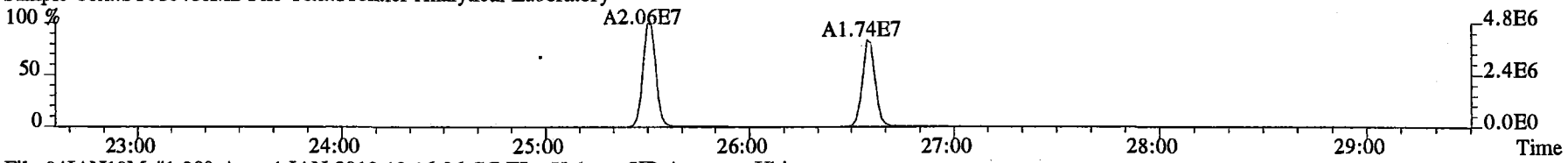
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



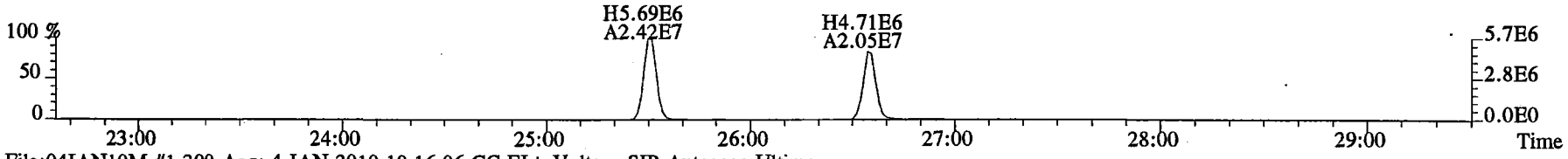
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



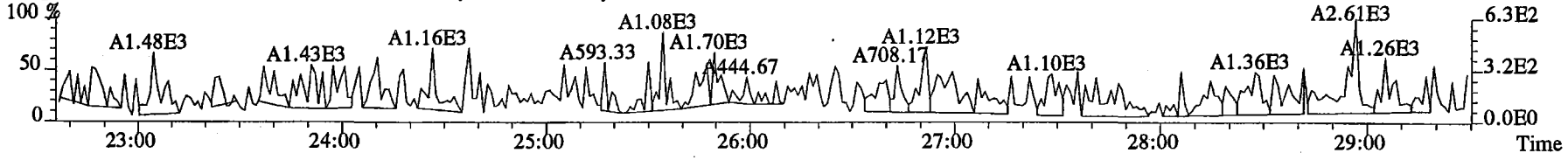
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



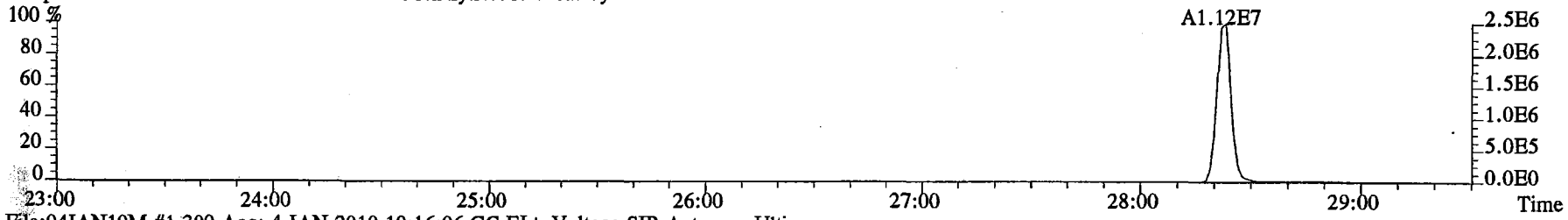
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



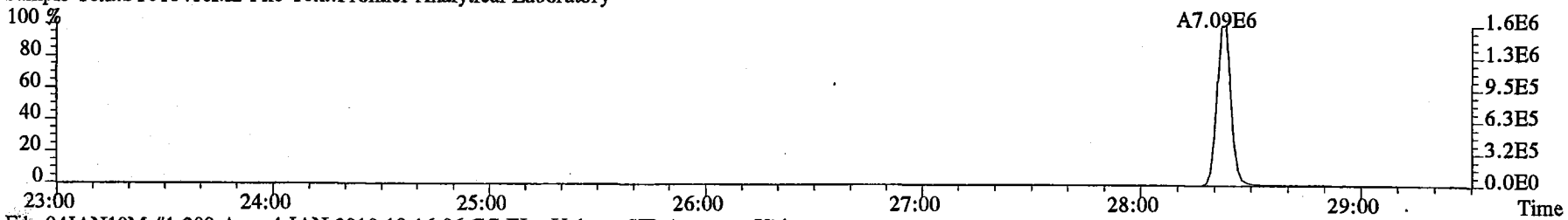
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



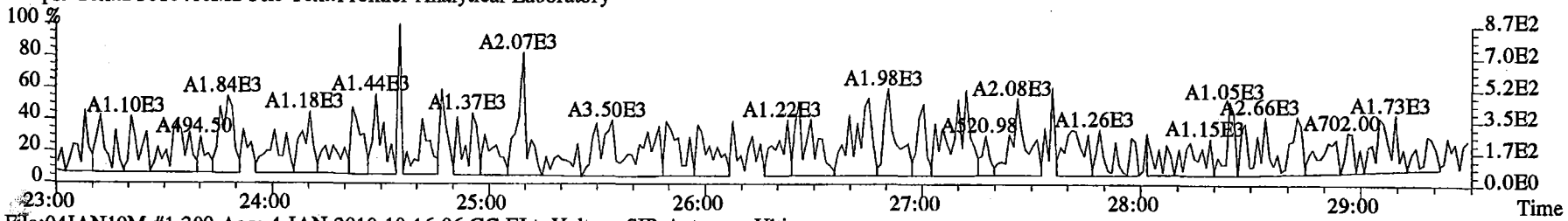
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



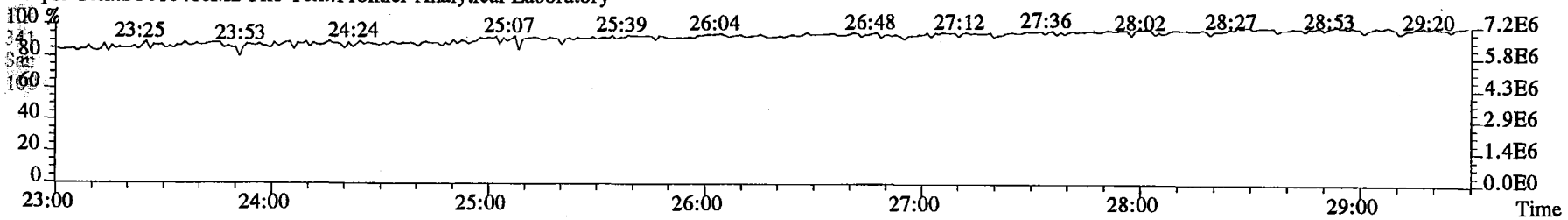
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



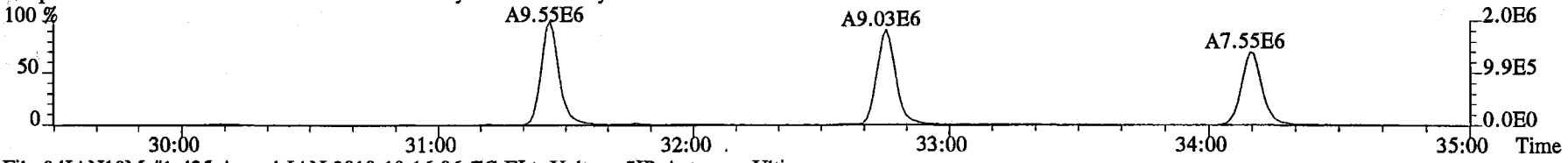
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



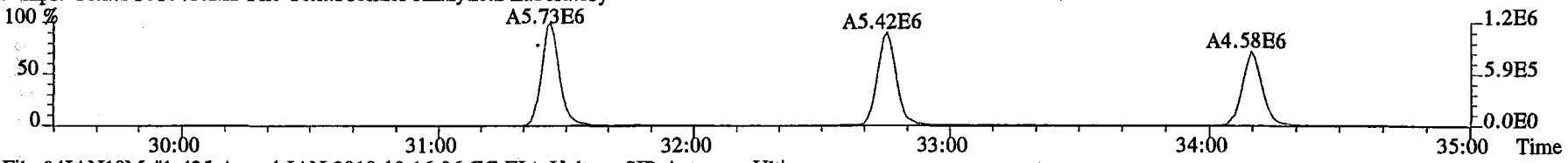
File:04JAN10M #1-390 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:11 Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



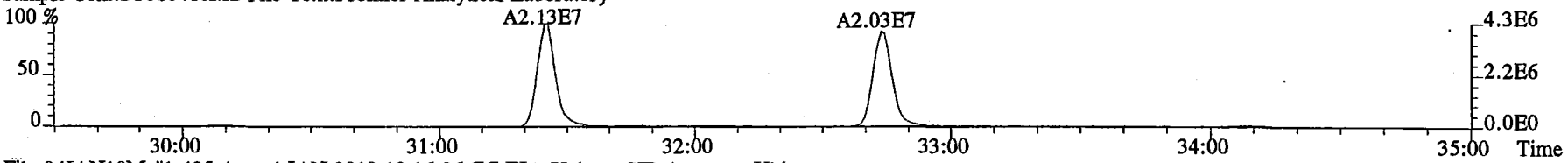
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



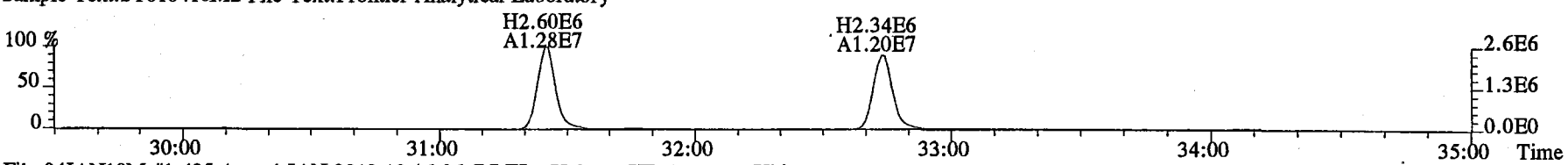
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



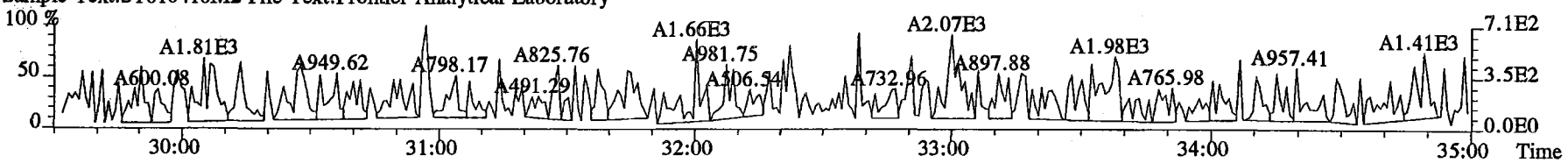
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



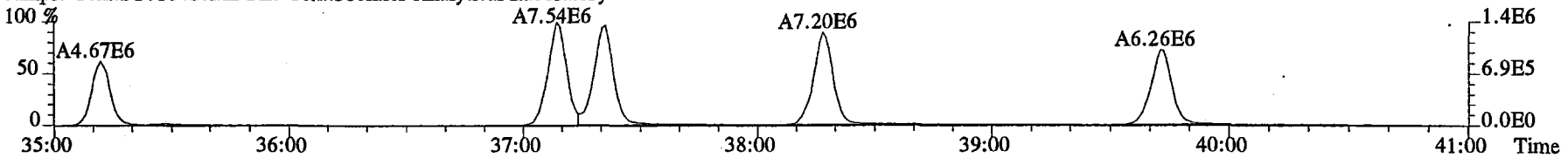
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



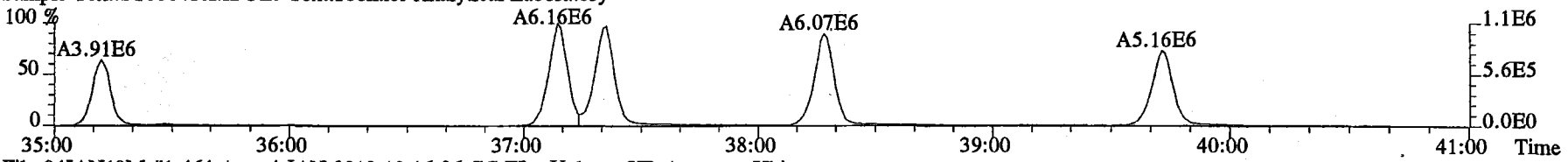
File:04JAN10M #1-425 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



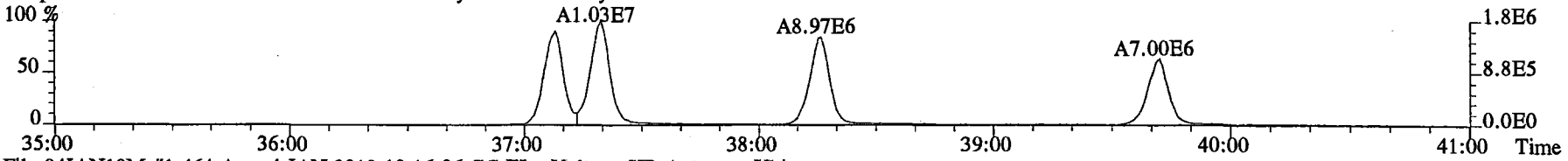
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



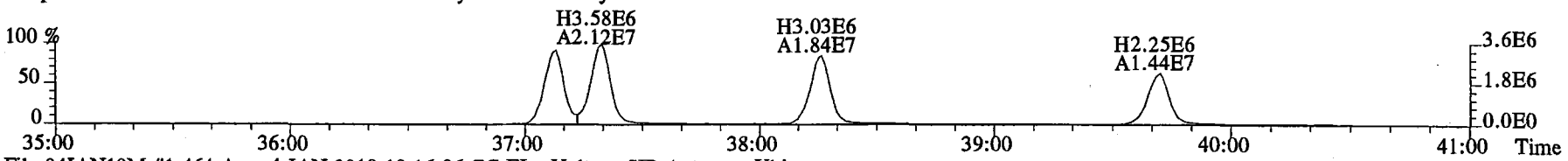
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



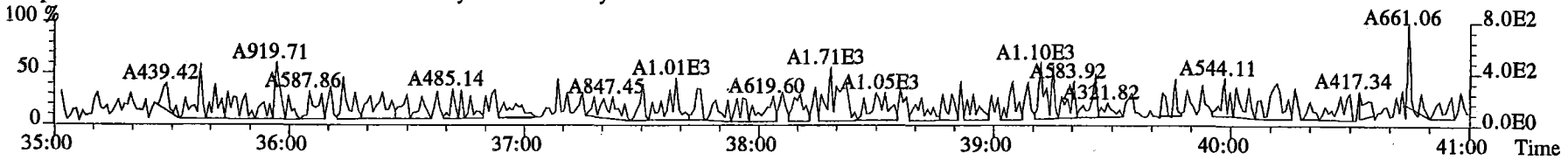
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



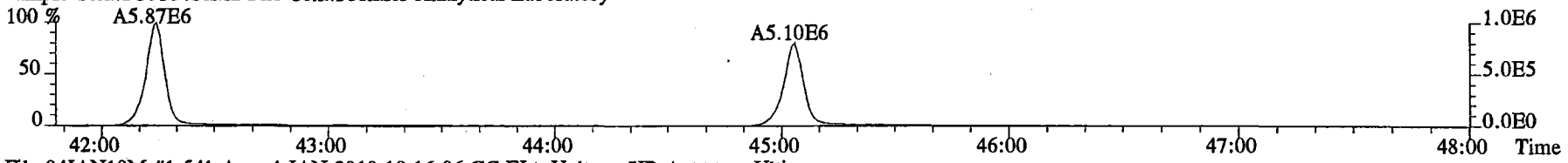
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



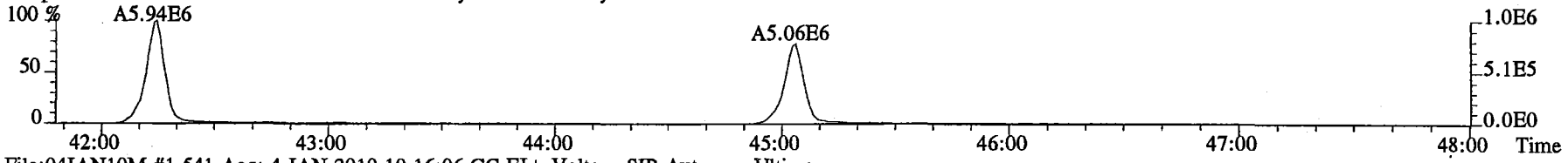
File:04JAN10M #1-464 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



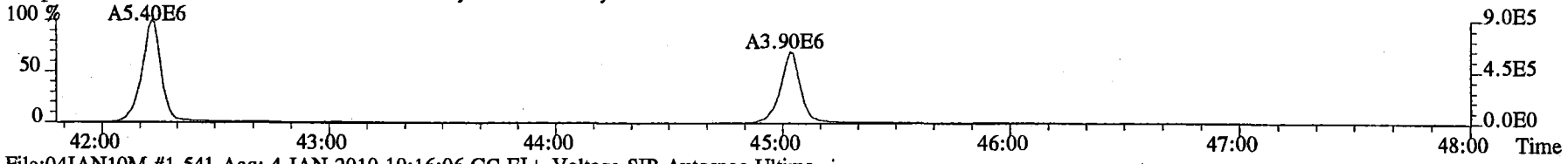
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



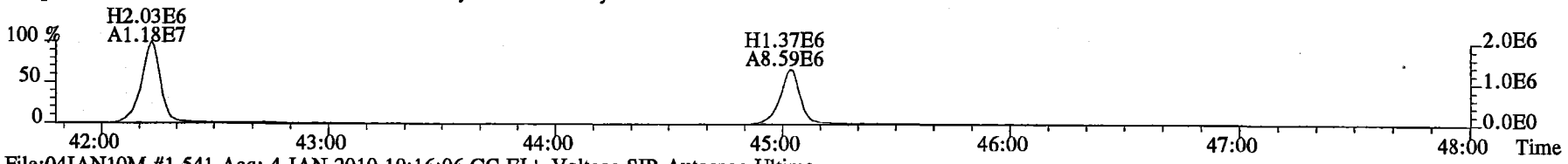
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



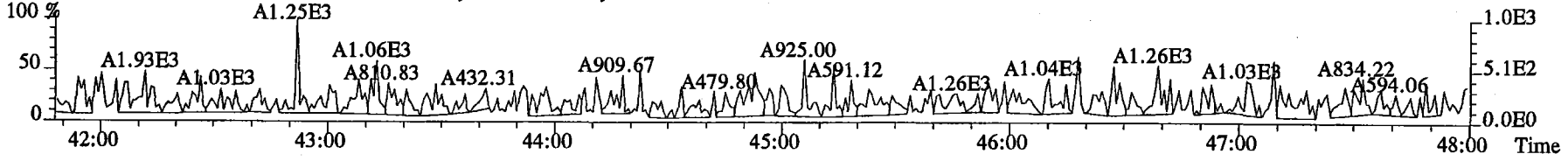
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



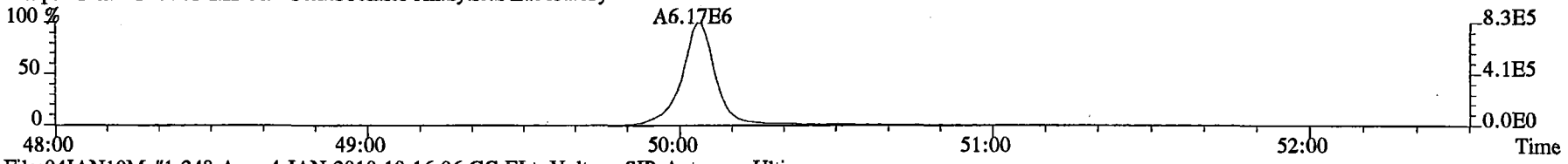
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



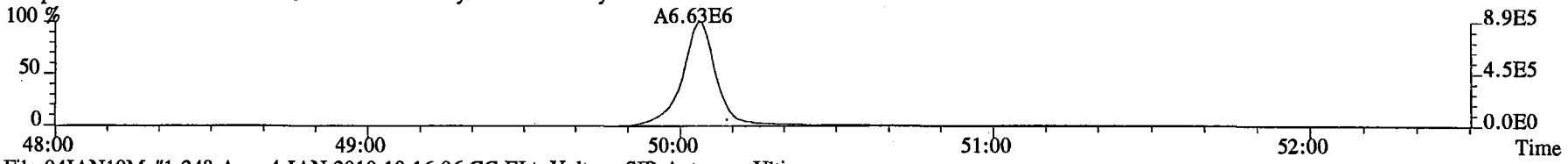
File:04JAN10M #1-541 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



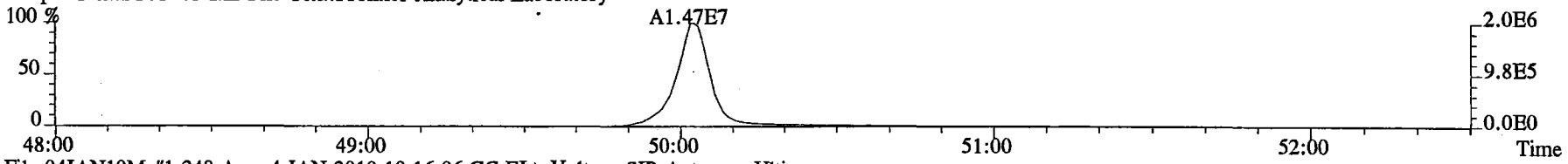
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



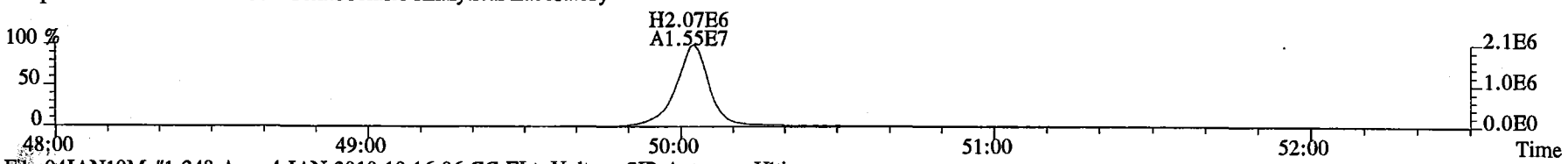
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



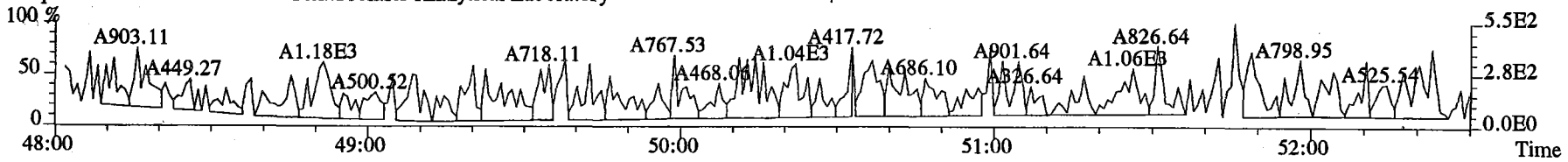
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory



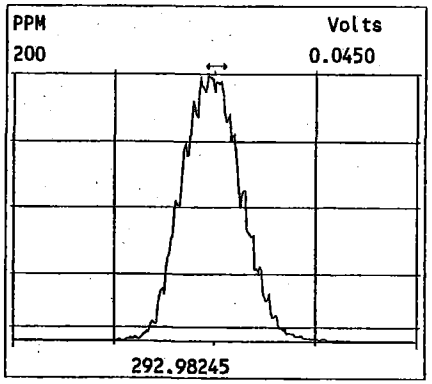
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory

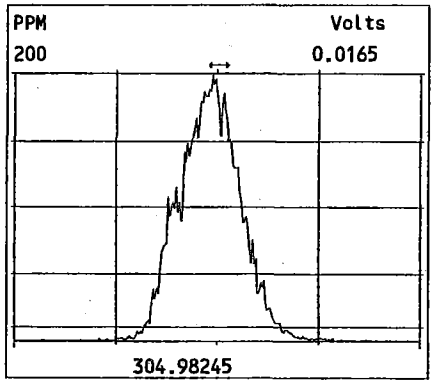


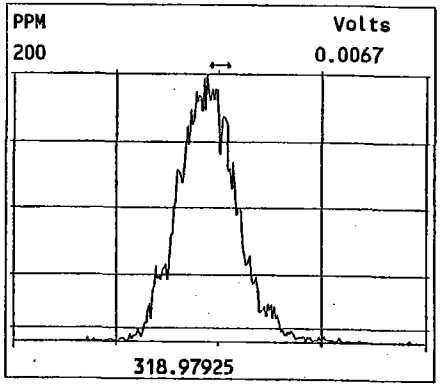
File:04JAN10M #1-348 Acq: 4-JAN-2010 19:16:06 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST010410M2 File Text:Frontier Analytical Laboratory

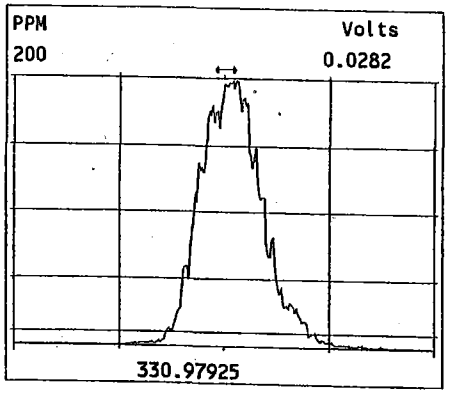


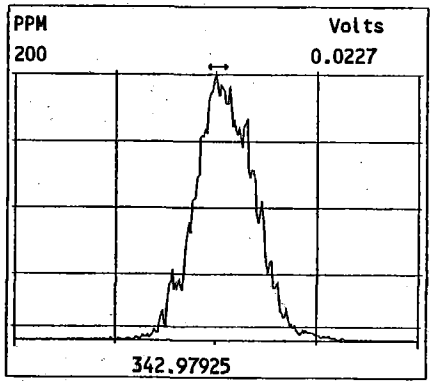
Peak Locate Examination: 5-JAN-2010:06:54 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

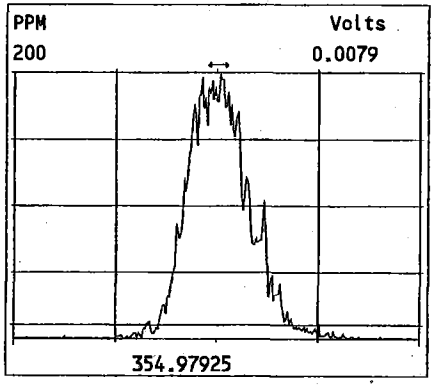


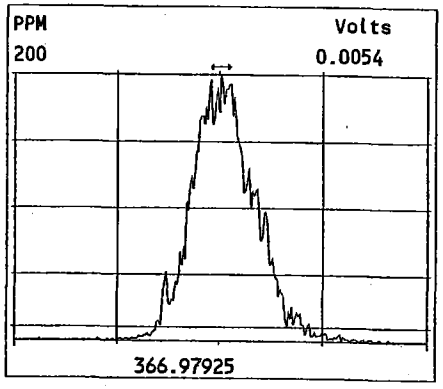


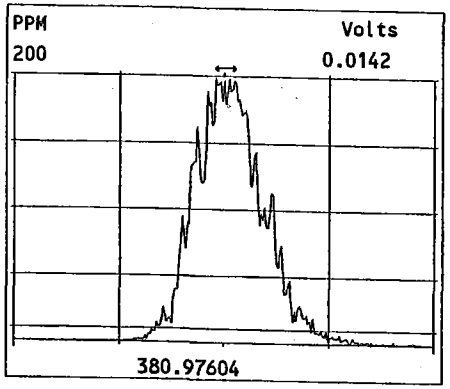


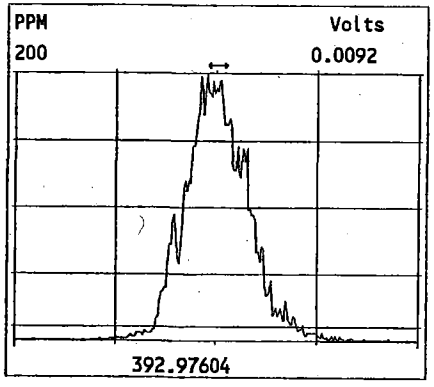


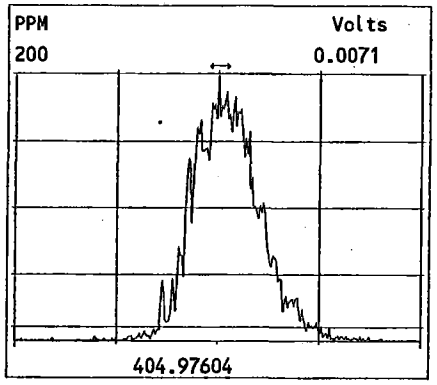


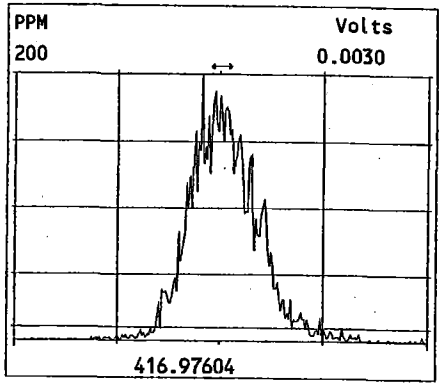




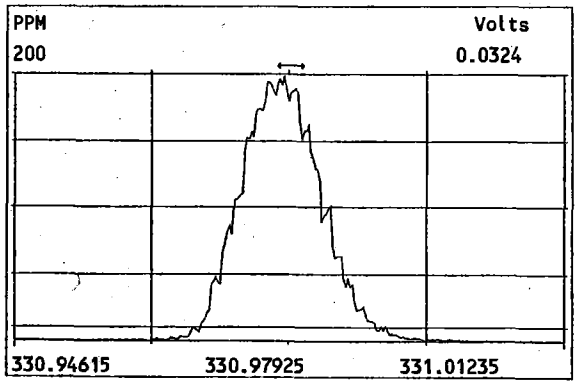


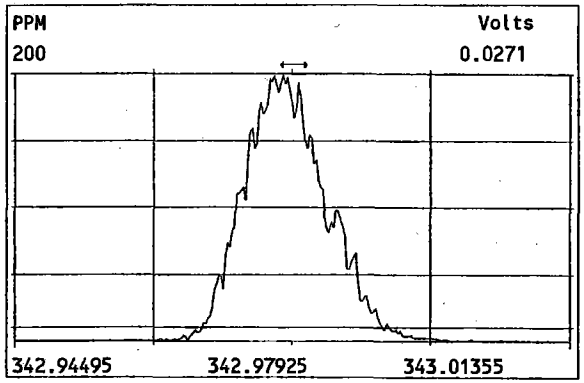


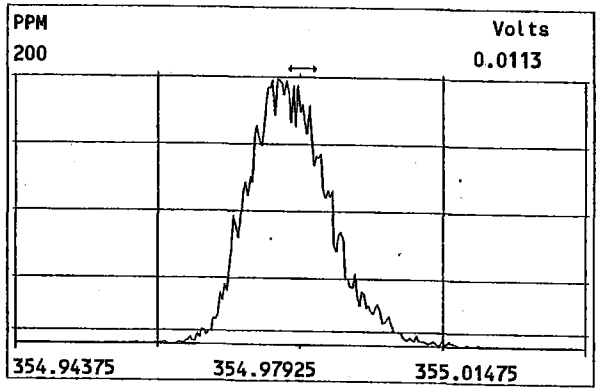


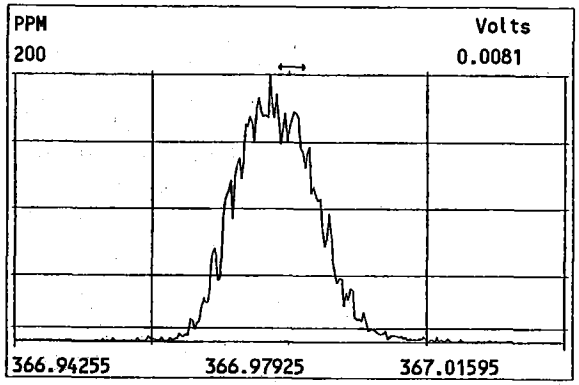


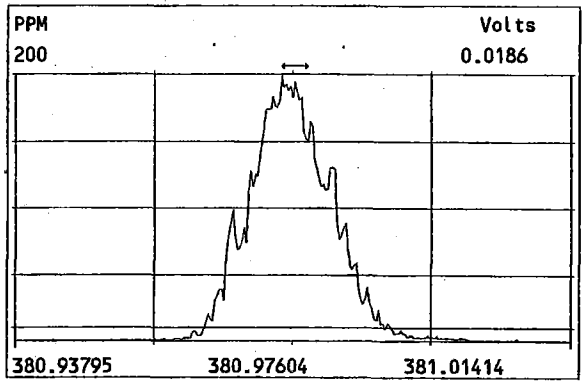
Peak Locate Examination: 5-JAN-2010:06:55 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

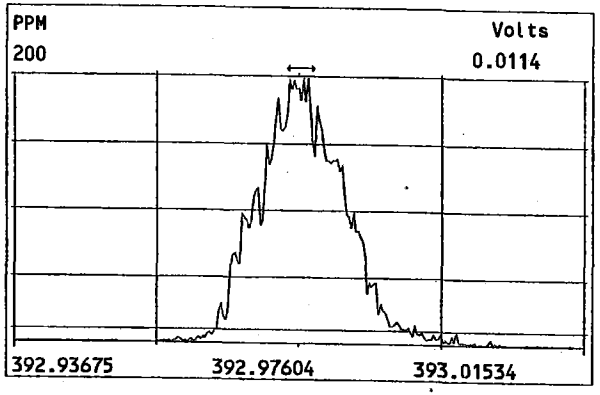


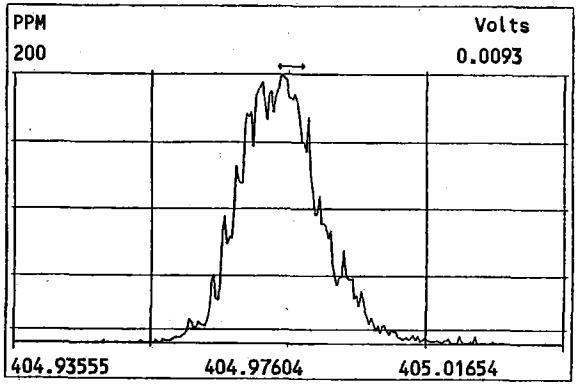


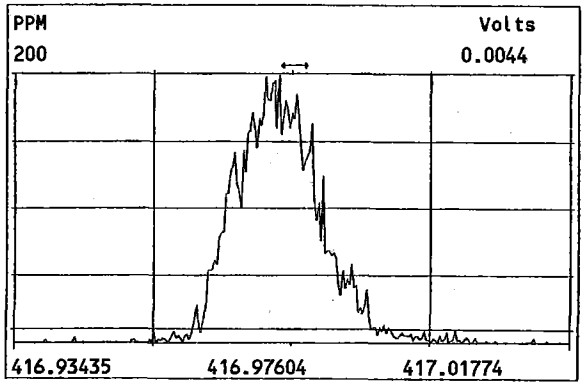




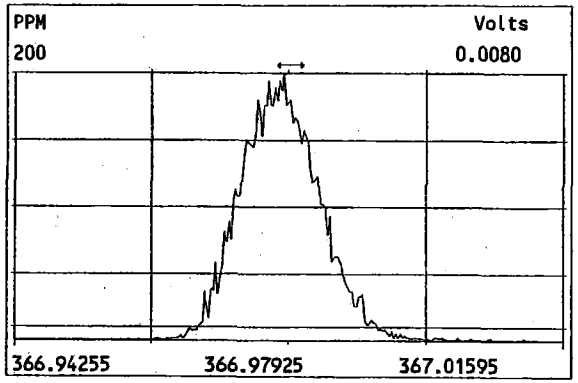


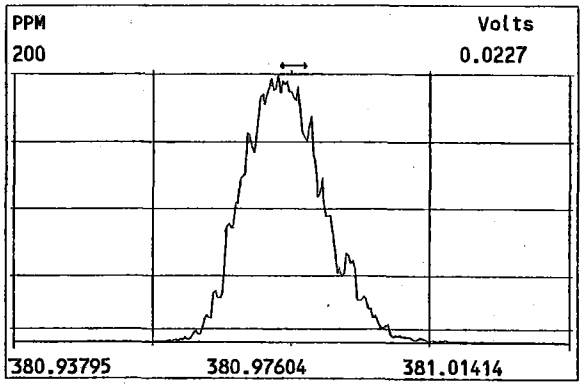


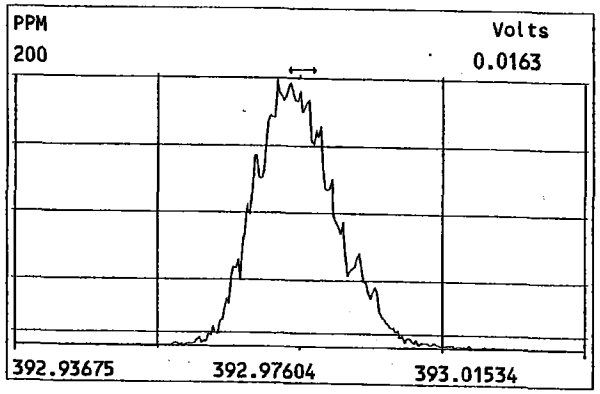


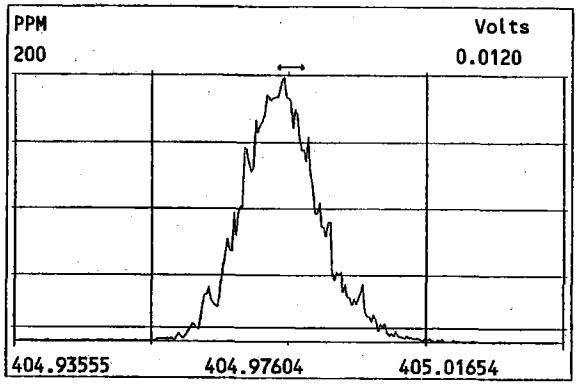


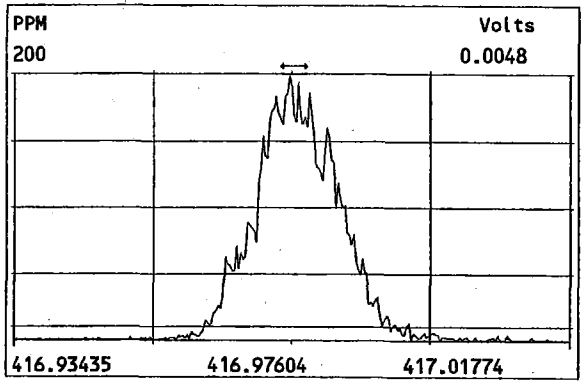
Peak Locate Examination: 5-JAN-2010:06:55 File:04JAN10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

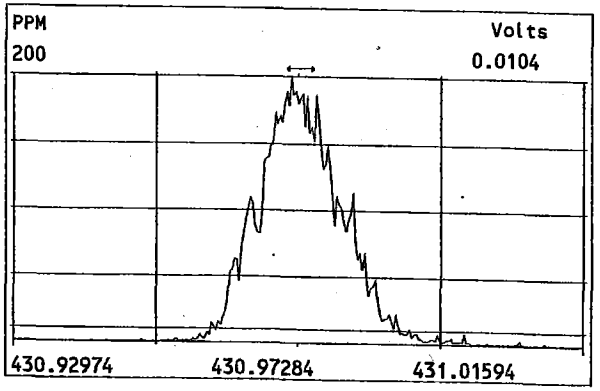


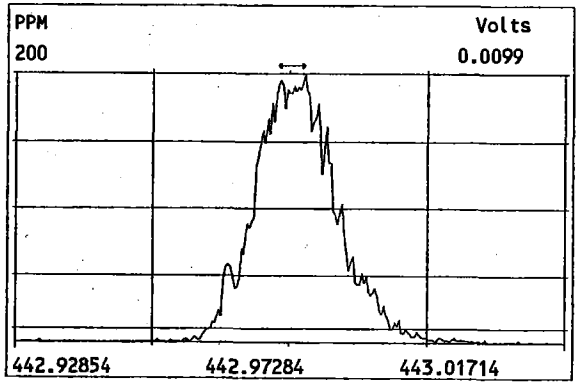


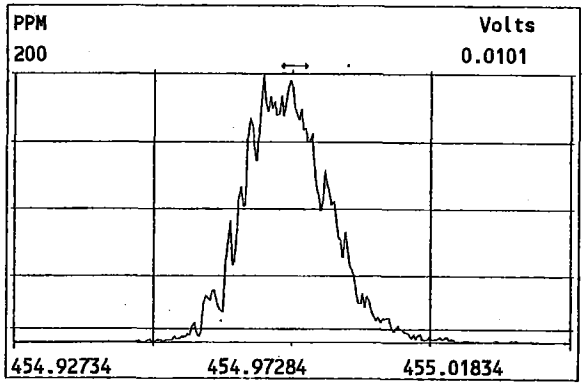






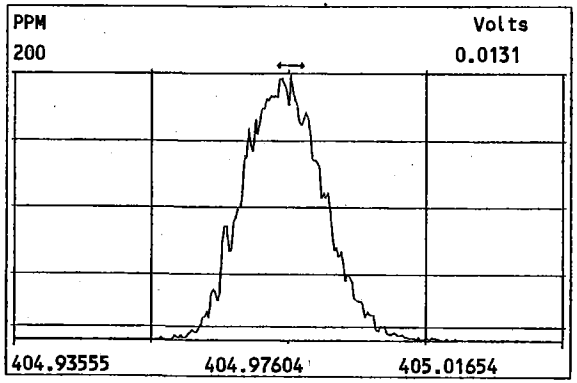


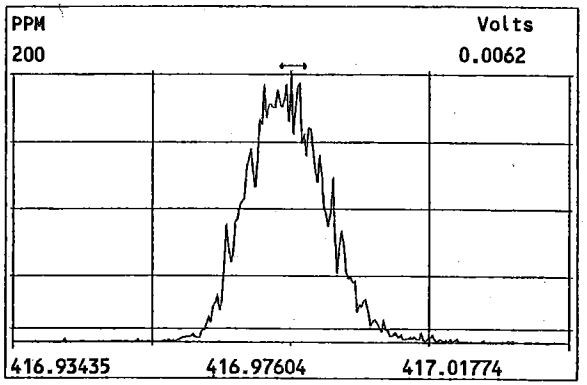


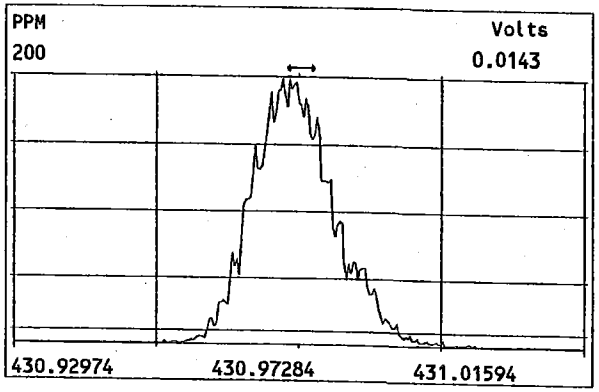


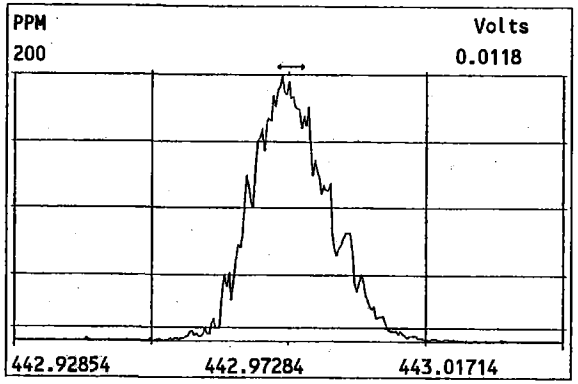
Peak Locate Examination: 5-JAN-2010:06:56 File:04JAN10M_RES_CHECK

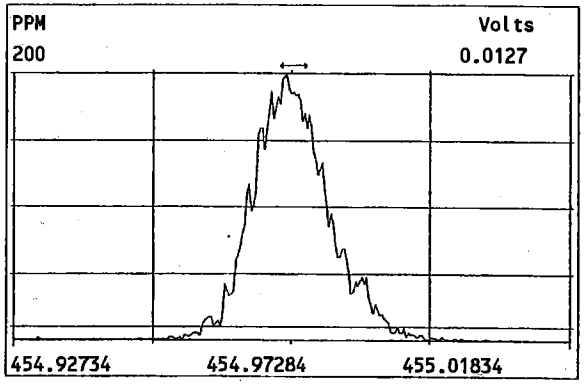
Experiment:PCDD Function:4 Reference:PFK

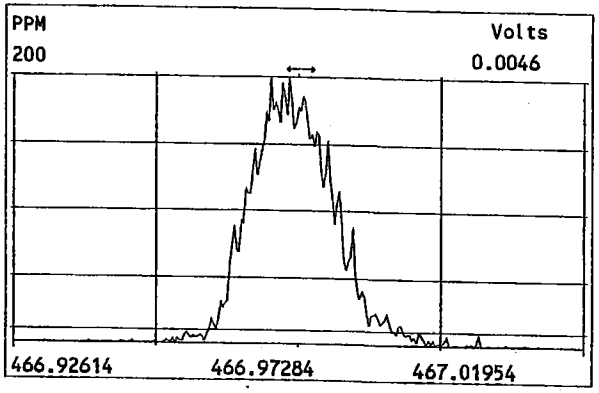


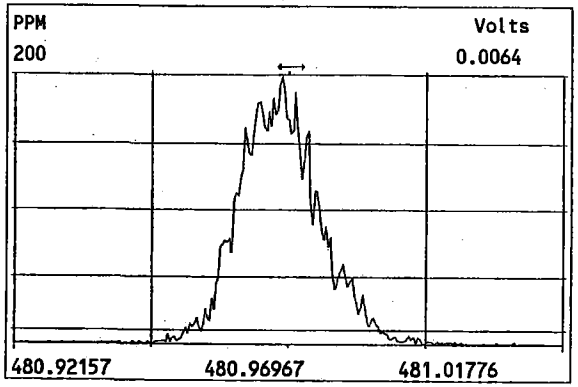






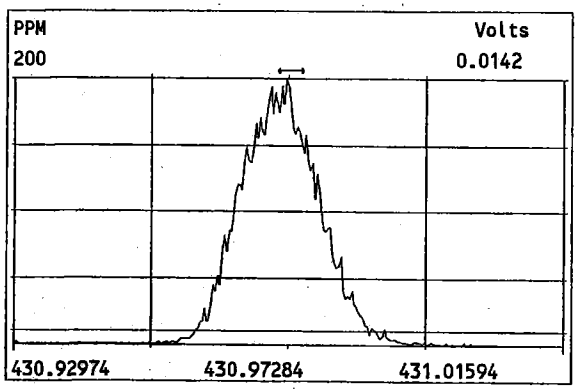


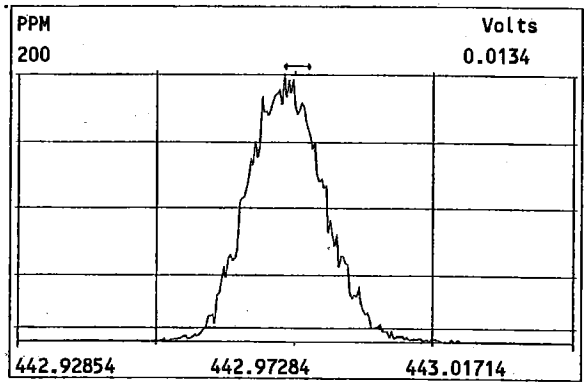


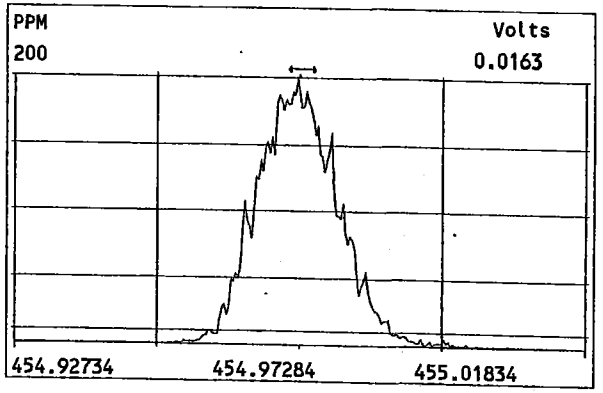


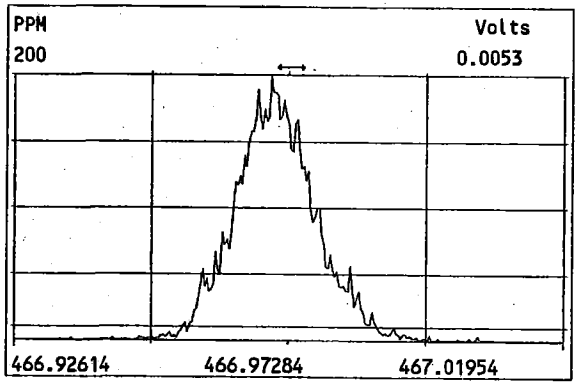
Peak Locate Examination: 5-JAN-2010:06:56 File:04JAN10M_RES_CHECK

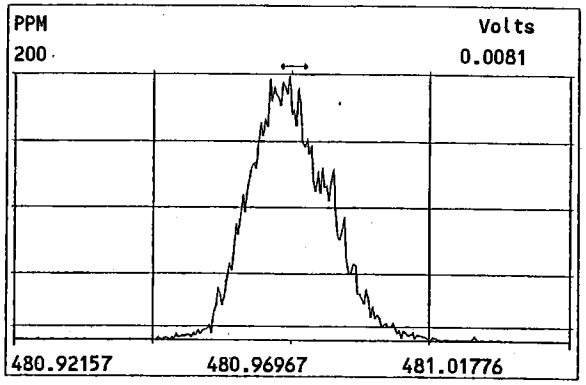
Experiment:PCDD Function:5 Reference:PFK

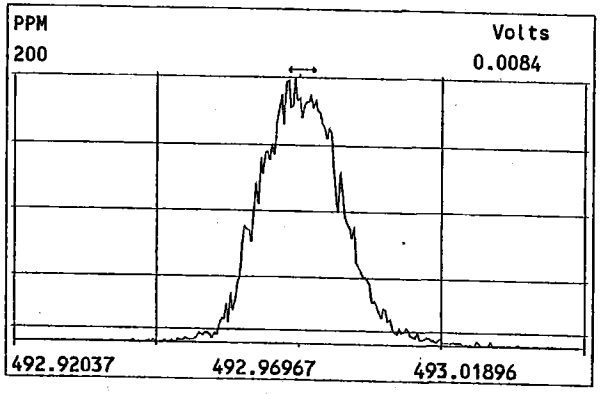


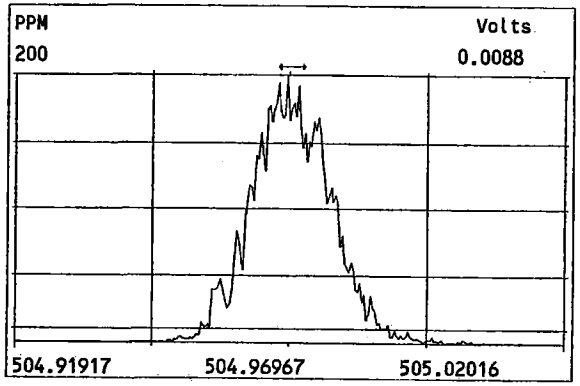


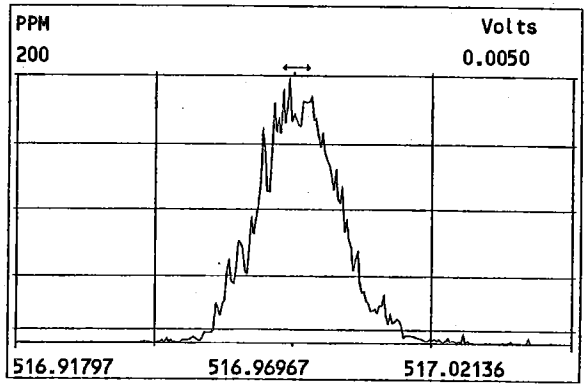












Analytical Resources, Incorporated
Analytical Chemists and Consultants

January 20, 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: QD71

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 QD71

SD/co

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 Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

QD71

Chain of Custody Record & Laboratory Analysis Request

Port of Seattle

ARI Assigned Number:	Turn-around Requested: Standard
ARI Client Company: Floyd/Snider	Phone: 206-292-2078
Client Contact: Jessi Massingale / Matt Woltman	
Client Project Name: Lora Lake Apts	
Client Project #: POS - LLA	Samplers: D. Metallo, C. Nickerson, P. Hetzel

Date: 1-2-2010
Page: 1 of 1
No. of Coolers: 2 Cooler Temps: 2.5 2.6

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	PAH 8270D-SIM low level	PCP 8041	Arsenic Total & Diss 200.8	Dioxin / Furans 1613	TSS SM2540D				Notes/Comments
CB31A123109COMP	12.31.09	2237	W	1	X	X	X	X	X				pH - Storm Lab measured (see attached sheet)
CB4857123109 COMP	12.31.09	2357	W	1	X	X	X	X	X				6.68
CB1123109 COMP	12.31.09	2137	W	1	X	X	X	X	X				6.81
													6.82

Comments/Special Instructions: - Bottles & glassware decon'ed to LLA project specific SOP (see attached)	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: David Metallo	Printed Name: Nikka Mulumba	Printed Name:	Printed Name:
	Company: Taylor	Company: ARI	Company:	Company:
	Date & Time: 1/2/10 (1352)	Date & Time: 1/2/10 1352	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.

QD71:00003

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd | Snider Project Name: Lara Lake Apts

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: QD71 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)..... 2.5 2.6 ___ ___

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90941619

Cooler Accepted by: MM Date: 1/2/2010 Time: 352

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	_____	

Samples Logged by: AV Date: 1/4/10 Time: 1011

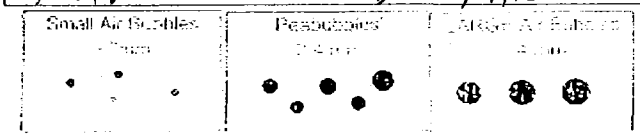
** ***Notify Project Manager of discrepancies or concerns*** **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Sampled on 12/31/09, arrived at ARI 1/8/10 @ 1352, ~~Sam~~ AV Split at ARI on 1/4/10 @ ≈ 920. Churn splitter was cleaned between each sample.

By: AV Date: 1/4/10 AV



Small → "sm"

Peabubbles → "pb"

Large → "lg"

Headspace → "hs"

PRESERVATION VERIFICATION 01/04/10
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **QD71**

PC: Sue D.
VTSR: 01/02/10

Inquiry Number: NONE
Analysis Requested: 01/04/10
Contact: Massingale, Jessi
Client: Floyd-Snider
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: Lv3
Deliverables:

Project #: POS-LLA
Project: Lora Lakes Apts
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
10-14 **QD71A**	CB31A123109COMP						DIS *									N						
10-15 **QD71B**	CB4857123109COMP						DIS									N						
10-16 **QD71C**	CB1123109COMP						DIS									N						
10-17 **QD71D**	CB31A123109COMP						TOT															
10-18 **QD71E**	CB4857123109COMP						TOT															
10-19 **QD71F**	CB1123109COMP						TOT															

* metals to filter and preserve DISS metals, a preserved container and a filter Blank given to metals lab.

QD71 09055

Checked By AV Date 1/4/10

Case Narrative

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL
RESOURCES
INCORPORATED

Case Narrative

Client: Floyd Snider
Project: Lora Lake Apartments, POS-LLA
Matrix: Water
ARI Job No.: QD71

Sample receipt

Analytical Resources, Inc. (ARI) accepted three water samples on January 2, 2010 under ARI job QD71. The cooler temperatures measured by IR thermometer following ARI SOP were 2.5 and 2.6°C. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The Frontier report is included here in its entirety.

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.

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. The LCS and LCSD percent recoveries were within control limits.

Pentachlorophenol by SW8041

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. The LCS and LCSD percent recoveries were within control limits.

Total Arsenic and Lead by SW6010B

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.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

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

Data Reporting Qualifiers

Effective 7/10/2009

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

1/5/2010

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	1677-3	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	1621-4	ABN ACID	100/200	MEOH	07/14/10
11	1642-2	TPHD	15000	ACETONE	09/07/10
12	1622-2	ABN BASE	200	ACETONE	02/05/10
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	1613-2	LOW ABN	10	ACETONE	02/28/10
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
31	1596-1	TERPINEOL	100	MEOH	04/03/10

LCS SOLUTIONS

1/5/2010

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	1611-3	DDTS	2.5	ACETONE	06/04/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
	*=REVERIFIED SOLUTION				
	#=PROJECT SPECIFIC SOLUTION				

SURR SOLUTIONS

1/5/2010

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	1647-2	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					

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.

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 Lakes Apts, POS-LLA

ARI JOB NO: QD71

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: CB31A123109COMP**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 15:53
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**	**0.037**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.024**
90-12-0	**1-Methylnaphthalene**	**0.010**	**0.012**
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**	**0.099**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.16**
129-00-0	**Pyrene**	**0.010**	**0.18**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.032**
218-01-9	**Chrysene**	**0.010**	**0.094**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.059**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.048**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.051**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.037**
53-70-3	**Dibenz(a,h)anthracene**	**0.010**	**0.013**
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.072**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	65.3%
d14-Dibenzo(a,h)anthracene	47.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 16:17
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**	**0.026**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.014**
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**	**0.062**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.10**
129-00-0	**Pyrene**	**0.010**	**0.12**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.024**
218-01-9	**Chrysene**	**0.010**	**0.068**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.044**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.033**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.030**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.027**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.051**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	68.0%
d14-Dibenzo(a,h)anthracene	64.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: CB1123109COMP**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 16:42
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**	**0.017**
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**	**0.012**
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	67.3%
d14-Dibenzo(a,h)anthracene	59.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-010510	77.7%	78.0%	0
LCS-010510	71.0%	85.3%	0
LCSD-010510	70.3%	79.0%	0
CB31A123109COMP	65.3%	47.0%	0
CB4857123109COMP	68.0%	64.0%	0
CB1123109COMP	67.3%	59.3%	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: 10-14 to 10-16

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-010510
LAB CONTROL SAMPLE

Lab Sample ID: LCS-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 01/05/10

Date Analyzed LCS: 01/06/10 15:03
LCSD: 01/06/10 15:28
Instrument/Analyst LCS: NT2/PK
LCSD: NT2/PK

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	0.182	0.300	60.7%	0.191	0.300	63.7%	4.8%
2-Methylnaphthalene	0.199	0.300	66.3%	0.212	0.300	70.7%	6.3%
1-Methylnaphthalene	0.191	0.300	63.7%	0.198	0.300	66.0%	3.6%
Acenaphthylene	0.173	0.300	57.7%	0.168	0.300	56.0%	2.9%
Acenaphthene	0.199	0.300	66.3%	0.199	0.300	66.3%	0.0%
Fluorene	0.222	0.300	74.0%	0.219	0.300	73.0%	1.4%
Phenanthrene	0.262	0.300	87.3%	0.257	0.300	85.7%	1.9%
Anthracene	0.184	0.300	61.3%	0.182	0.300	60.7%	1.1%
Fluoranthene	0.262	0.300	87.3%	0.245	0.300	81.7%	6.7%
Pyrene	0.252	0.300	84.0%	0.239	0.300	79.7%	5.3%
Benzo(a)anthracene	0.262	0.300	87.3%	0.260	0.300	86.7%	0.8%
Chrysene	0.300	0.300	100%	0.282	0.300	94.0%	6.2%
Benzo(b)fluoranthene	0.278	0.300	92.7%	0.258	0.300	86.0%	7.5%
Benzo(k)fluoranthene	0.266	0.300	88.7%	0.240	0.300	80.0%	10.3%
Benzo(a)pyrene	0.182	0.300	60.7%	0.199	0.300	66.3%	8.9%
Indeno(1,2,3-cd)pyrene	0.229	0.300	76.3%	0.216	0.300	72.0%	5.8%
Dibenz(a,h)anthracene	0.253	0.300	84.3%	0.238	0.300	79.3%	6.1%
Benzo(g,h,i)perylene	0.216	0.300	72.0%	0.206	0.300	68.7%	4.7%
Dibenzofuran	0.235	0.300	78.3%	0.232	0.300	77.3%	1.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	71.0%	70.3%
d14-Dibenzo(a,h)anthracene	85.3%	79.0%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO. QD71MBW1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QD71 Project: LORA LAKES APTS

Lab File ID: 010604 Date Extracted: 01/05/10

Instrument ID: NT2 Date Analyzed: 01/06/10

Matrix: LIQUID Time Analyzed: 1439

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QD71LCSW1	QD71LCSW1	010605	01/06/10
02	QD71LCSDW1	QD71LCSDW1	010606	01/06/10
03	CB31A123109COMP	QD71A	010607	01/06/10
04	CB4857123109COMP	QD71B	010608	01/06/10
05	CB1123109COMP	QD71C	010609	01/06/10
06				
07				
08				
09				
10				
11				
12				
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COMMENTS:

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS **Sample ID: MB-010510**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 14:39
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	< 0.010 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	77.7%
d14-Dibenzo(a,h)anthracene	78.0%

PCP/CHLOROPHENOLS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/08/10 23:23
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	0.41

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	84.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/09/10 00:03
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	79.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1123109COMP
SAMPLE

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/09/10 00:42
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	78.0%

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client ID	TBP	TOT OUT
MB-010510	61.6%	0
LCS-010510	62.6%	0
LCSD-010510	73.2%	0
CB31A123109COMP	84.4%	0
CB4857123109COMP	79.2%	0
CB1123109COMP	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-14 to 10-16

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-010510
LCS/LCSD

Lab Sample ID: LCS-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted LCS/LCSD: 01/05/10

Date Analyzed LCS: 01/08/10 22:44
LCSD: 01/08/10 23:03
Instrument/Analyst LCS: ECD1/AAR
LCSD: ECD1/AAR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 50 mL
LCSD: 50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	1.97	2.50	78.8%	1.87	2.50	74.8%	5.2%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	62.6%	73.2%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QD71MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD-SNIDER

ARI Job No.: QD71 — Project: LORA LAKES APTS

Lab Sample ID: QD71MBW1 — Lab File ID: 0108A017

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 01/05/10

Date Analyzed (1): 01/08/10 — Date Analyzed (2): 01/08/10

Time Analyzed (1): 2224 — Time Analyzed (2): 2224

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	QD71LCSW1	QD71LCSW1	01/08/10	01/08/10
02	QD71LCSDW1	QD71LCSDW1	01/08/10	01/08/10
03	CB31A123109C	QD71A	01/08/10	01/08/10
04	CB4857123109	QD71B	01/09/10	01/09/10
05	CB1123109COM	QD71C	01/09/10	01/09/10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-010510
METHOD BLANK

Lab Sample ID: MB-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/05/10
Date Analyzed: 01/08/10 22:24
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	61.6%

FORM I

METALS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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: CB1123109COMP
SAMPLE

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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: CB31A123109COMP
MATRIX SPIKE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.490	27.5	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

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A123109COMP
DUPLICATE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.5	0.5	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: LAB CONTROL

Lab Sample ID: QD71LCS
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	26.4	25.0	106%	

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: QD71MB
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	01/05/10	200.8	01/11/10	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
TOTAL METALS
Page 1 of 1

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**7440-38-2**	**Arsenic**	0.2	**1.2**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71E
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**7440-38-2**	**Arsenic**	0.2	**1.0**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB1123109COMP
SAMPLE

Lab Sample ID: QD71F
LIMS ID: 10-19
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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: CB31A123109COMP
MATRIX SPIKE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	1.23	28.4	25.0	109%	

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: CB31A123109COMP
DUPLICATE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	1.2	1.3	8.0%	+/- 20%	

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: QD71LCS
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	26.5	25.0	106%	

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: QD71MB
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	01/05/10	200.8	01/11/10	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: 01/07/10
Date Received: 01/02/10
Page 1 of 1

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CB31A123109COMP QD71A 10-14	12/31/09	Water	01/05/10 14:22 010510#1	3.3	59.0
CB4857123109COMP QD71B 10-15	12/31/09	Water	01/05/10 14:22 010510#1	1.7	33.3
CB1123109COMP QD71C 10-16	12/31/09	Water	01/05/10 14:22 010510#1	1.0	9.2

Reported in mg/L

RL-Analytical reporting limit
U-Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QD71A Client ID: CB31A123109COMP					
Total Suspended Solids	01/05/10	mg/L	59.0	59.7	1.2%

LAB CONTROL RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	01/05/10 14:22	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	01/05/10 14:22	mg/L	< 1.0 U

SUBCONTRACTED ANALYSIS

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **5904**

Received on: **01/05/2010** Project Due: **01/27/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time
5904-001-SA	0	QD71	CB31A123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	10:37 pm
5904-002-SA	0	QD71	CB4857123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	11:57 pm
5904-003-SA	0	QD71	CB1123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	09:37 pm

FAL Sample ID	Notes
5904-001-SA	Using hand written sample ID from COC per Ms. Dunnihoo to Gabby. GN 1-6-10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.918		-	0.320				
1,2,3,7,8-PeCDD	ND	0.717		-	0.491				
1,2,3,4,7,8-HxCDD	ND	0.966		-	0.483				
1,2,3,6,7,8-HxCDD	ND	1.16		-	0.665	Total TCDD	ND	0.918	
1,2,3,7,8,9-HxCDD	ND	1.05		-	0.650	Total PeCDD	ND	0.717	
1,2,3,4,6,7,8-HpCDD	ND	1.79		-	0.985	Total HxCDD	ND	1.16	
OCDD	ND	3.31		-	1.93	Total HpCDD	ND	1.79	
2,3,7,8-TCDF	ND	0.398		-	0.305				
1,2,3,7,8-PeCDF	ND	0.551		-	0.340				
2,3,4,7,8-PeCDF	ND	0.587		-	0.441				
1,2,3,4,7,8-HxCDF	ND	0.734		-	0.317				
1,2,3,6,7,8-HxCDF	ND	0.797		-	0.346				
2,3,4,6,7,8-HxCDF	ND	0.788		-	0.292				
1,2,3,7,8,9-HxCDF	ND	1.00		-	0.474	Total TCDF	ND	0.398	
1,2,3,4,6,7,8-HpCDF	ND	0.889		-	0.497	Total PeCDF	ND	0.587	
1,2,3,4,7,8,9-HpCDF	ND	1.06		-	0.587	Total HxCDF	ND	1.00	
OCDF	ND	2.07		-	1.32	Total HpCDF	ND	1.06	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	79.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	71.1	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	78.3	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	74.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	73.2	23.0 - 140	
13C-OCDD	77.7	17.0 - 157	
13C-2,3,7,8-TCDF	83.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	74.5	24.0 - 185	
13C-2,3,4,7,8-PeCDF	73.2	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	77.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	71.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	68.4	26.0 - 138	
13C-OCDF	70.1	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	84.7	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: 1/15/10

Reviewed By: _____
Date: 1/16/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 01-14-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.77	6.70 - 15.8	
1,2,3,7,8-PeCDD	49.6	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.5	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50.0	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50.2	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50.9	35.0 - 70.0	
OCDD	95.8	78.0 - 144	
2,3,7,8-TCDF	9.98	7.50 - 15.8	
1,2,3,7,8-PeCDF	51.4	40.0 - 67.0	
2,3,4,7,8-PeCDF	52.0	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	51.0	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	49.8	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50.3	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	50.1	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	51.7	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	50.4	39.0 - 69.0	
OCDF	99.9	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	64.8	20.0 - 175	
13C-1,2,3,7,8-PeCDD	58.6	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	65.6	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	63.2	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	64.3	26.0 - 166	
13C-OCDD	95.4	13.0 - 198	
13C-2,3,7,8-TCDF	66.0	22.0 - 152	
13C-1,2,3,7,8-PeCDF	57.9	21.0 - 192	
13C-2,3,4,7,8-PeCDF	56.8	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	69.6	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	66.4	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	66.8	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	64.1	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	62.4	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	75.9	20.0 - 186	
13C-OCDF	85.5	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	71.0	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-SA
Client ID: CB31A123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.012 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 13.8

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.765		-	0.320				
1,2,3,7,8-PeCDD	2.17	-	J	2.17	0.491				
1,2,3,4,7,8-HxCDD	4.24	-	J	0.424	0.483				
1,2,3,6,7,8-HxCDD	12.5	-	J	1.25	0.665	Total TCDD	ND	0.765	
1,2,3,7,8,9-HxCDD	8.19	-	J	0.819	0.650	Total PeCDD	6.25	-	J
1,2,3,4,6,7,8-HpCDD	405	-		4.05	0.985	Total HxCDD	64.2	-	
OCDD	4540	-		1.36	1.93	Total HpCDD	684	-	
2,3,7,8-TCDF	ND	0.694		-	0.305				
1,2,3,7,8-PeCDF	ND	1.32		-	0.340				
2,3,4,7,8-PeCDF	ND	1.34		-	0.441				
1,2,3,4,7,8-HxCDF	11.8	-	J	1.18	0.317				
1,2,3,6,7,8-HxCDF	9.12	-	J	0.912	0.346				
2,3,4,6,7,8-HxCDF	5.19	-	J	0.519	0.292				
1,2,3,7,8,9-HxCDF	1.46	-	J	0.146	0.474	Total TCDF	25.4	-	D,M
1,2,3,4,6,7,8-HpCDF	82.2	-		0.822	0.497	Total PeCDF	60.5	-	D,M
1,2,3,4,7,8,9-HpCDF	7.34	-	J	0.0734	0.587	Total HxCDF	217	-	D,M
OCDF	252	-		0.0756	1.32	Total HpCDF	261	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	97.2	25.0 - 164	
13C-1,2,3,7,8-PeCDD	132	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	89.4	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.6	23.0 - 140	
13C-OCDD	88.3	17.0 - 157	
13C-2,3,7,8-TCDF	94.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	133	24.0 - 185	
13C-2,3,4,7,8-PeCDF	137	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	85.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	82.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	86.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	87.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	80.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	84.4	26.0 - 138	
13C-OCDF	77.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	108	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-002-SA
Client ID: CB4857123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.015 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 6.48

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.599		-	0.320				
1,2,3,7,8-PeCDD	ND	1.62		-	0.491				
1,2,3,4,7,8-HxCDD	2.71	-	J	0.271	0.483				
1,2,3,6,7,8-HxCDD	6.81	-	J	0.681	0.665	Total TCDD	ND	0.599	
1,2,3,7,8,9-HxCDD	4.83	-	J	0.483	0.650	Total PeCDD	ND	1.62	
1,2,3,4,6,7,8-HpCDD	212	-		2.12	0.985	Total HxCDD	38.5	-	
OCDD	2380	-		0.714	1.93	Total HpCDD	369	-	
2,3,7,8-TCDF	ND	0.611		-	0.305				
1,2,3,7,8-PeCDF	ND	0.866		-	0.340				
2,3,4,7,8-PeCDF	ND	0.947		-	0.441				
1,2,3,4,7,8-HxCDF	7.21	-	J	0.721	0.317				
1,2,3,6,7,8-HxCDF	6.41	-	J	0.641	0.346				
2,3,4,6,7,8-HxCDF	3.15	-	J	0.315	0.292				
1,2,3,7,8,9-HxCDF	ND	0.992		-	0.474	Total TCDF	17.0	-	D,M
1,2,3,4,6,7,8-HpCDF	45.8	-		0.458	0.497	Total PeCDF	47.5	-	D,M
1,2,3,4,7,8,9-HpCDF	4.30	-	J	0.0430	0.587	Total HxCDF	129	-	D,M
OCDF	122	-		0.0366	1.32	Total HpCDF	146	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	82.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	78.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	78.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	75.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.5	23.0 - 140	
13C-OCDD	76.0	17.0 - 157	
13C-2,3,7,8-TCDF	83.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	82.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	77.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	75.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	72.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	75.2	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	75.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	73.2	26.0 - 138	
13C-OCDF	68.4	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	89.4	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-003-SA
Client ID: CB1123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.026 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 0.302

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.530		-	0.320				
1,2,3,7,8-PeCDD	ND	1.01		-	0.491				
1,2,3,4,7,8-HxCDD	ND	1.17		-	0.483				
1,2,3,6,7,8-HxCDD	ND	1.38		-	0.665	Total TCDD	ND	0.530	
1,2,3,7,8,9-HxCDD	ND	1.26		-	0.650	Total PeCDD	ND	1.01	
1,2,3,4,6,7,8-HpCDD	20.4	-	J	0.204	0.985	Total HxCDD	5.97	-	J
OCDD	151	-		0.0453	1.93	Total HpCDD	39.9	-	
2,3,7,8-TCDF	ND	0.686		-	0.305				
1,2,3,7,8-PeCDF	ND	0.545		-	0.340				
2,3,4,7,8-PeCDF	ND	0.588		-	0.441				
1,2,3,4,7,8-HxCDF	ND	0.652		-	0.317				
1,2,3,6,7,8-HxCDF	ND	0.669		-	0.346				
2,3,4,6,7,8-HxCDF	ND	0.679		-	0.292				
1,2,3,7,8,9-HxCDF	ND	0.752		-	0.474	Total TCDF	ND	0.686	
1,2,3,4,6,7,8-HpCDF	4.85	-	J	0.0485	0.497	Total PeCDF	1.51	-	J
1,2,3,4,7,8,9-HpCDF	ND	0.719		-	0.587	Total HxCDF	6.13	-	J
OCDF	13.0	-	J	0.00390	1.32	Total HpCDF	11.5	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	86.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	85.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	89.5	23.0 - 140	
13C-OCDD	90.6	17.0 - 157	
13C-2,3,7,8-TCDF	89.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	90.7	24.0 - 185	
13C-2,3,4,7,8-PeCDF	87.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	82.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	77.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	81.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	82.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	81.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	84.0	26.0 - 138	
13C-OCDF	82.7	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: _____
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Reviewed By: _____
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Laboratory Data Package

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

SIM Semivolatile Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client ID	MNP	DBA	TOT OUT
MB-010510	77.7%	78.0%	0
LCS-010510	71.0%	85.3%	0
LCSD-010510	70.3%	79.0%	0
CB31A123109COMP	65.3%	47.0%	0
CB4857123109COMP	68.0%	64.0%	0
CB1123109COMP	67.3%	59.3%	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: 10-14 to 10-16

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-010510
LAB CONTROL SAMPLE

Lab Sample ID: LCS-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 01/05/10

Date Analyzed LCS: 01/06/10 15:03
LCSD: 01/06/10 15:28
Instrument/Analyst LCS: NT2/PK
LCSD: NT2/PK

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	0.182	0.300	60.7%	0.191	0.300	63.7%	4.8%
2-Methylnaphthalene	0.199	0.300	66.3%	0.212	0.300	70.7%	6.3%
1-Methylnaphthalene	0.191	0.300	63.7%	0.198	0.300	66.0%	3.6%
Acenaphthylene	0.173	0.300	57.7%	0.168	0.300	56.0%	2.9%
Acenaphthene	0.199	0.300	66.3%	0.199	0.300	66.3%	0.0%
Fluorene	0.222	0.300	74.0%	0.219	0.300	73.0%	1.4%
Phenanthrene	0.262	0.300	87.3%	0.257	0.300	85.7%	1.9%
Anthracene	0.184	0.300	61.3%	0.182	0.300	60.7%	1.1%
Fluoranthene	0.262	0.300	87.3%	0.245	0.300	81.7%	6.7%
Pyrene	0.252	0.300	84.0%	0.239	0.300	79.7%	5.3%
Benzo(a)anthracene	0.262	0.300	87.3%	0.260	0.300	86.7%	0.8%
Chrysene	0.300	0.300	100%	0.282	0.300	94.0%	6.2%
Benzo(b)fluoranthene	0.278	0.300	92.7%	0.258	0.300	86.0%	7.5%
Benzo(k)fluoranthene	0.266	0.300	88.7%	0.240	0.300	80.0%	10.3%
Benzo(a)pyrene	0.182	0.300	60.7%	0.199	0.300	66.3%	8.9%
Indeno(1,2,3-cd)pyrene	0.229	0.300	76.3%	0.216	0.300	72.0%	5.8%
Dibenz(a,h)anthracene	0.253	0.300	84.3%	0.238	0.300	79.3%	6.1%
Benzo(g,h,i)perylene	0.216	0.300	72.0%	0.206	0.300	68.7%	4.7%
Dibenzofuran	0.235	0.300	78.3%	0.232	0.300	77.3%	1.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	71.0%	70.3%
d14-Dibenzo(a,h)anthracene	85.3%	79.0%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QD71MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD-SNIDER

ARI Job No: QD71 — Project: LORA LAKES APTS

Lab File ID: 010604 — Date Extracted: 01/05/10

Instrument ID: NT2 — Date Analyzed: 01/06/10

Matrix: LIQUID — Time Analyzed: 1439

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QD71LCSW1	QD71LCSW1	010605	01/06/10
02	QD71LCSDW1	QD71LCSDW1	010606	01/06/10
03	CB31A123109COMP	QD71A	010607	01/06/10
04	CB4857123109COMP	QD71B	010608	01/06/10
05	CB1123109COMP	QD71C	010609	01/06/10
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
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25				
26				
27				
28				
29				
30				

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 LAKES APTS

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					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

Instrument ID: NT2 Project: LORA LAKES APTS

DFTPP Injection Date: 01/06/10 DFTPP Injection Time: 1027

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	65.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	85.9
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	25.0 - 75.0% of mass 198	64.1
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	7.3
275	10.0 - 30.0% of mass 198	23.0
365	Greater than 0.75% of mass 198	3.92
441	Present, but less than mass 443	9.0
442	40.0 - 110.0% of mass 198	63.3
443	15.0 - 24.0% of mass 442	12.5 (19.7)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	CC0106	01/06/10	1047
02	QD71MBW1	QD71MBW1	010604	01/06/10	1439
03	QD71LCSW1	QD71LCSW1	010605	01/06/10	1503
04	QD71LCSDW1	QD71LCSDW1	010606	01/06/10	1528
05	CB31A123109COMP	QD71A	010607	01/06/10	1553
06	CB4857123109COMP	QD71B	010608	01/06/10	1617
07	CB1123109COMP	QD71C	010609	01/06/10	1642
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QD71 Project: LORA LAKES APTS

Ical Midpoint ID: IC102101 Ical Date: 10/21/09

Instrument ID: NT2 Cont. Cal Date: 01/06/10

		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	176475		7.26		96387		9.47		144535		11.30	
	UPPER LIMIT			7.76				9.97				11.80	
	LOWER LIMIT			6.76				8.97				10.80	
01	QD71MBW1	164571		7.24		87861		9.47		121730		11.30	
02	QD71LCSW1	147690		7.26		82979		9.47		118484		11.30	
03	QD71LCSDW1	142273		7.24		79654		9.47		112612		11.30	
04	CB31A123109C	142763		7.24		79977		9.47		114059		11.30	
05	CB4857123109	144398		7.26		79839		9.47		115276		11.30	
06	CB1123109COM	140626		7.26		79881		9.47		115741		11.30	
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
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: QD71 Project: LORA LAKES APTS

Ical Midpoint ID: IC102101 Ical Date: 10/21/09

Instrument ID: NT2 Cont. Cal Date: 01/06/10

		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	111668	14.62	105827	16.57		
	UPPER LIMIT		15.12		17.07		
	LOWER LIMIT		14.12		16.07		
01	QD71MBW1	87493	14.62	81179	16.58		
02	QD71LCSW1	91929	14.62	84988	16.57		
03	QD71LCSDW1	86927	14.62	82483	16.57		
04	CB31A123109C	93856	14.61	86846	16.57		
05	CB4857123109	92980	14.62	87153	16.57		
06	CB1123109COM	85042	14.62	84037	16.57		
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
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 Apts, POS-LLA

ARI JOB NO: QD71

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: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 15:53
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**	**0.037**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.024**
90-12-0	**1-Methylnaphthalene**	**0.010**	**0.012**
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**	**0.099**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.16**
129-00-0	**Pyrene**	**0.010**	**0.18**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.032**
218-01-9	**Chrysene**	**0.010**	**0.094**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.059**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.048**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.051**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.037**
53-70-3	**Dibenz(a,h)anthracene**	**0.010**	**0.013**
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.072**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	65.3%
d14-Dibenzo(a,h)anthracene	47.0%

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LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010607.d
Lab Smp Id: QD71A Client Smp ID: CB31A123109COMP
Inj Date : 06-JAN-2010 15:53
Operator : VTS Inst ID: nt2.i
Smp Info : QD71A
Misc Info : 10-14
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 06-Jan-2010 14:37 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	7.243	7.260	(1.000)	142763	200.000	
	5 Naphthalene	128	7.274	7.275	(1.004)	25710	37.3992	37.4
$	6 2-Methylnaphthalene-d10	152	8.104	8.106	(1.119)	71945	195.659	196
	7 2-Methylnaphthalene	142	8.135	8.137	(1.123)	9658	24.0911	24.1(M)
	8 1-Methylnaphthalene	142	8.274	8.275	(1.142)	5094	12.2083	12.2
	10 Acenaphthylene	152	9.278	9.280	(0.980)	5712	9.02492	9.02
*	11 Acenaphthene-d10	164	9.471	9.473	(1.000)	79977	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	9.703	9.705	(1.024)	3977	7.77249	7.77
	15 Fluorene	166	10.117	10.131	(1.068)	3871	9.15150	9.15(M)
*	18 Phenanthrene-d10	188	11.302	11.301	(1.000)	114059	200.000	
	19 Phenanthrene	178	11.332	11.332	(1.003)	56117	98.9856	99.0
	20 Anthracene	178	11.378	11.393	(1.007)	5028	8.67933	8.68
	24 Fluoranthene	202	12.814	12.827	(1.134)	95639	154.886	155
	25 Pyrene	202	13.100	13.112	(1.159)	112779	179.928	180

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.592	14.594	(0.998)	14865	31.7330	31.7
*	29 Chrysene-d12	240	14.614	14.616	(1.000)	93856	200.000	
	30 Chrysene	228	14.647	14.649	(1.002)	43375	93.8503	93.9
	32 Benzo(b)fluoranthene	252	15.980	15.979	(0.964)	29417	59.1219	59.1
	33 Benzo(k)fluoranthene	252	16.011	16.010	(0.966)	25749	47.6630	47.7
	34 Benzo(a)pyrene	252	16.483	16.475	(0.995)	19754	50.6696	50.7
*	35 Perylene-d12	264	16.568	16.568	(1.000)	86846	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	18.591	18.590	(1.122)	16630	36.8101	36.8
$	36 Dibenzo(a,h)anthracene-d14	292	18.537	18.523	(1.119)	37025	140.652	141
	38 Dibenzo(a,h)anthracene	278	18.591	18.604	(1.122)	4482	12.6835	12.7(M)
	39 Benzo(g,h,i)perylene	276	19.197	19.197	(1.159)	27933	71.7033	71.7

QC Flag Legend

M - Compound response manually integrated.

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 010607.d
Lab Smp Id: QD71A
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: CB31A123109COMP
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	142763	-17.53
11 Acenaphthene-d10	96677	48338	193354	79977	-17.27
18 Phenanthrene-d10	147750	73875	295500	114059	-22.80
29 Chrysene-d12	135219	67610	270438	93856	-30.59
35 Perylene-d12	125815	62908	251630	86846	-30.97

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.24	-0.23
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	-0.02
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.01
29 Chrysene-d12	14.62	14.12	15.12	14.61	-0.01
35 Perylene-d12	16.57	16.07	17.07	16.57	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.

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RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QD71A
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

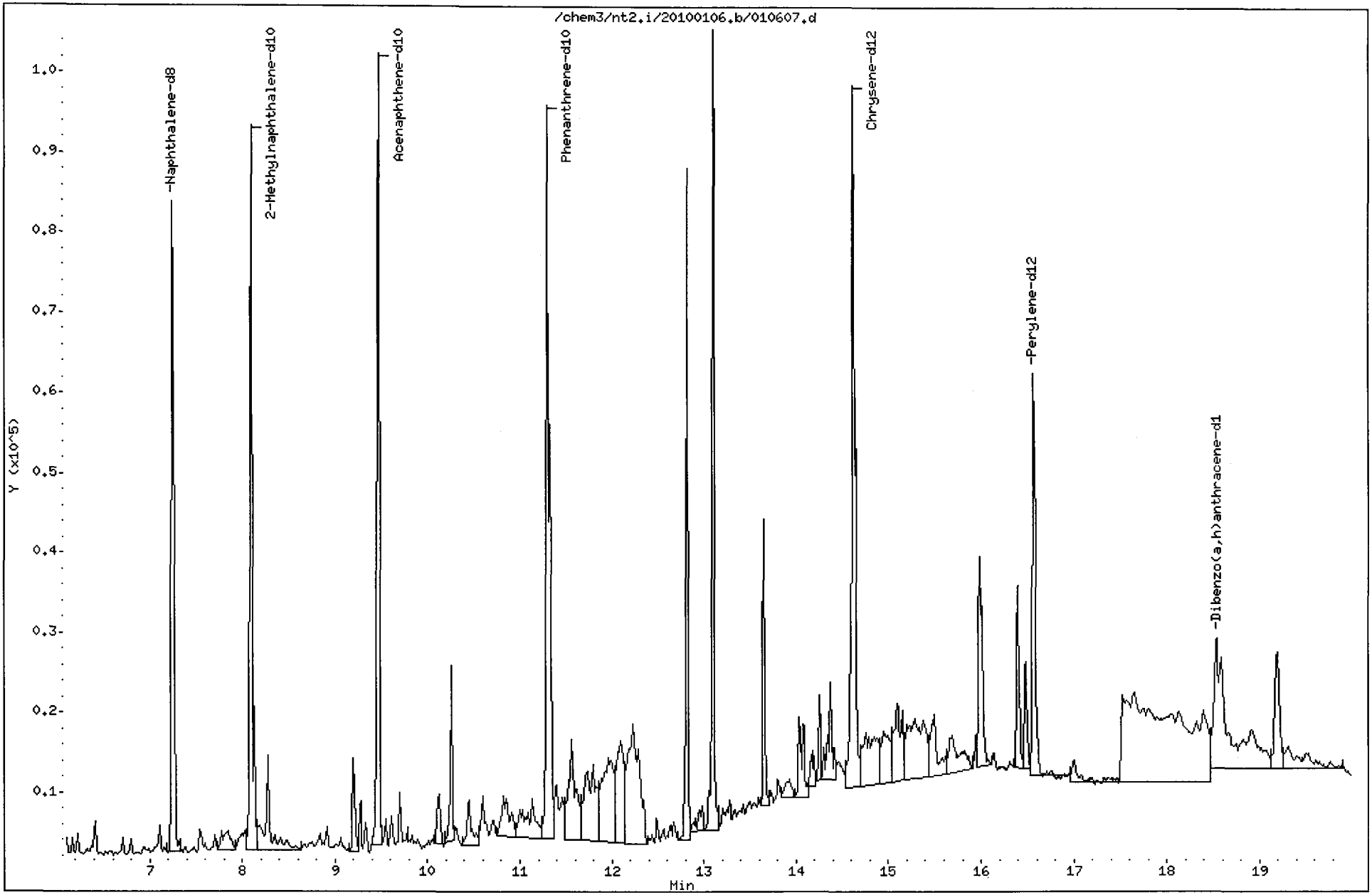
Client SDG: QD71
Fraction: SV
Client Smp ID: CB31A123109COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	196	65.22	31-109
$ 36 Dibenzo(a,h)anthra	300	141	46.88	10-133

Data File: /chem3/nt2.i/20100106.b/010607.d
Date : 06-JAN-2010 15:53
Client ID: CB31A123109COMP
Sample Info: QD71A
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

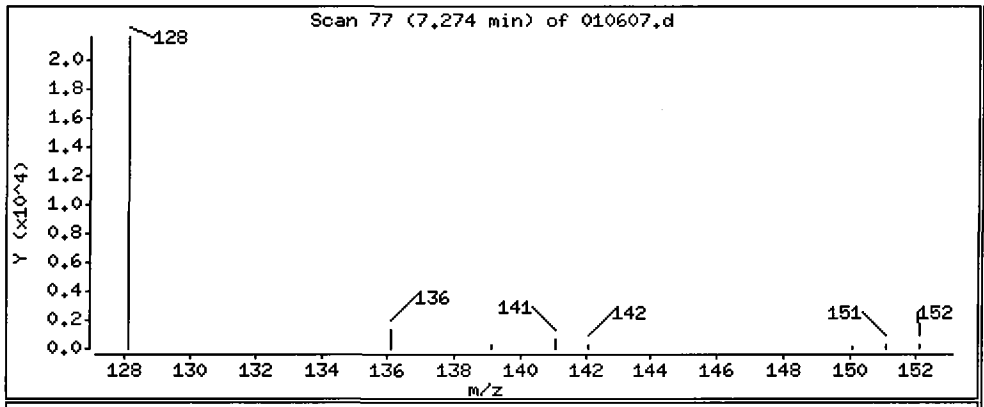
Operator: VTS

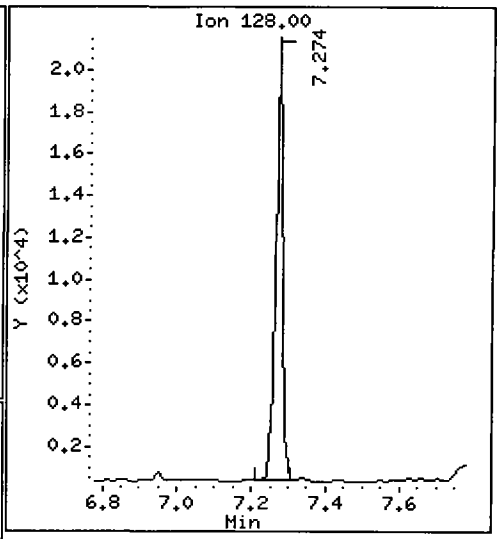
Column phase: ZB-5

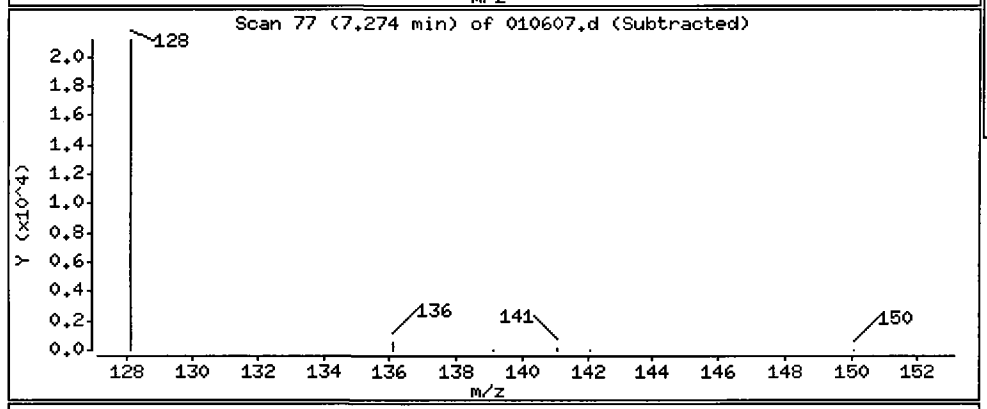
Column diameter: 0.25

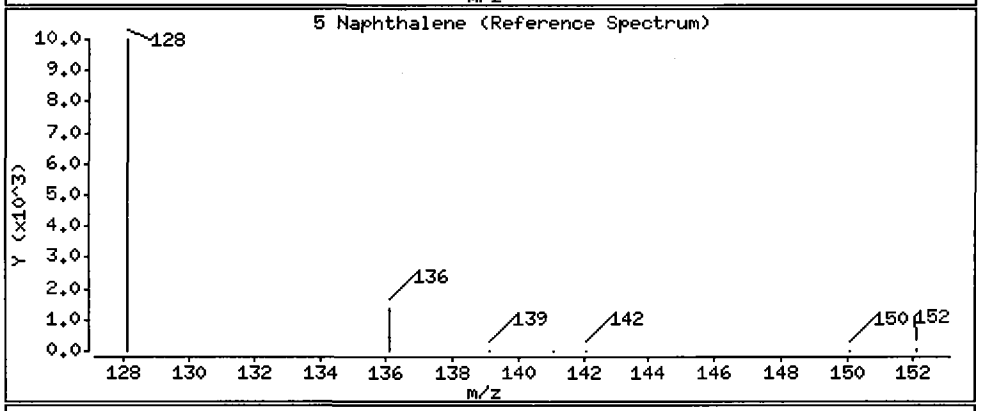
5 Naphthalene

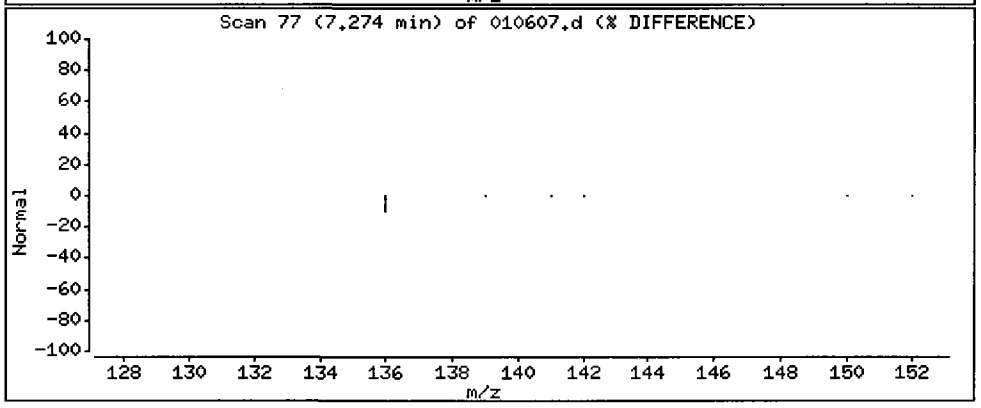
Concentration: 37.4 ug/L











Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

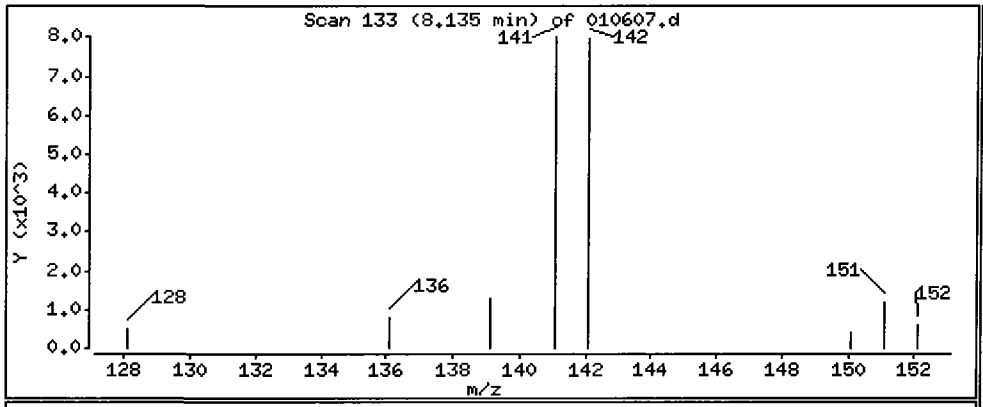
Operator: VTS

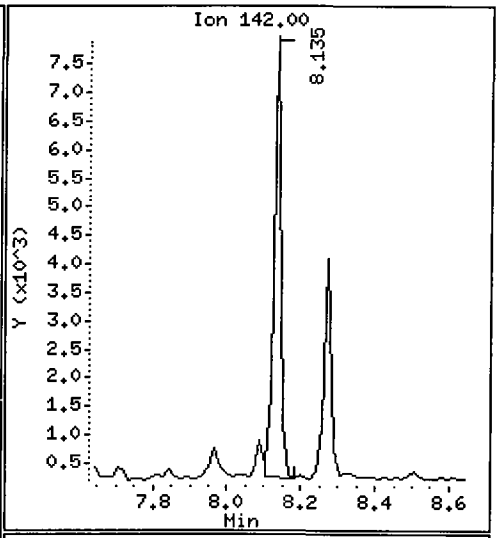
Column phase: ZB-5

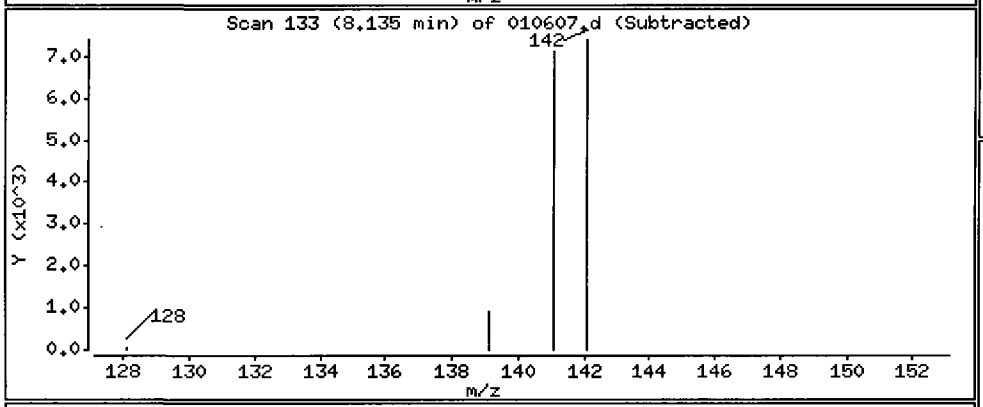
Column diameter: 0.25

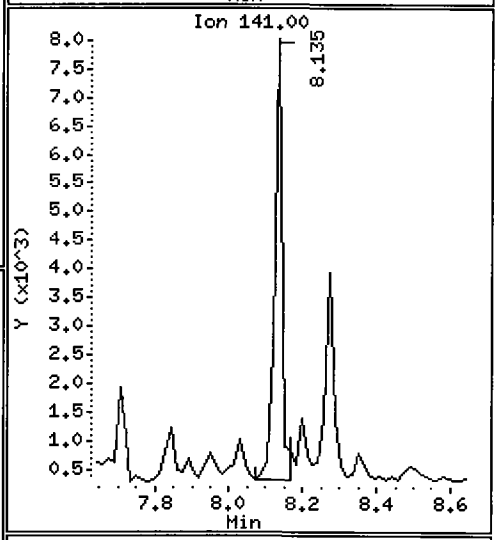
7 2-Methylnaphthalene

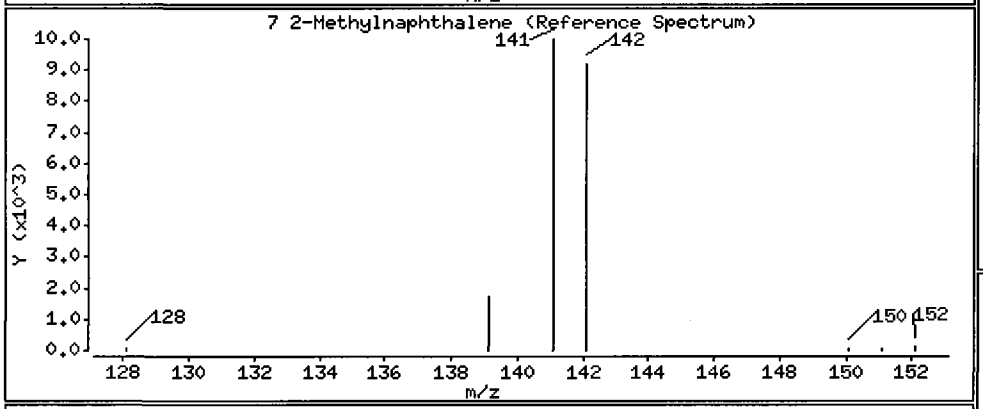
Concentration: 24.1 ug/L

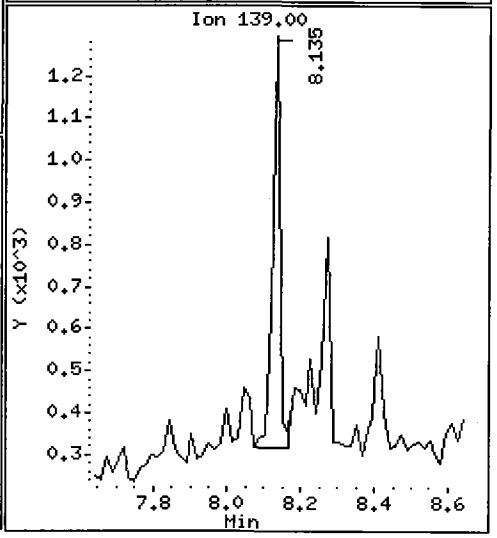


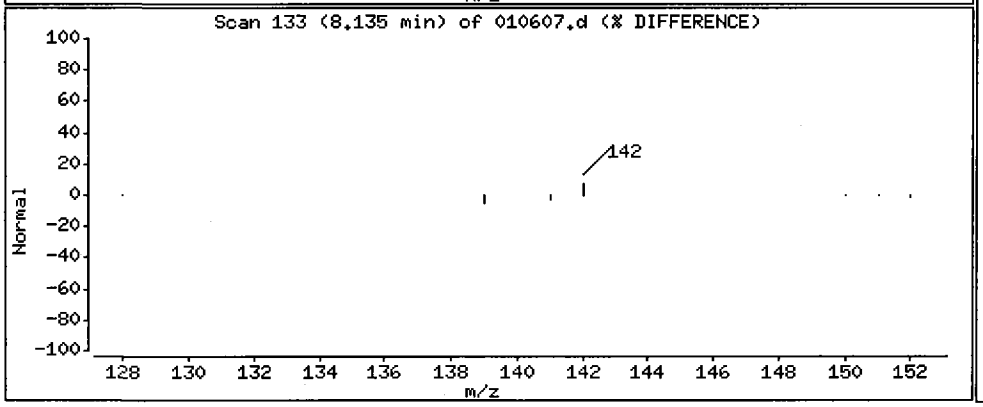












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Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

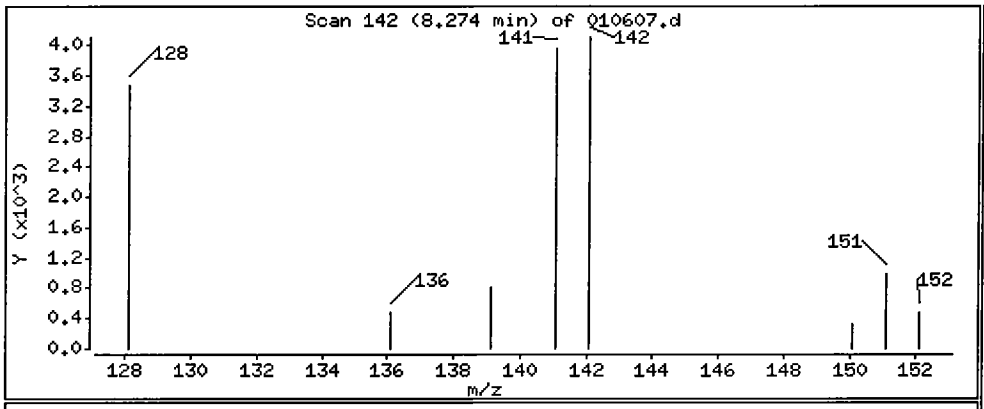
Operator: VTS

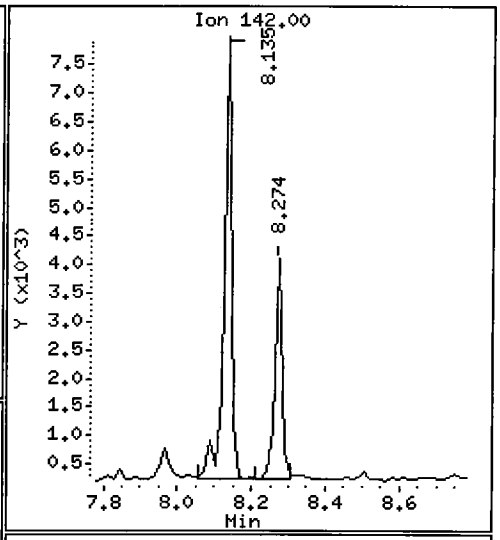
Column phase: ZB-5

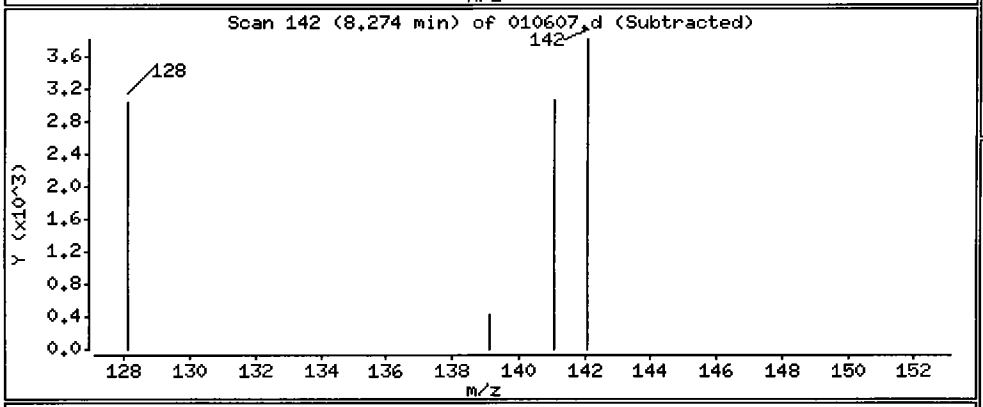
Column diameter: 0.25

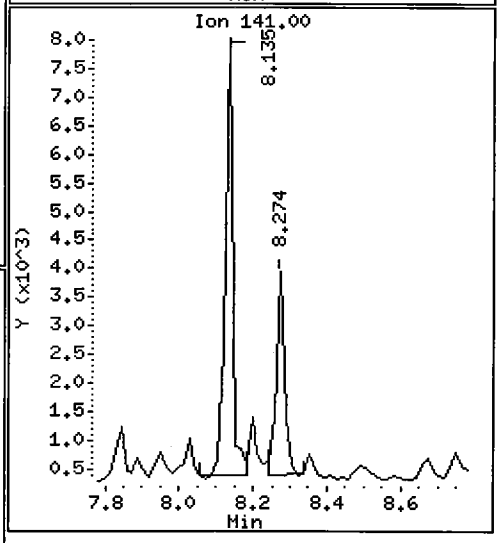
8 1-Methylnaphthalene

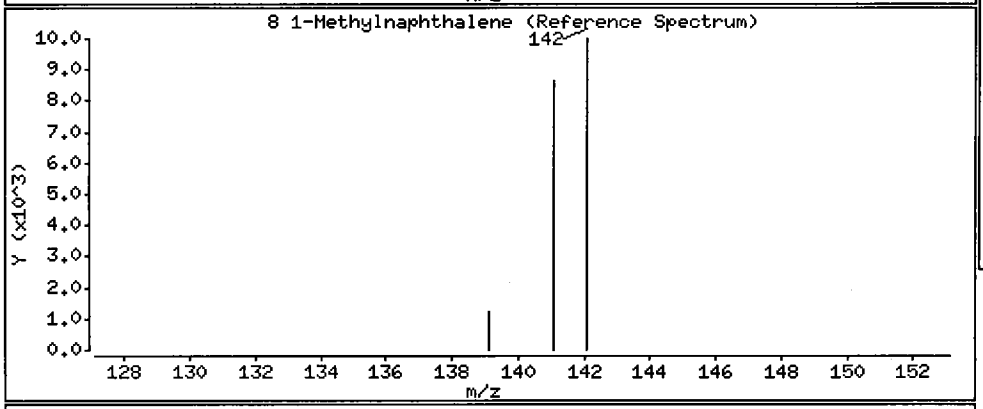
Concentration: 12.2 ug/L

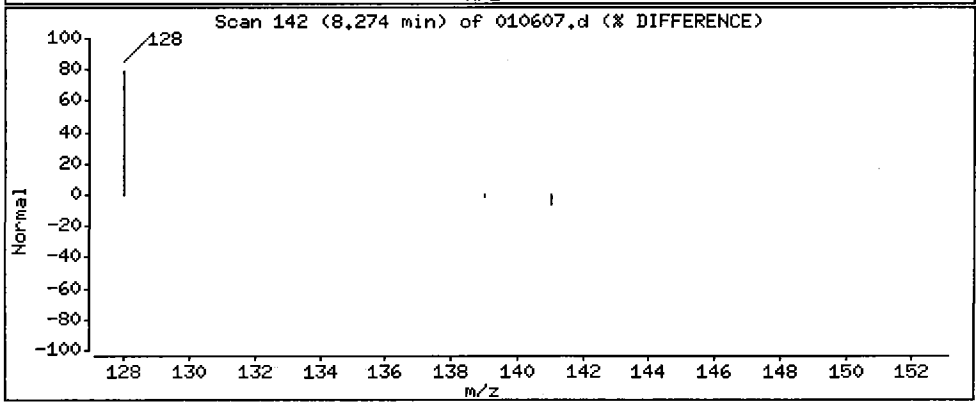












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

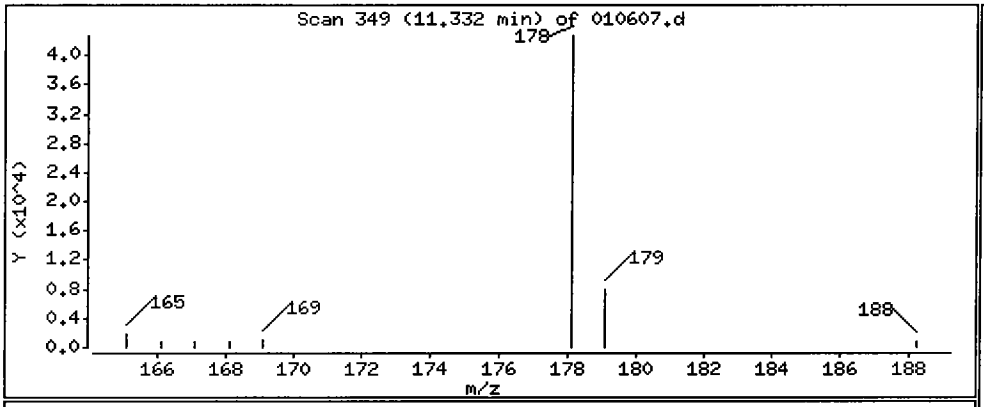
Operator: VTS

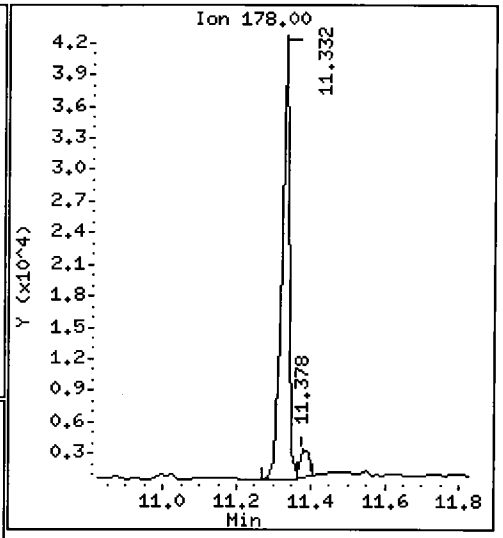
Column phase: ZB-5

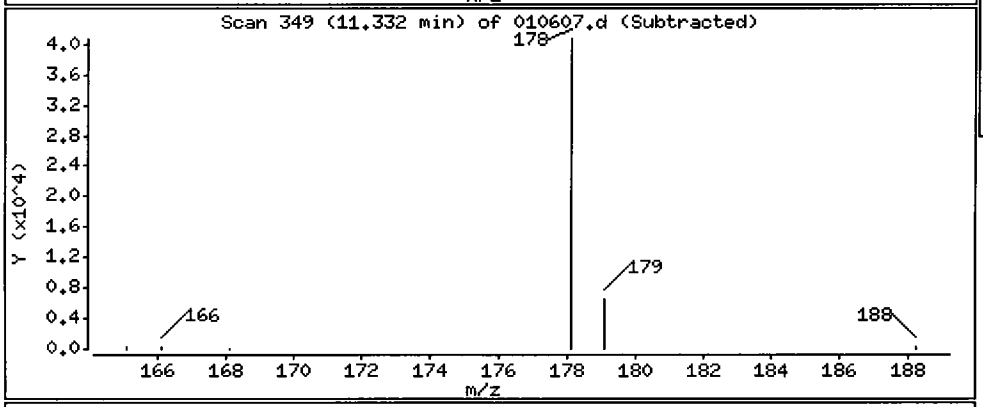
Column diameter: 0.25

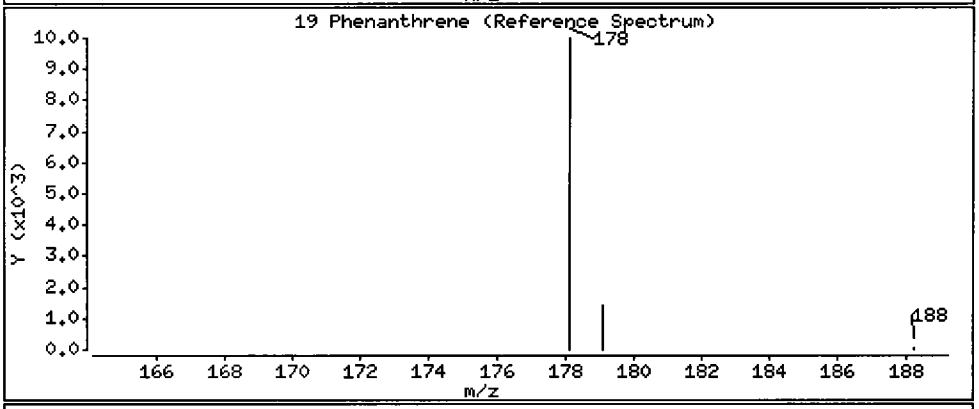
19 Phenanthrene

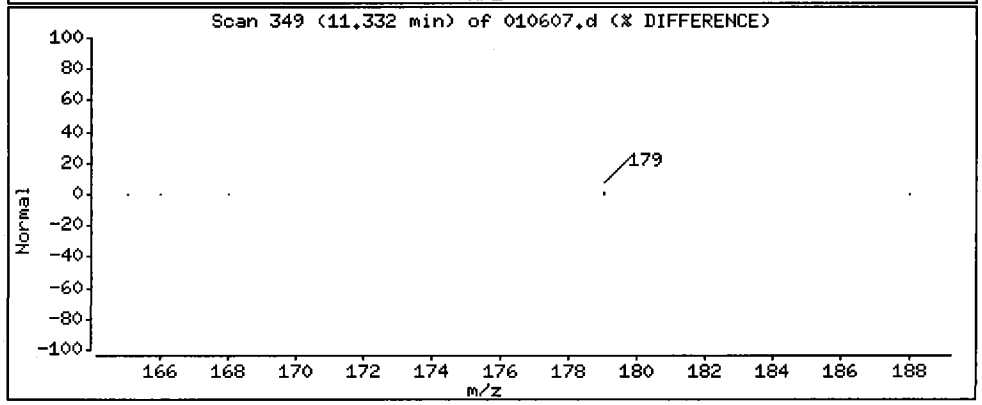
Concentration: 99.0 ug/L











Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

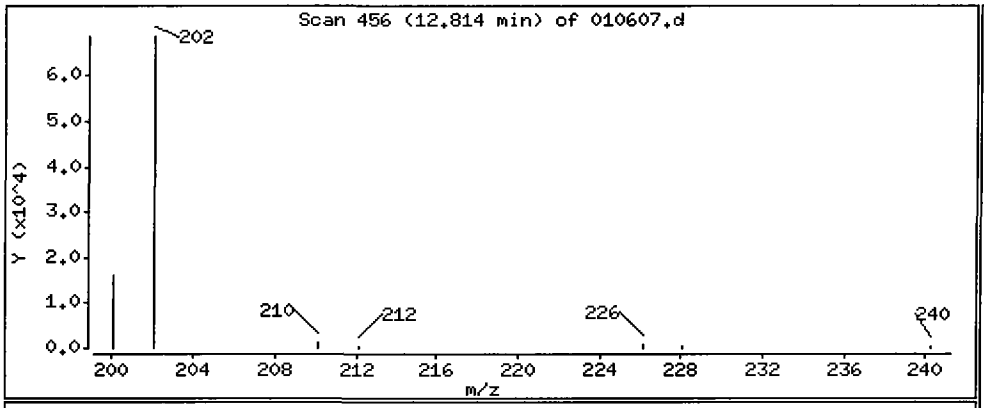
Operator: VTS

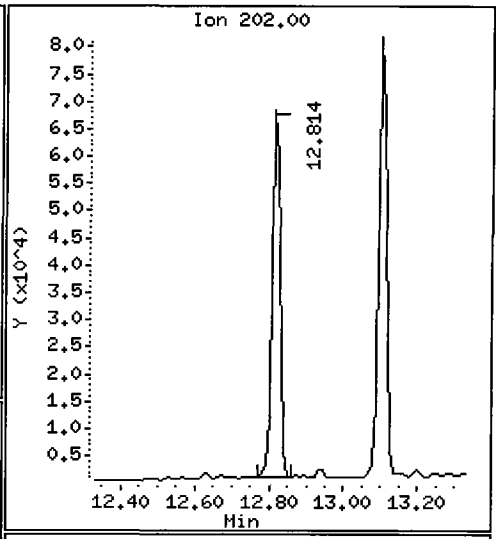
Column phase: ZB-5

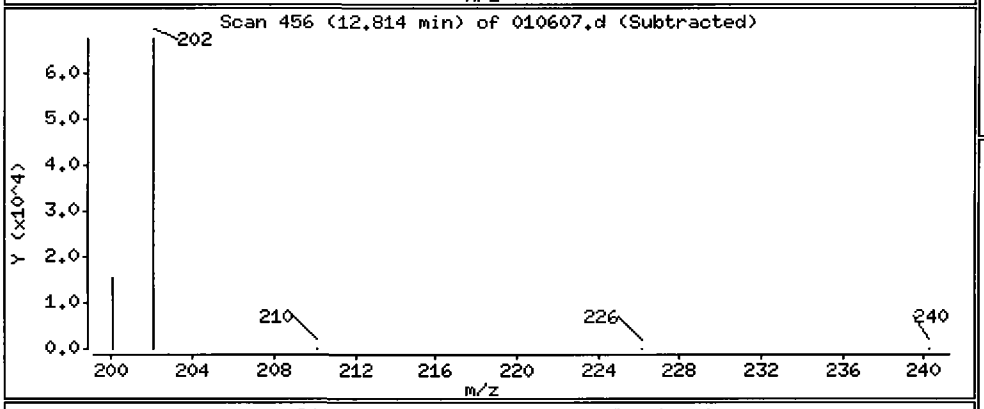
Column diameter: 0.25

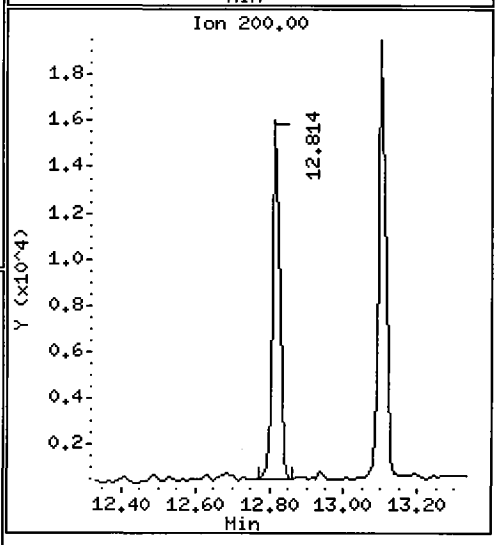
24 Fluoranthene

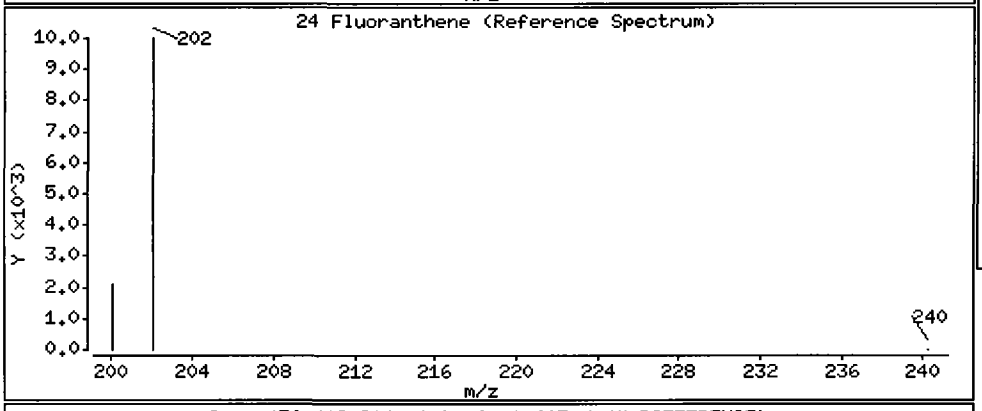
Concentration: 155 ug/L

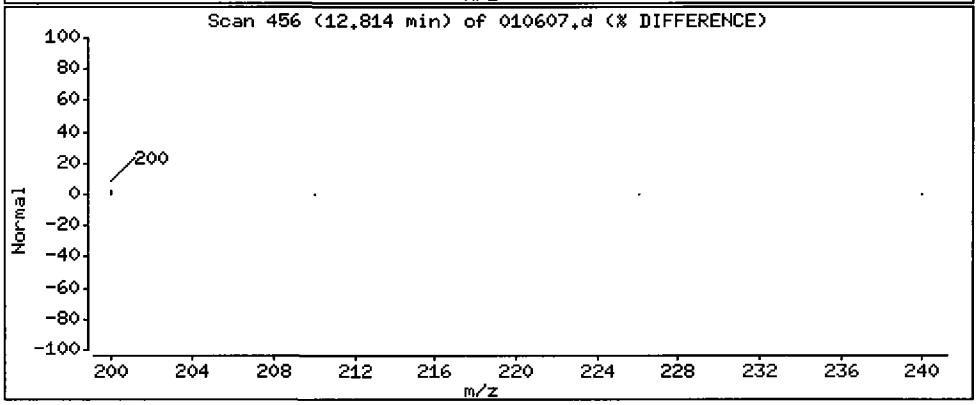












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

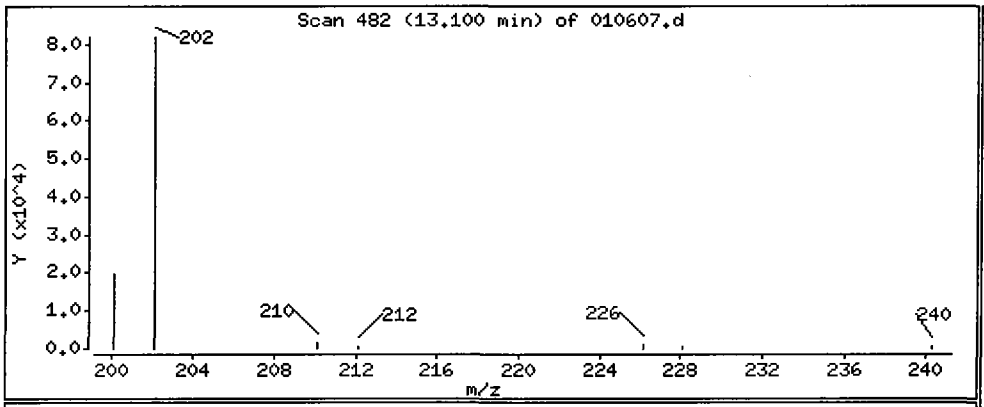
Operator: VTS

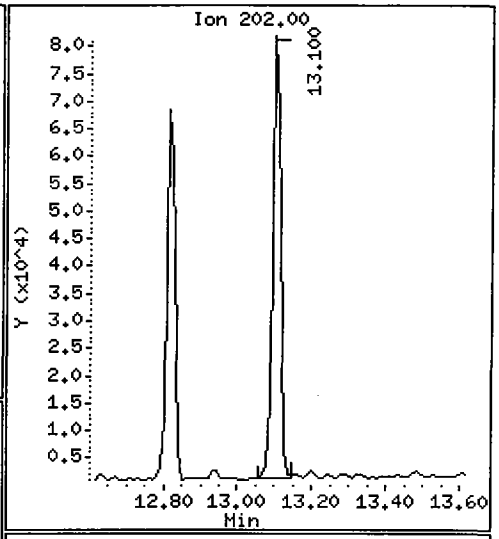
Column phase: ZB-5

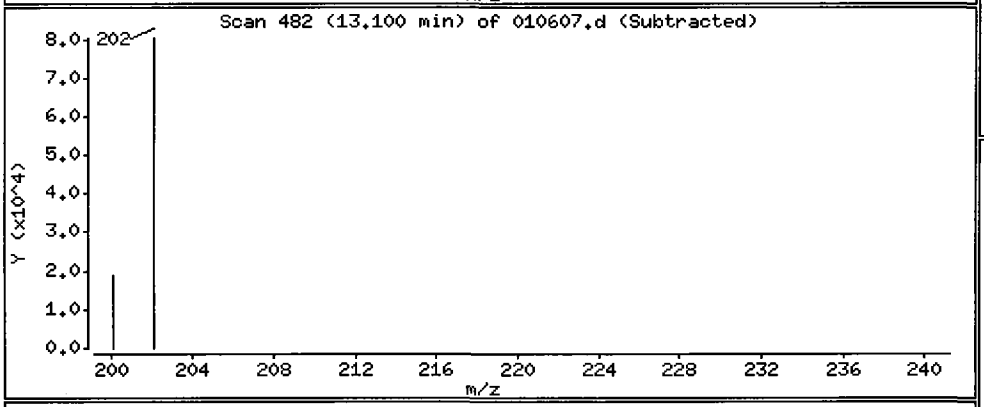
Column diameter: 0.25

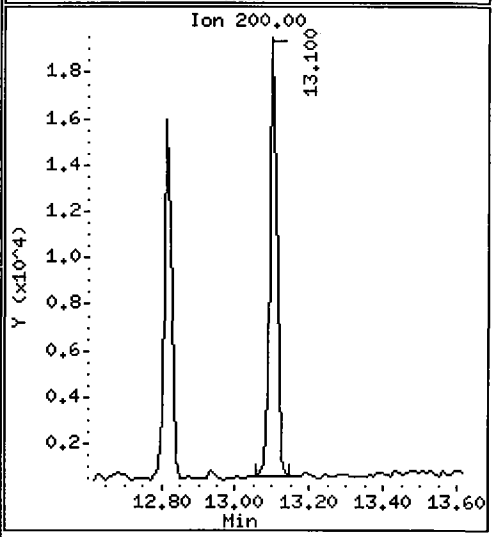
25 Pyrene

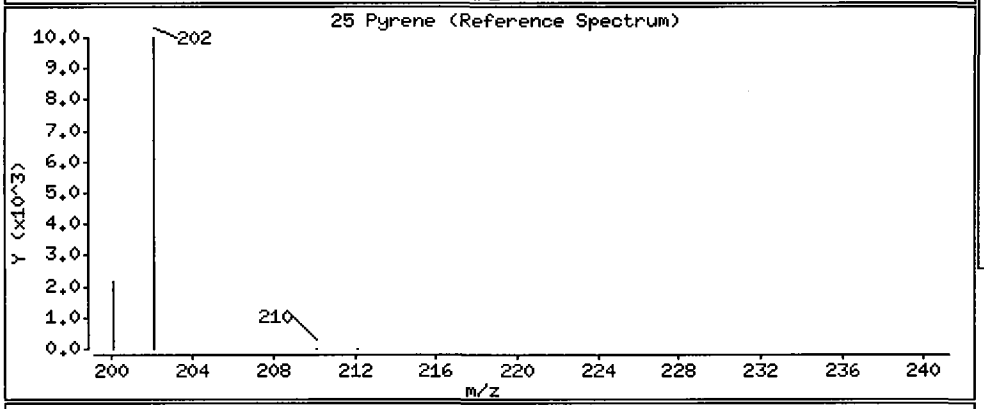
Concentration: 180 ug/L

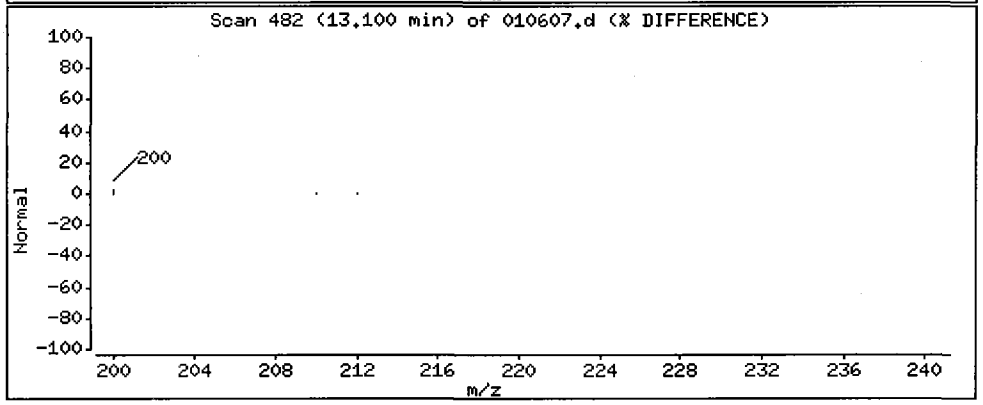












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

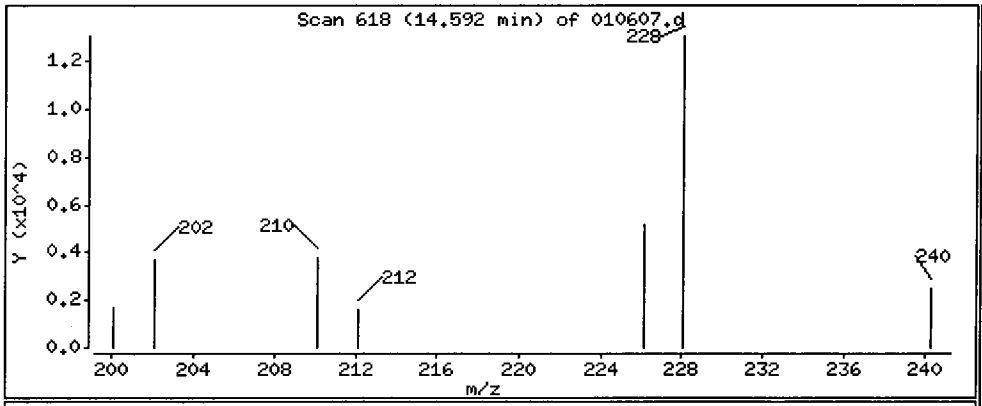
Operator: VTS

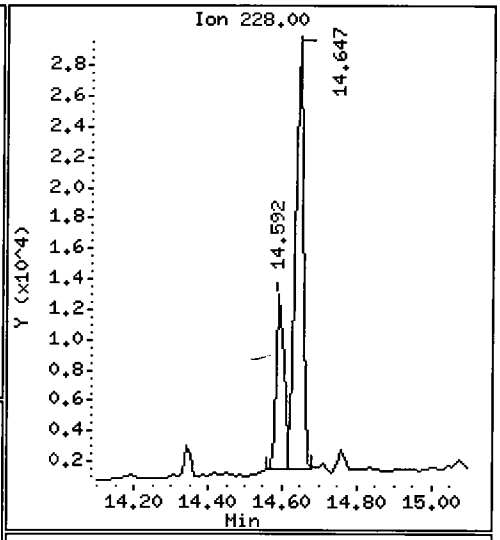
Column phase: ZB-5

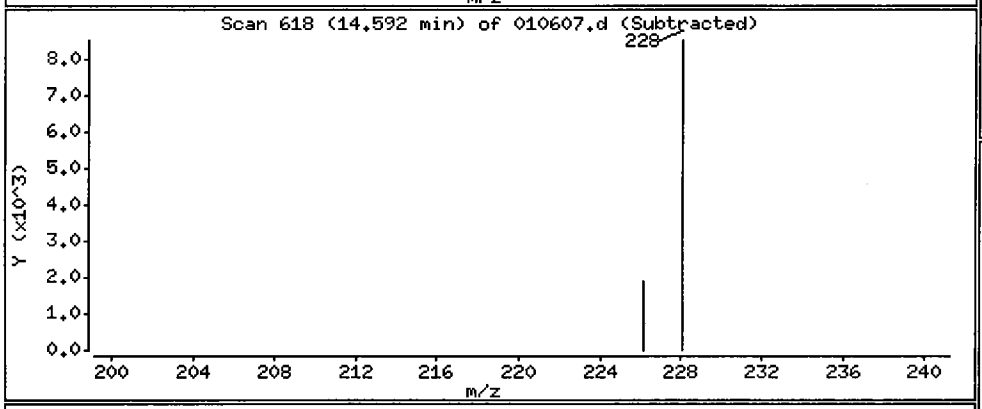
Column diameter: 0.25

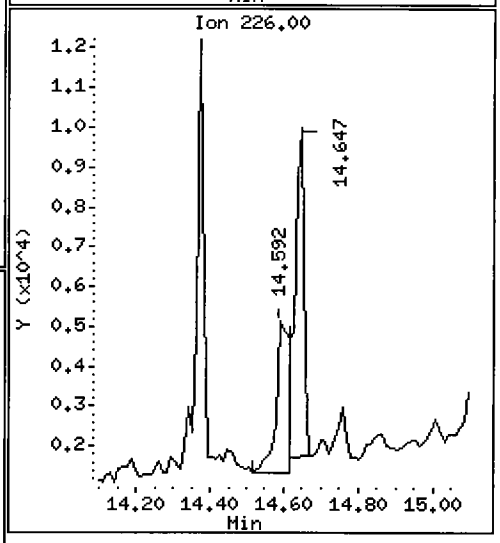
28 Benzo(a)anthracene

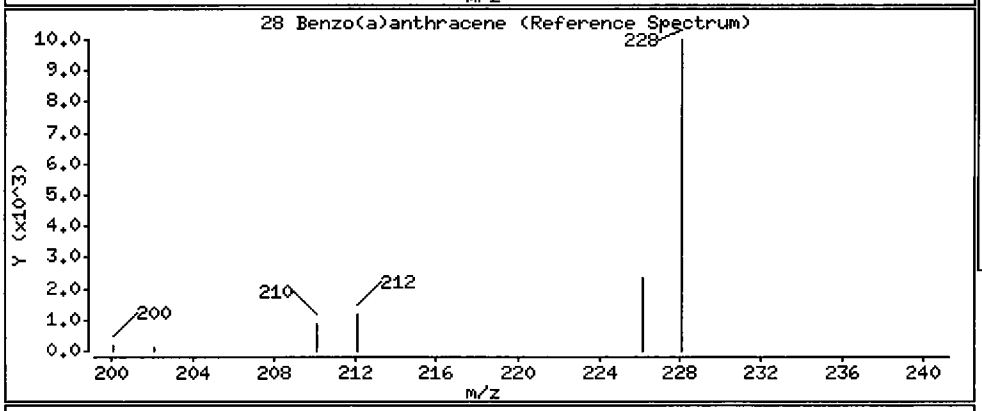
Concentration: 31.7 ug/L

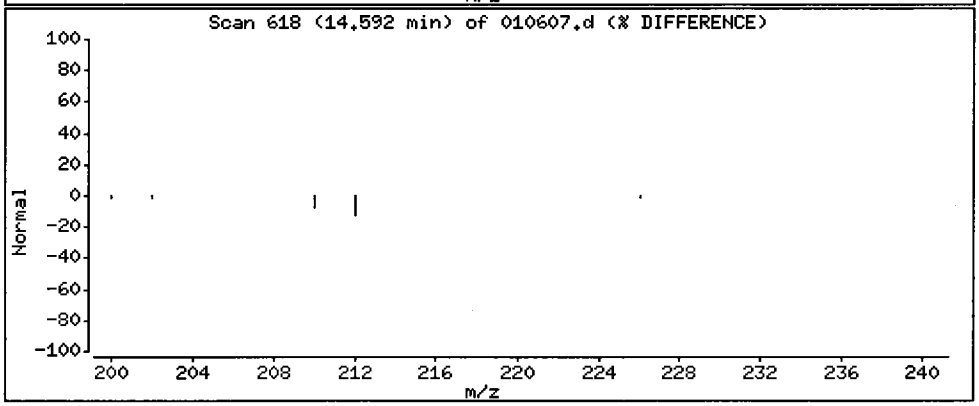












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

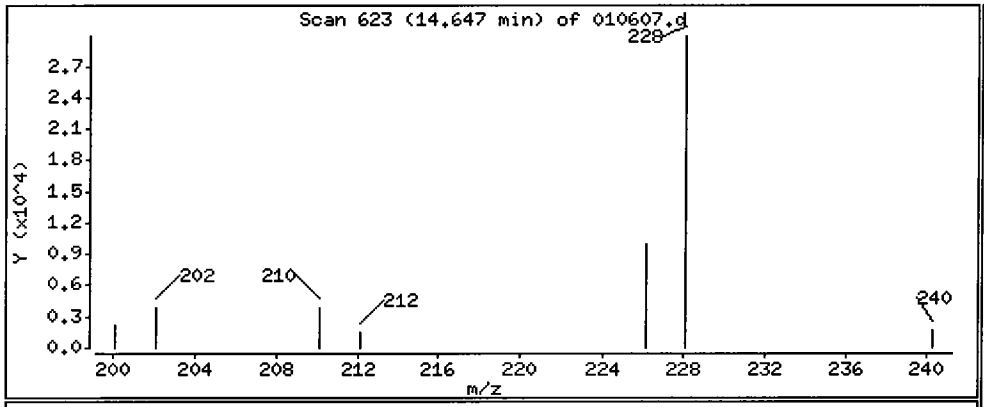
Operator: VTS

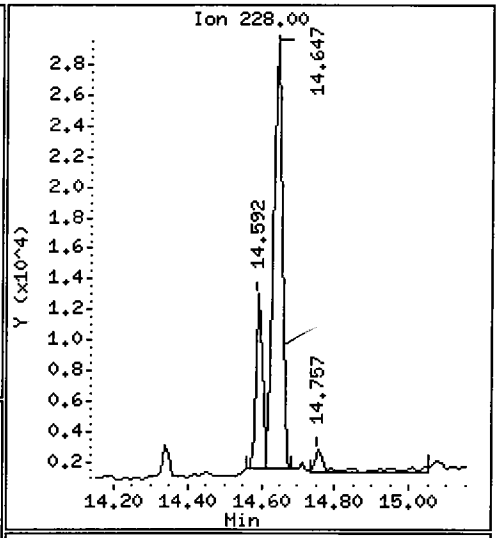
Column phase: ZB-5

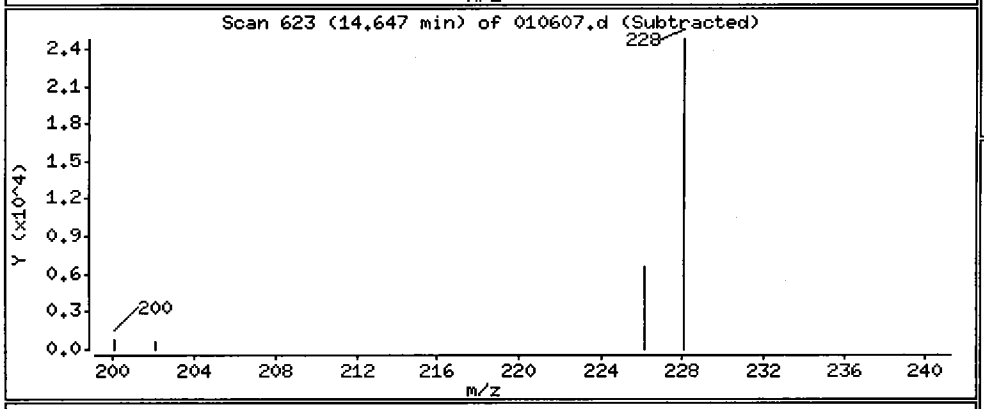
Column diameter: 0.25

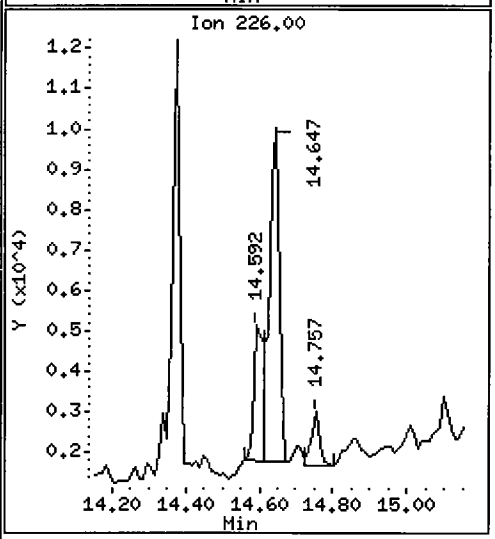
30 Chrysene

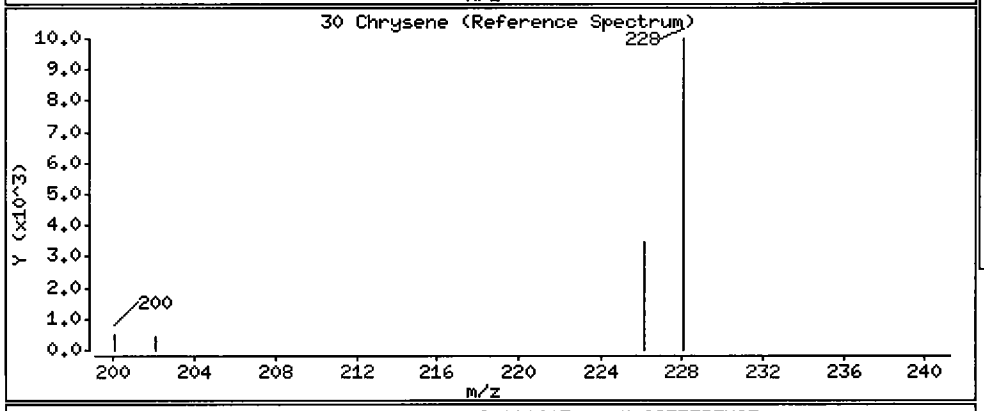
Concentration: 93.9 ug/L

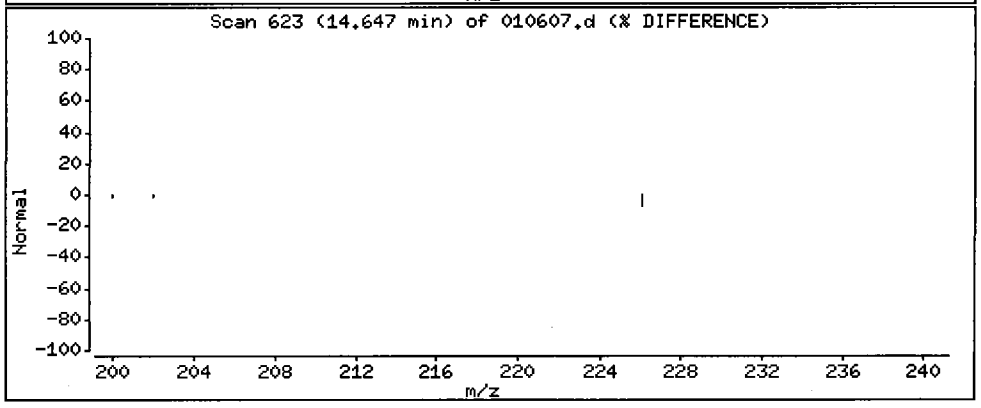












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

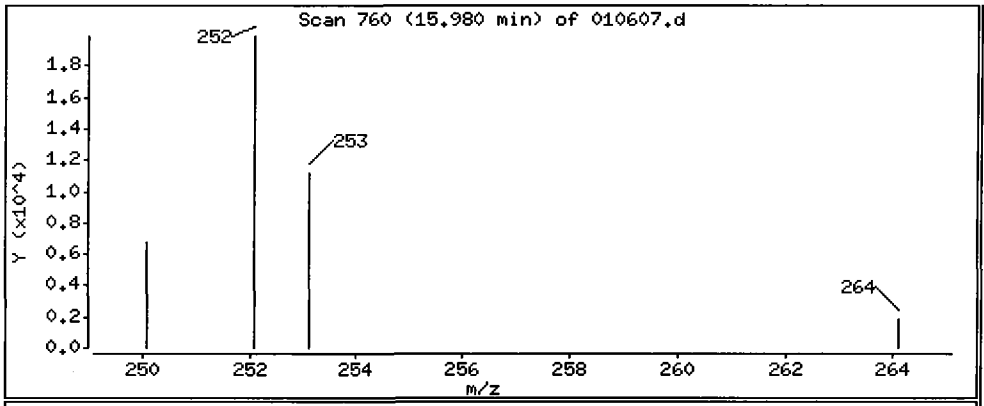
Operator: VTS

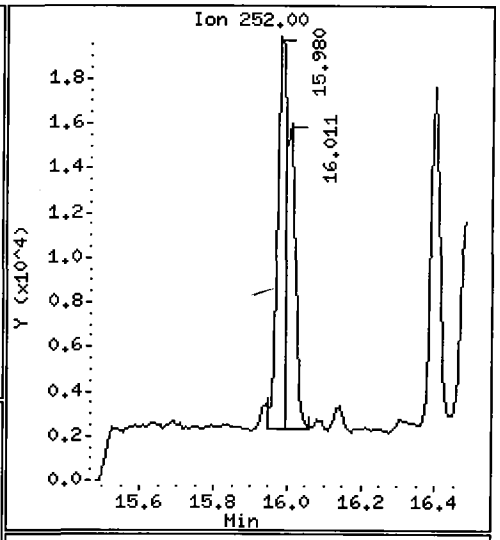
Column phase: ZB-5

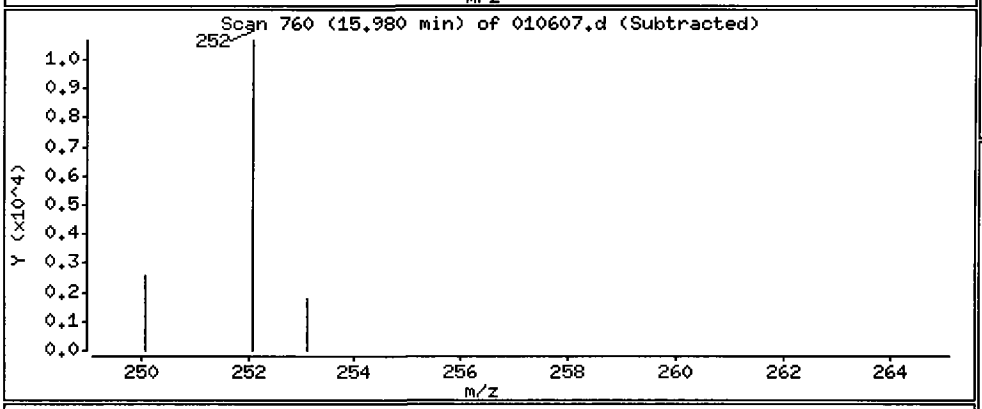
Column diameter: 0.25

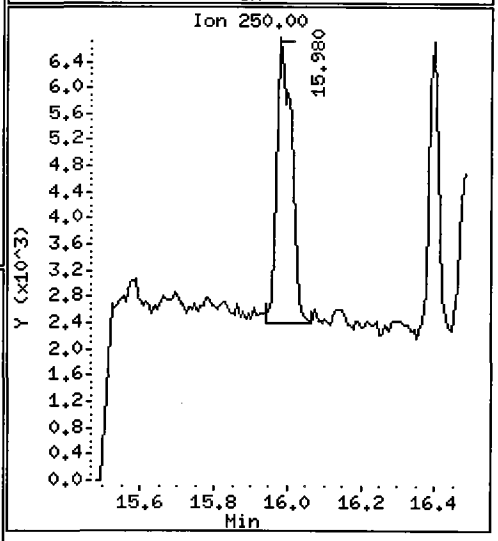
32 Benzo(b)fluoranthene

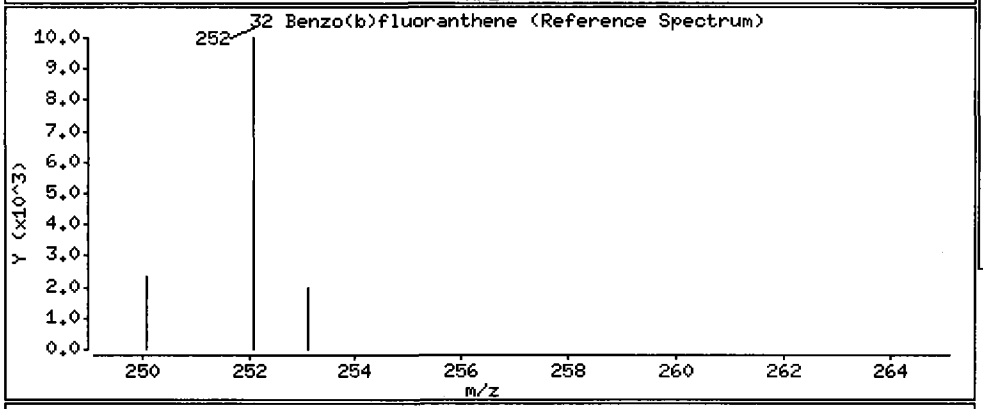
Concentration: 59.1 ug/L

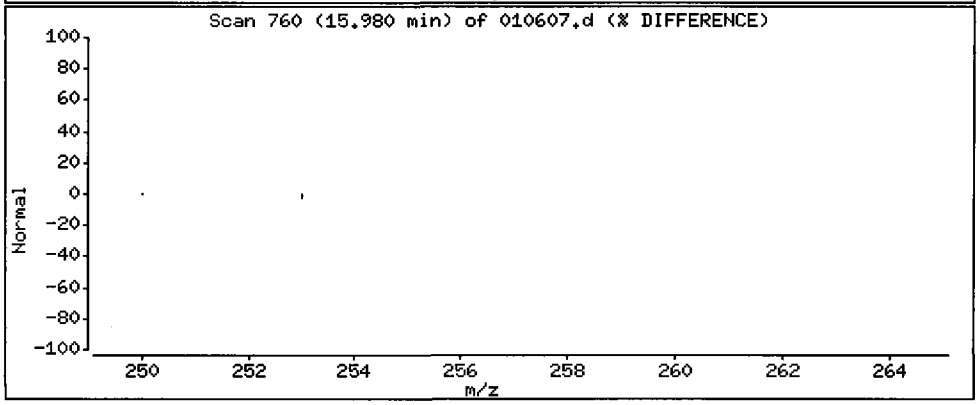












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

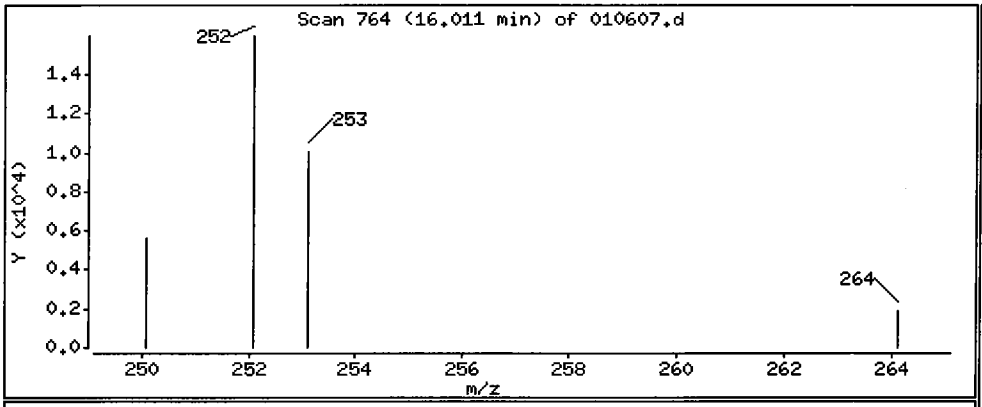
Operator: VTS

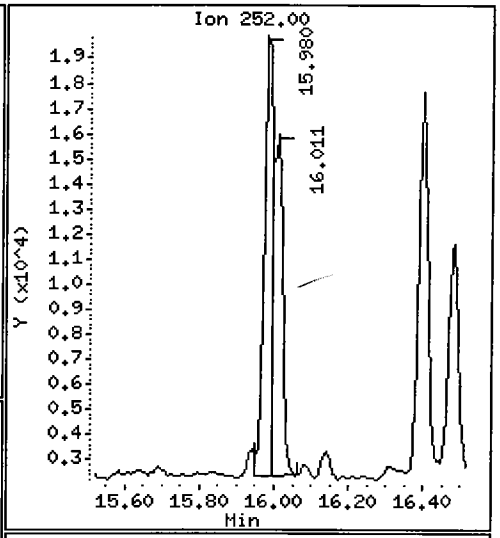
Column phase: ZB-5

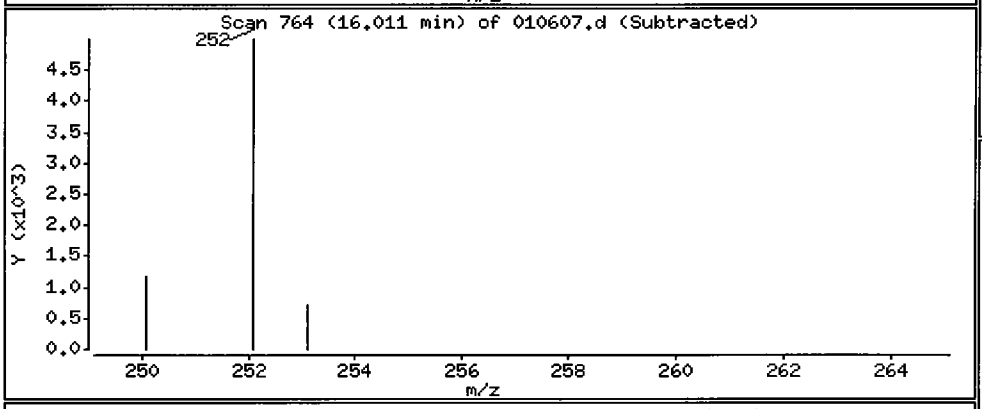
Column diameter: 0.25

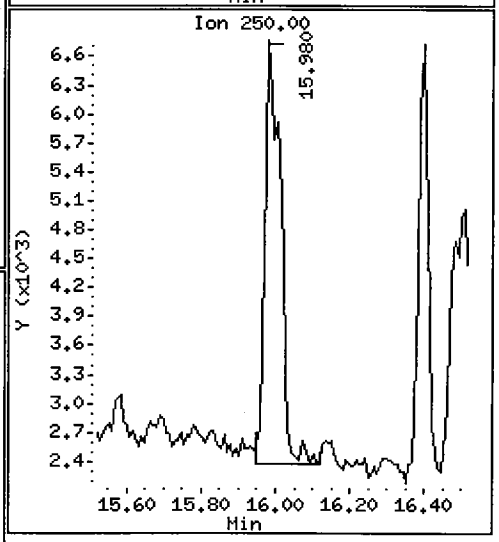
33 Benzo(k)fluoranthene

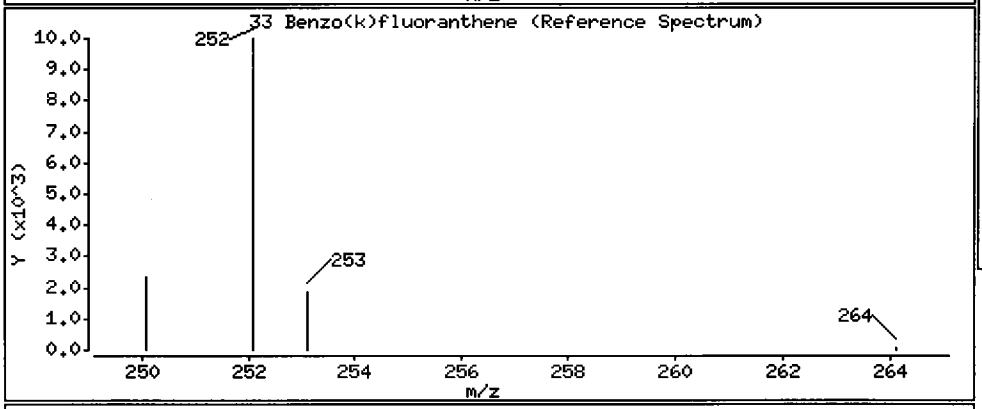
Concentration: 47.7 ug/L

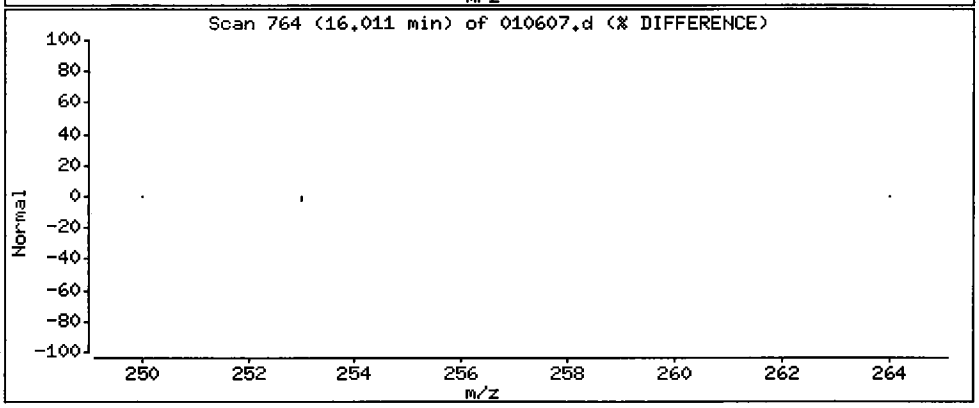












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

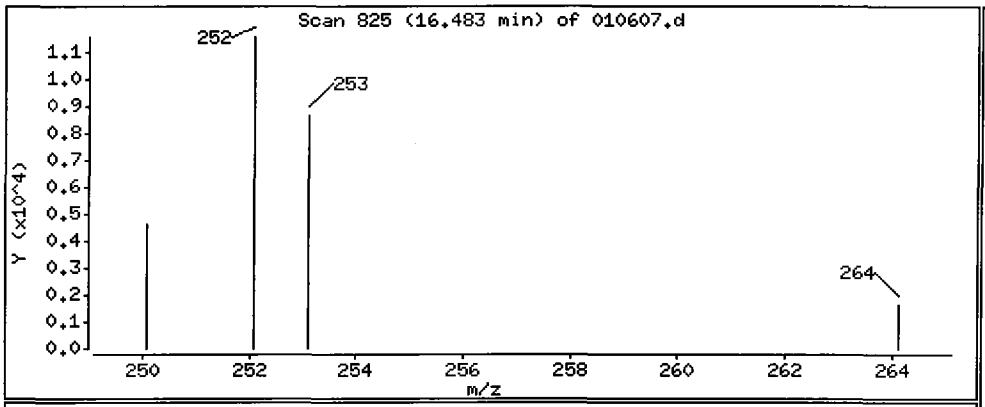
Operator: VTS

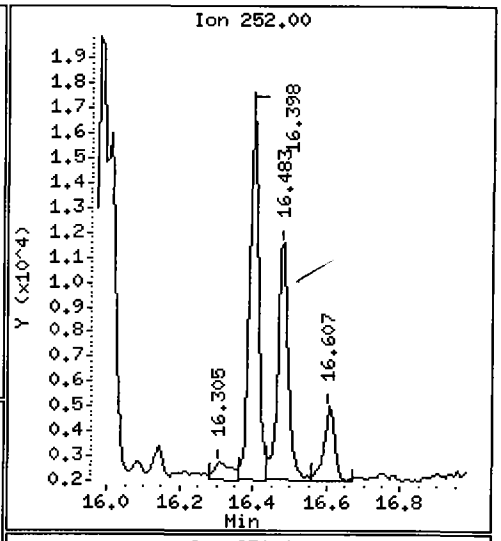
Column phase: ZB-5

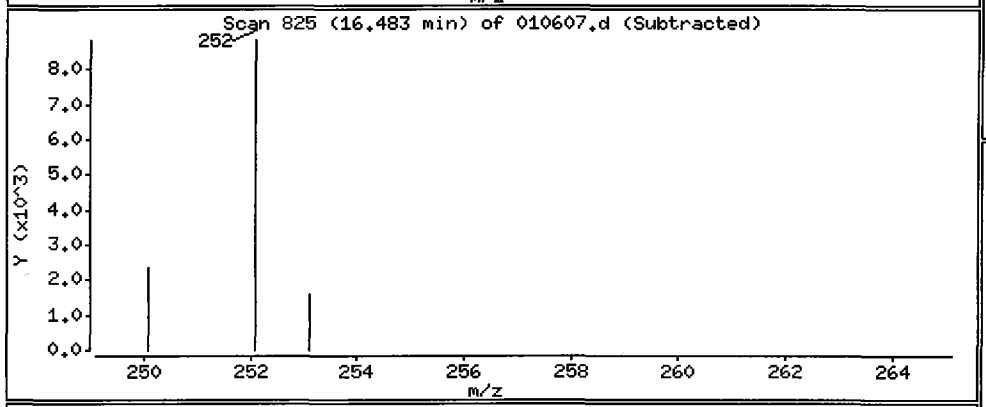
Column diameter: 0.25

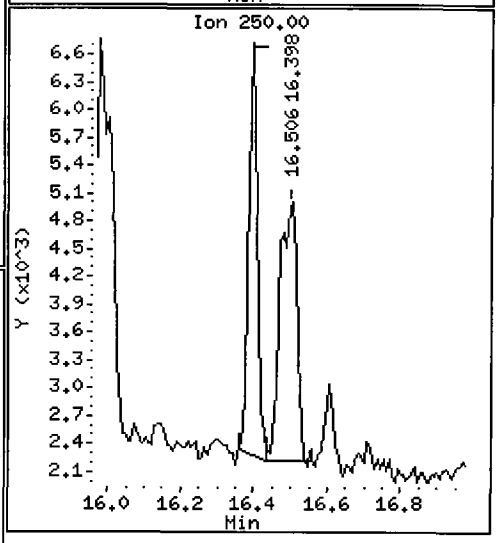
34 Benzo(a)pyrene

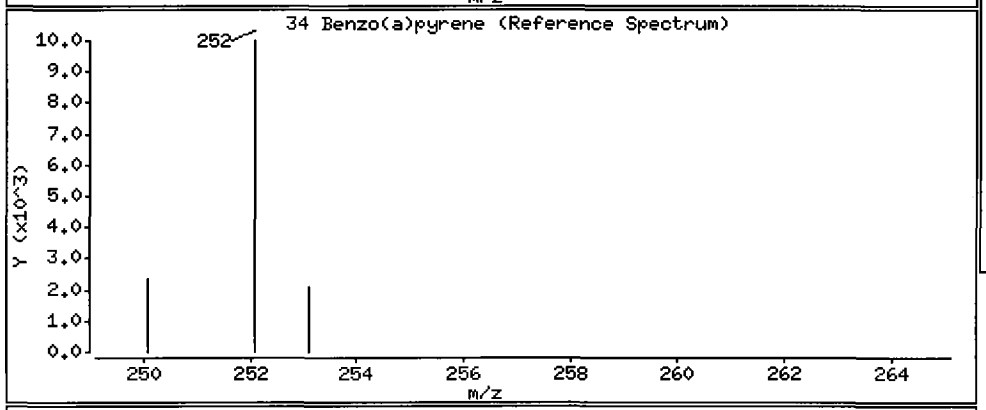
Concentration: 50.7 ug/L

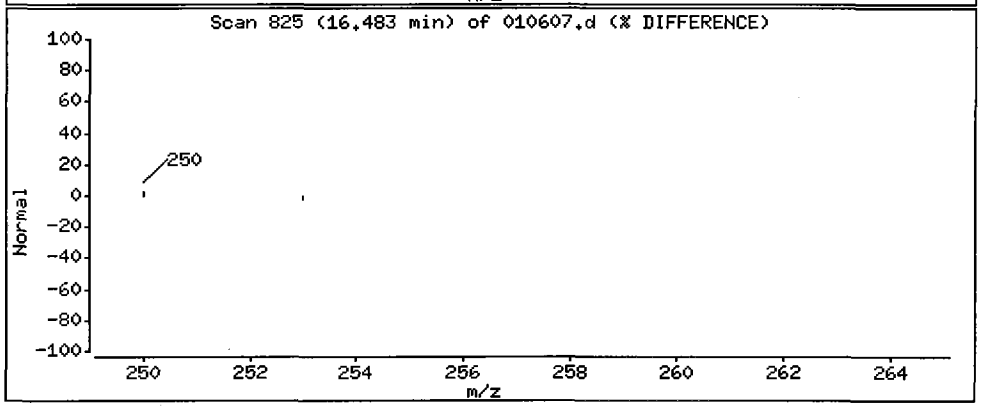












Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

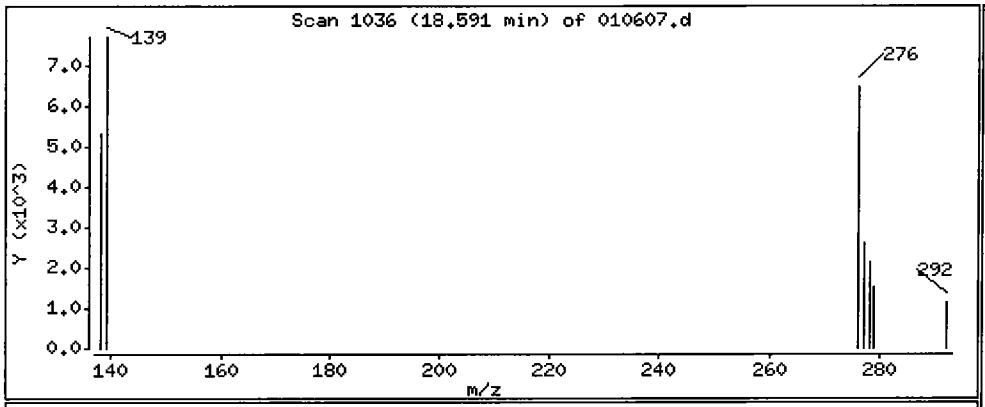
Operator: VTS

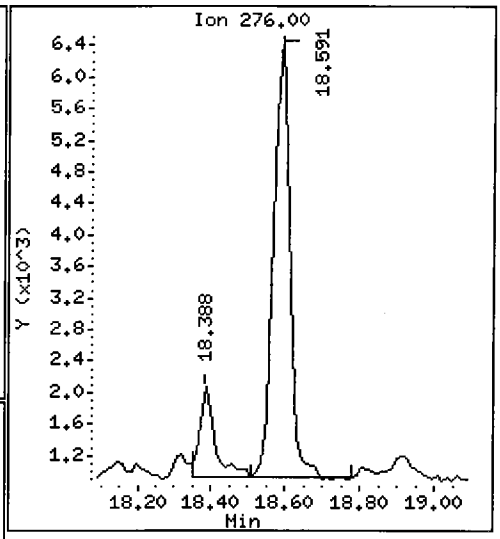
Column phase: ZB-5

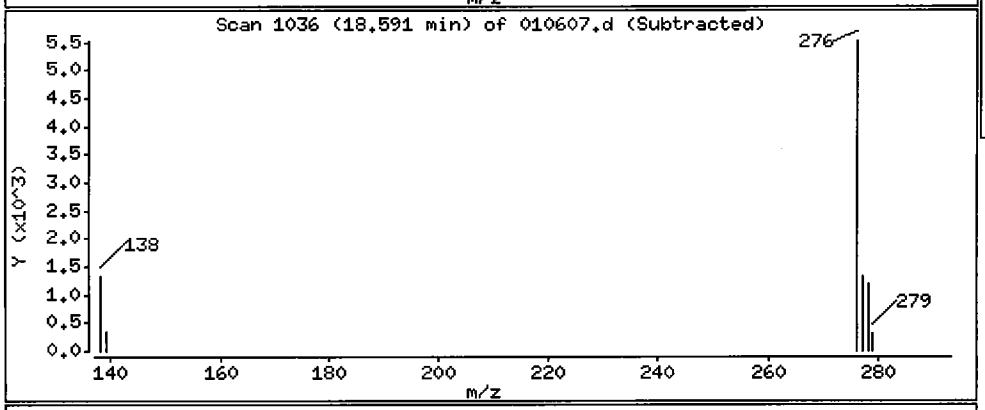
Column diameter: 0.25

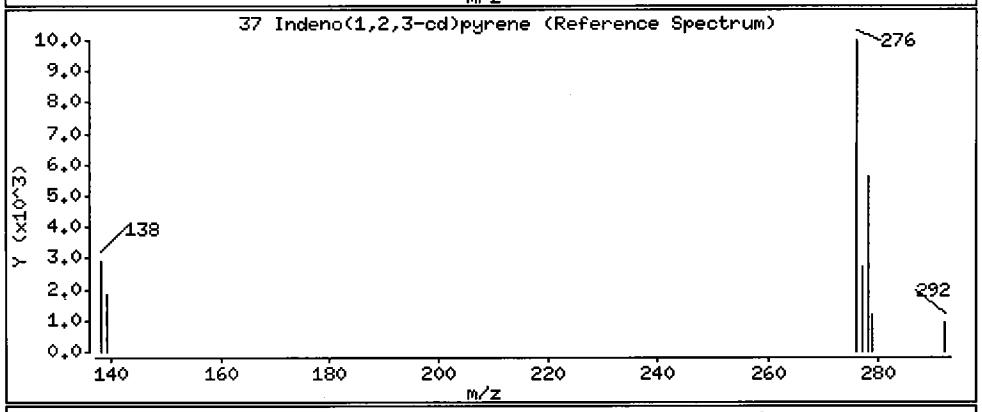
37 Indeno(1,2,3-cd)pyrene

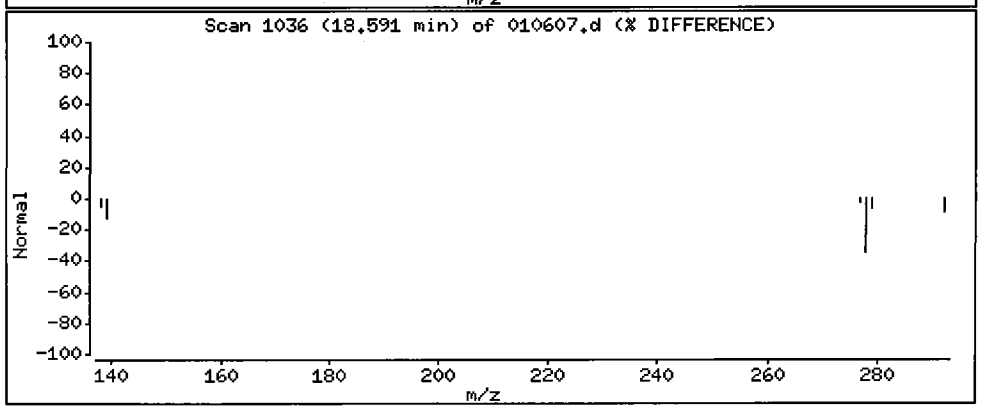
Concentration: 36.8 ug/L











Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

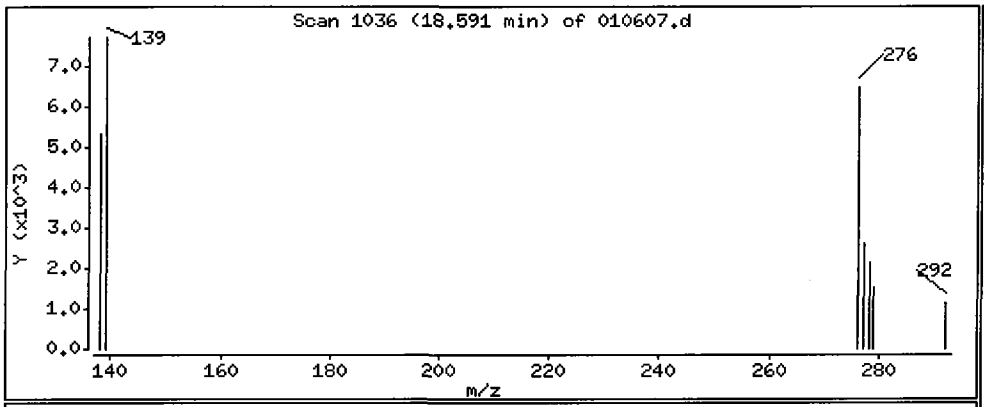
Operator: VTS

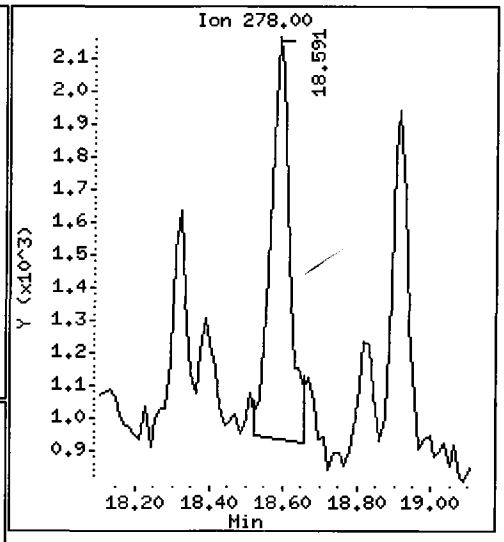
Column phase: ZB-5

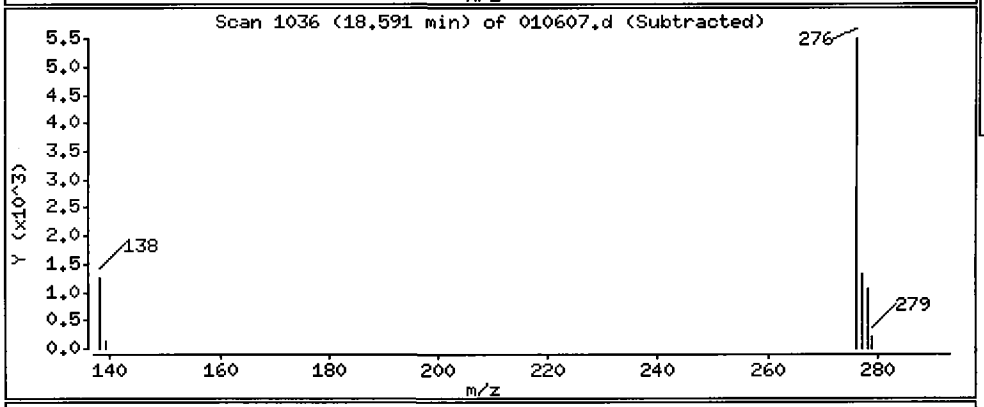
Column diameter: 0.25

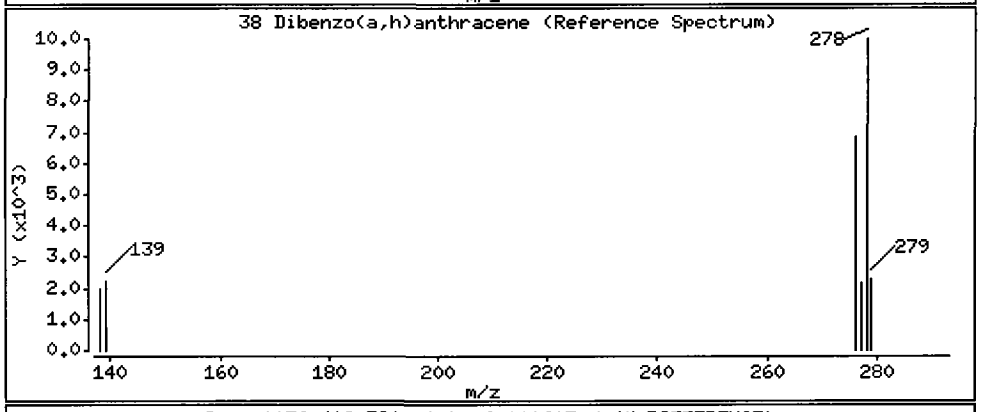
38 Dibenzo(a,h)anthracene

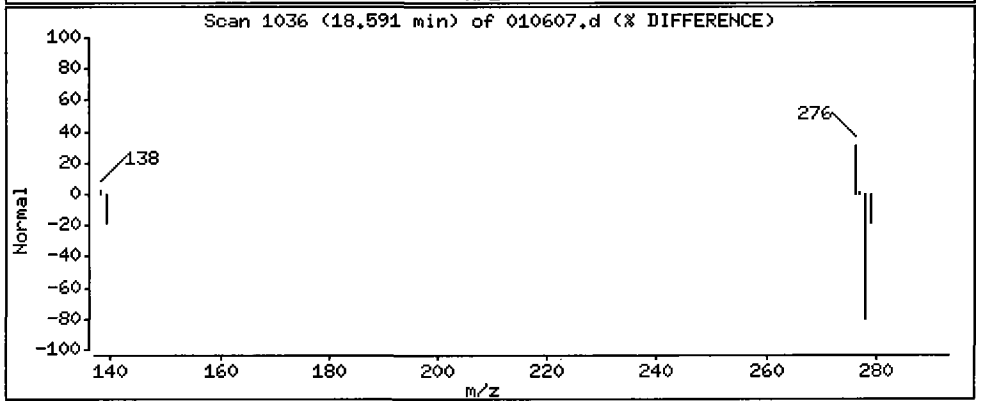
Concentration: 12.7 ug/L











Data File: /chem3/nt2.i/20100106.b/010607.d

Date : 06-JAN-2010 15:53

Client ID: CB31A123109COMP

Instrument: nt2.i

Sample Info: QD71A

Volume Injected (uL): 2.0

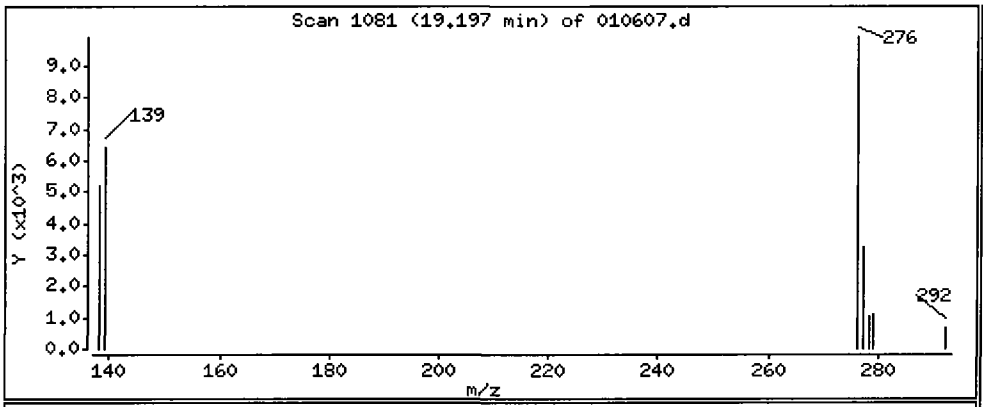
Operator: VTS

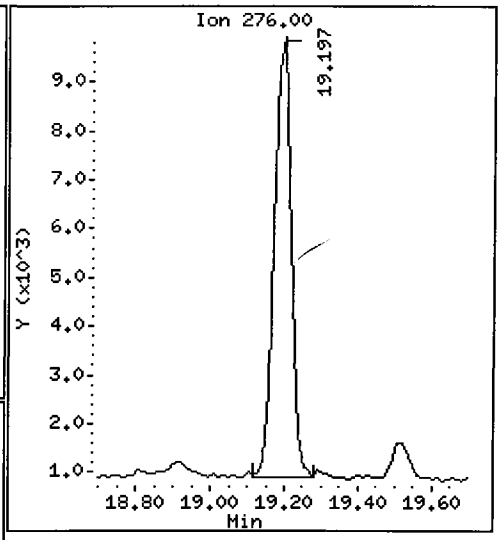
Column phase: ZB-5

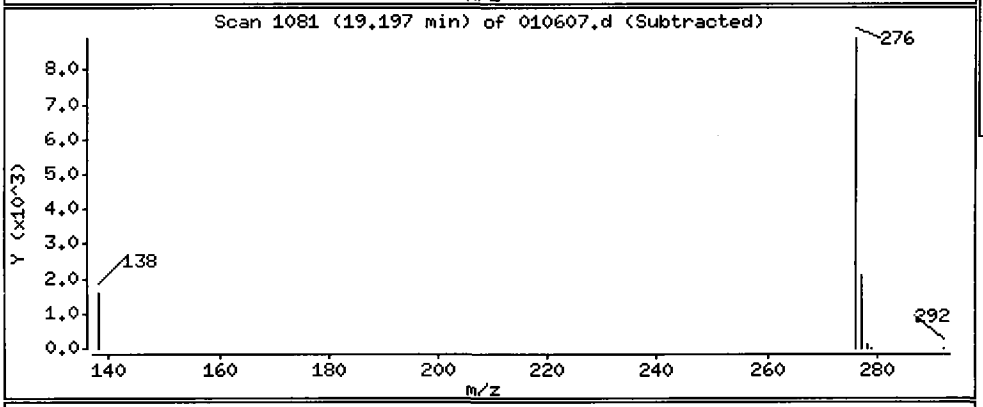
Column diameter: 0.25

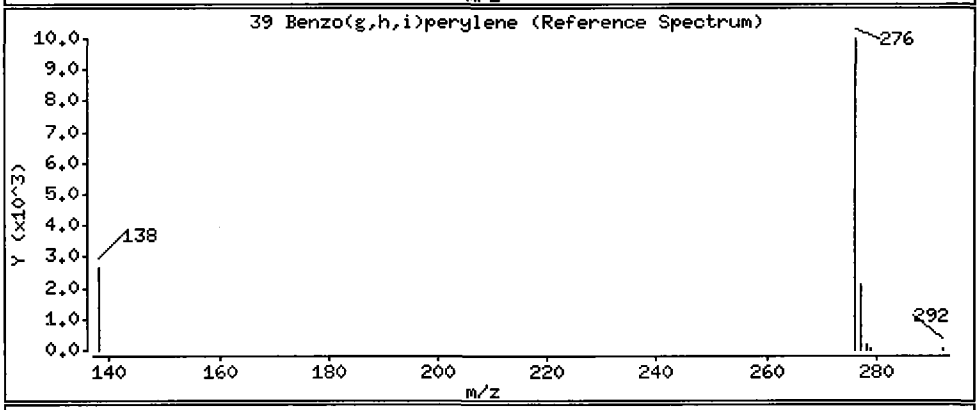
39 Benzo(g,h,i)perylene

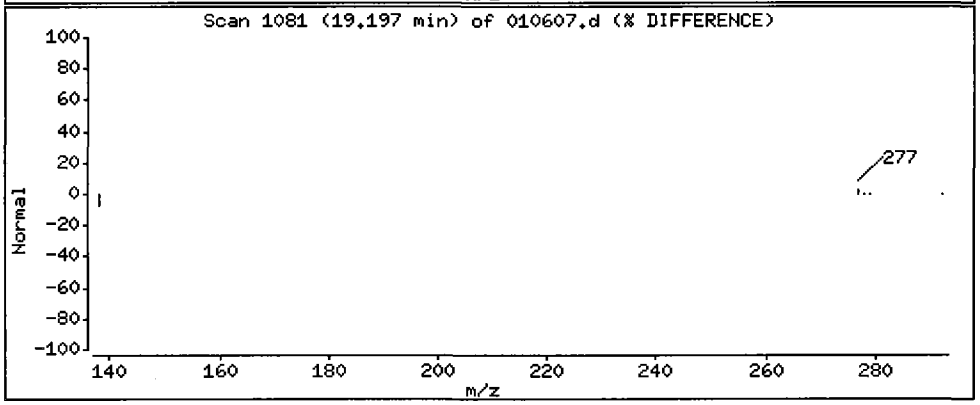
Concentration: 71.7 ug/L



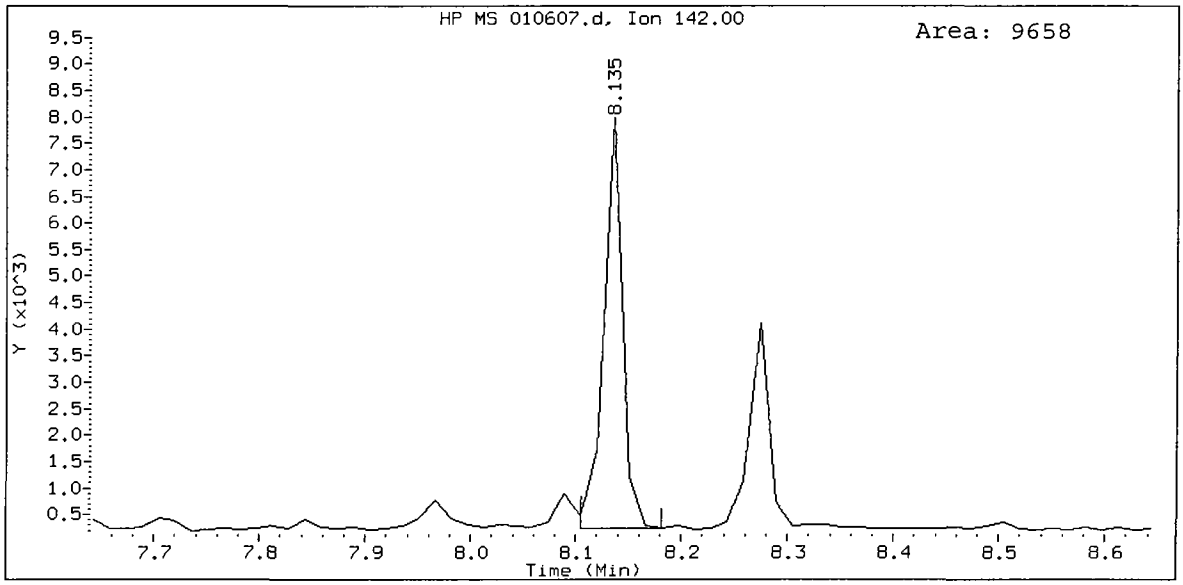


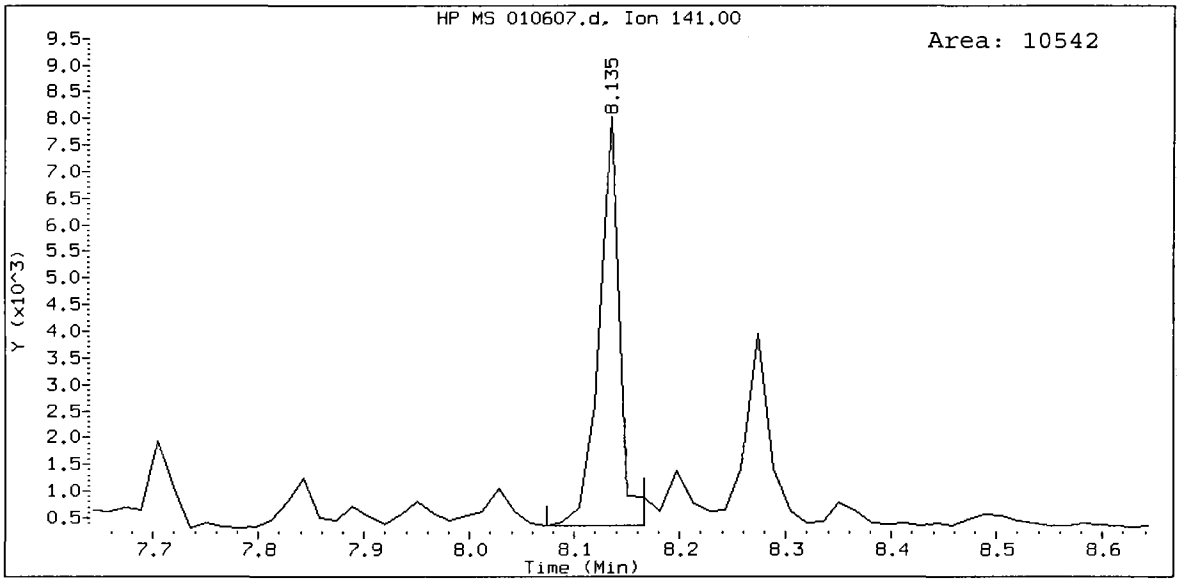


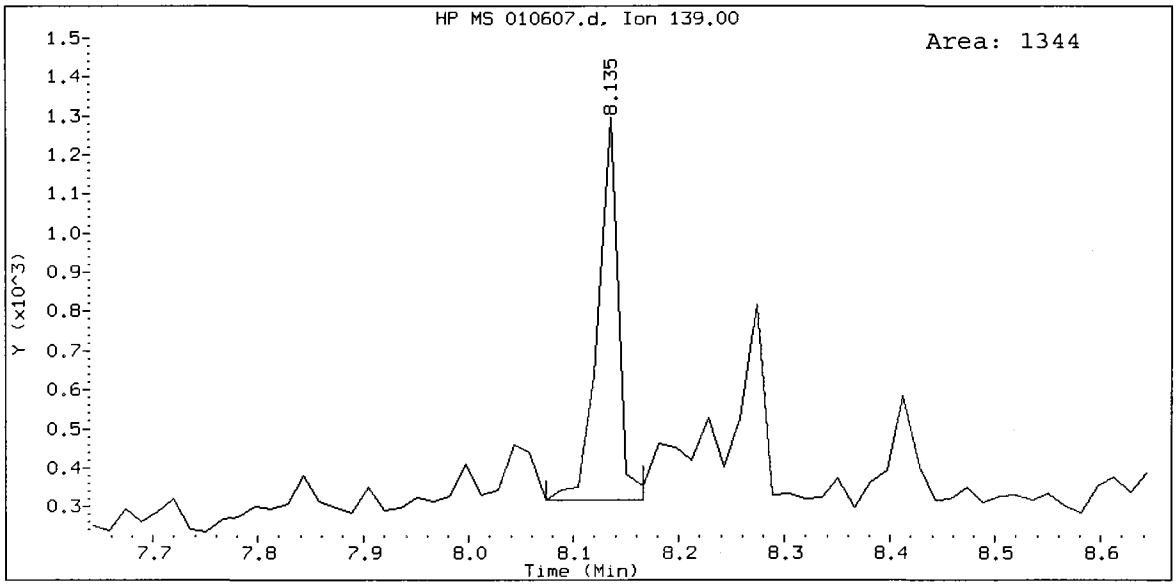




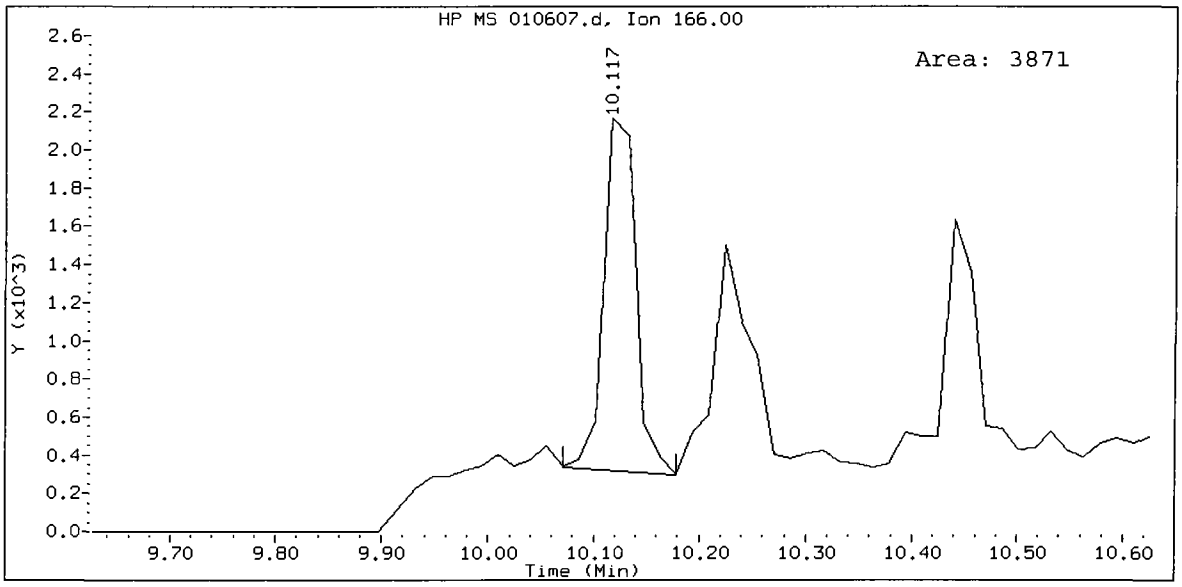
QD71A, /chem3/nt2.i/20100106.b/010607.d
2-Methylnaphthalene Amount: 24.09



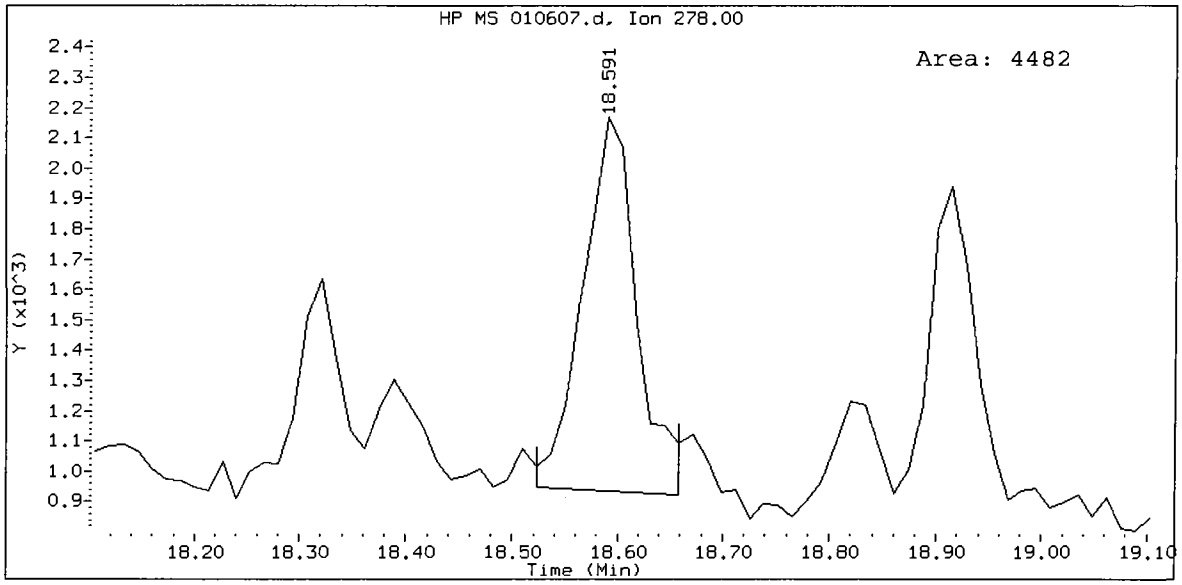




QD71A, /chem3/nt2.i/20100106.b/010607.d
Fluorene Amount: 9.15



QD71A, /chem3/nt2.i/20100106.b/010607.d
Dibenzo(a,h)anthracene Amount: 12.68



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 16:17
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**	**0.026**
91-57-6	**2-Methylnaphthalene**	**0.010**	**0.014**
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**	**0.062**
120-12-7	Anthracene	0.010	< 0.010 U
206-44-0	**Fluoranthene**	**0.010**	**0.10**
129-00-0	**Pyrene**	**0.010**	**0.12**
56-55-3	**Benzo(a)anthracene**	**0.010**	**0.024**
218-01-9	**Chrysene**	**0.010**	**0.068**
205-99-2	**Benzo(b)fluoranthene**	**0.010**	**0.044**
207-08-9	**Benzo(k)fluoranthene**	**0.010**	**0.033**
50-32-8	**Benzo(a)pyrene**	**0.010**	**0.030**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**0.010**	**0.027**
53-70-3	Dibenz(a,h)anthracene	0.010	< 0.010 U
191-24-2	**Benzo(g,h,i)perylene**	**0.010**	**0.051**
132-64-9	Dibenzofuran	0.010	< 0.010 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	68.0%
d14-Dibenzo(a,h)anthracene	64.0%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010608.d
Lab Smp Id: QD71B Client Smp ID: CB4857123109COMP
Inj Date : 06-JAN-2010 16:17
Operator : VTS Inst ID: nt2.i
Smp Info : QD71B
Misc Info : 10-15
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 06-Jan-2010 14:37 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	7.258	7.260	(1.000)	144398	200.000	
5 Naphthalene	128	7.273	7.275	(1.002)	17867	25.6961	25.7
$ 6 2-Methylnaphthalene-d10	152	8.104	8.106	(1.117)	75758	203.696	204
7 2-Methylnaphthalene	142	8.135	8.137	(1.121)	5515	13.6009	13.6(M)
8 1-Methylnaphthalene	142	8.273	8.275	(1.140)	3999	9.47550	9.48
10 Acenaphthylene	152	9.279	9.280	(0.980)	4299	6.80413	6.80
* 11 Acenaphthene-d10	164	9.473	9.473	(1.000)	79839	200.000	
12 Acenaphthene	153	Compound Not Detected.					
14 Dibenzofuran	168	9.705	9.705	(1.024)	3039	5.94957	5.95(M)
15 Fluorene	166	10.132	10.131	(1.070)	2697	6.38705	6.39
* 18 Phenanthrene-d10	188	11.302	11.301	(1.000)	115276	200.000	
19 Phenanthrene	178	11.332	11.332	(1.003)	35344	61.6856	61.7
20 Anthracene	178	11.394	11.393	(1.008)	3371	5.75759	5.76
24 Fluoranthene	202	12.816	12.827	(1.134)	62700	100.470	100
25 Pyrene	202	13.102	13.112	(1.159)	75090	118.534	119

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.594	14.594	(0.998)	10982	23.6646	23.7
*	29 Chrysene-d12	240	14.616	14.616	(1.000)	92980	200.000	
	30 Chrysene	228	14.649	14.649	(1.002)	30947	67.5908	67.6
	32 Benzo(b)fluoranthene	252	15.980	15.979	(0.964)	22121	44.3019	44.3
	33 Benzo(k)fluoranthene	252	16.003	16.010	(0.966)	17739	32.7203	32.7(M)
	34 Benzo(a)pyrene	252	16.475	16.475	(0.994)	11845	30.2758	30.3(M)
*	35 Perylene-d12	264	16.568	16.568	(1.000)	87153	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	18.590	18.590	(1.122)	12067	26.6160	26.6(M)
$	36 Dibenzo(a,h)anthracene-d14	292	18.522	18.523	(1.118)	50718	191.990	192
	38 Dibenzo(a,h)anthracene	278	18.590	18.604	(1.122)	3024	8.52742	8.53(M)
	39 Benzo(g,h,i)perylene	276	19.183	19.197	(1.158)	20033	51.2430	51.2

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: 010608.d
Lab Smp Id: QD71B
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-15

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: CB4857123109COMP
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	144398	-16.59
11 Acenaphthene-d10	96677	48338	193354	79839	-17.42
18 Phenanthrene-d10	147750	73875	295500	115276	-21.98
29 Chrysene-d12	135219	67610	270438	92980	-31.24
35 Perylene-d12	125815	62908	251630	87153	-30.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.26	-0.02
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	0.00
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.01
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.00
35 Perylene-d12	16.57	16.07	17.07	16.57	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: QD71B
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-15

Client SDG: QD71
Fraction: SV
Client Smp ID: CB4857123109COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

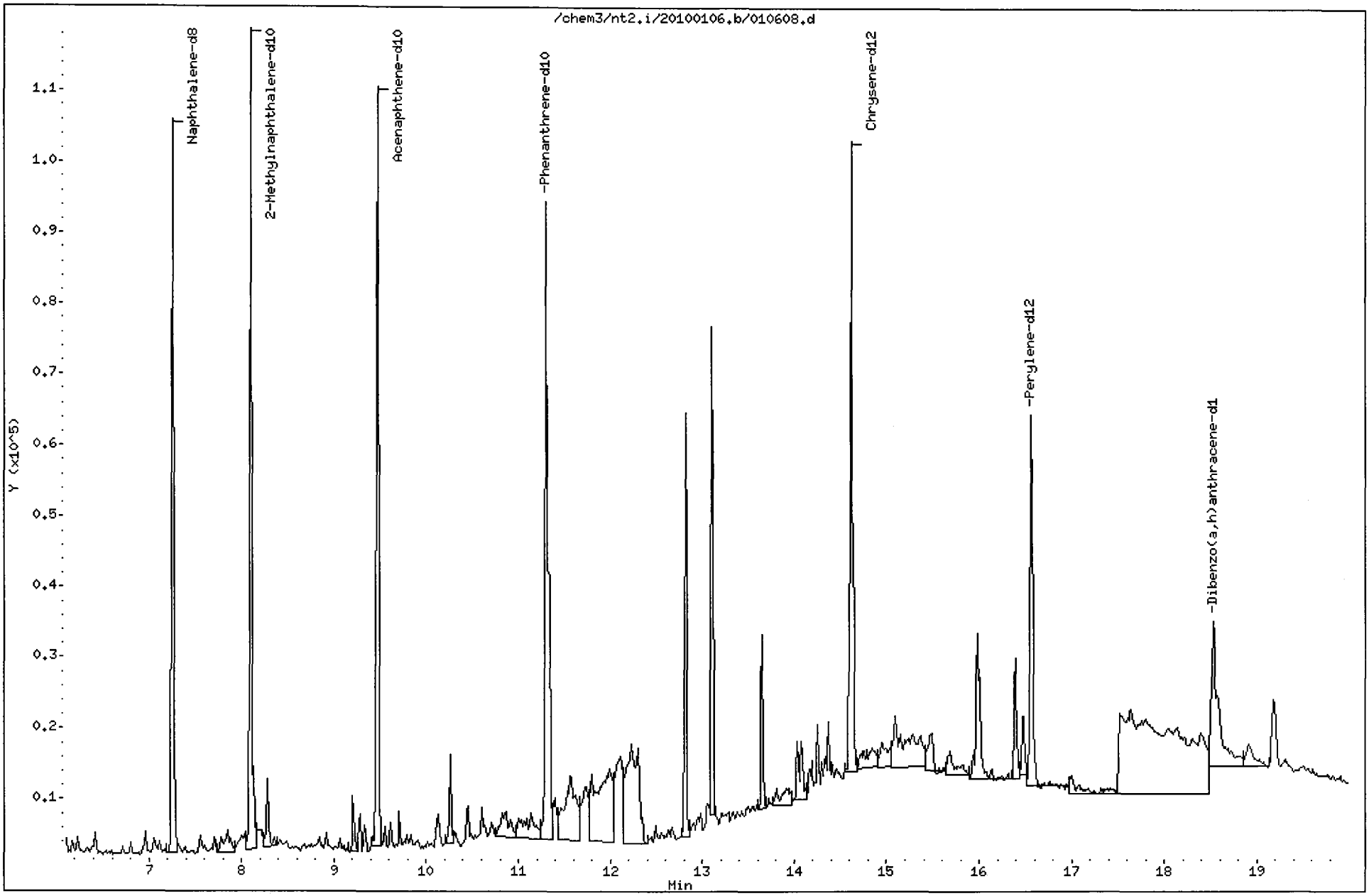
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	204	67.90	31-109
$ 36 Dibenzo(a,h)anthra	300	192	64.00	10-133

Data File: /chem3/nt2.i/20100106.b/010608.d
Date : 06-JAN-2010 16:17
Client ID: CB4857123109COMP
Sample Info: QD71B
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25

QD71 : 00108



Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

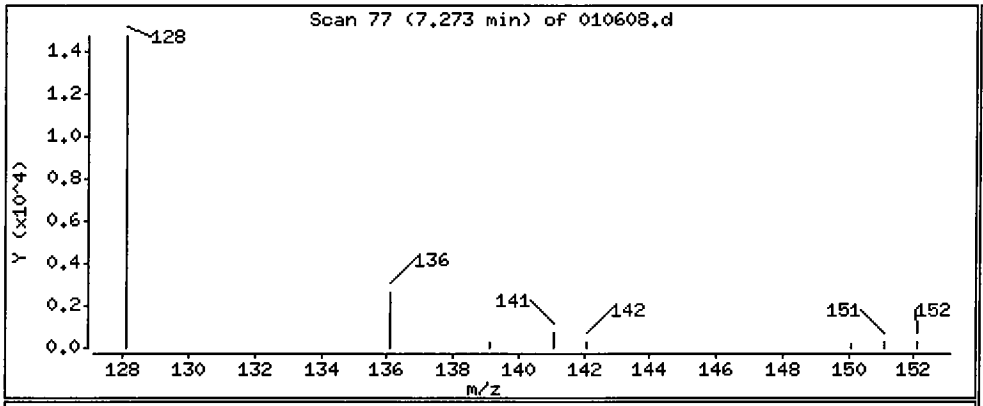
Operator: VTS

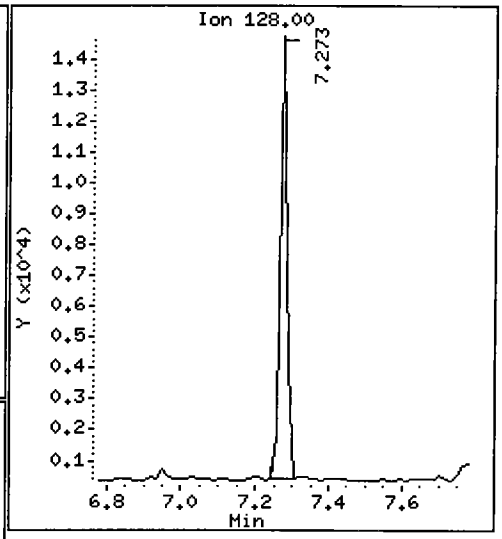
Column phase: ZB-5

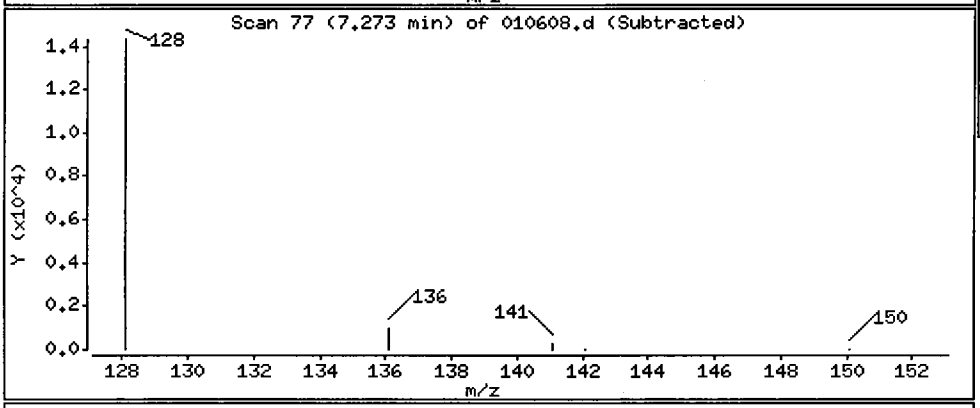
Column diameter: 0.25

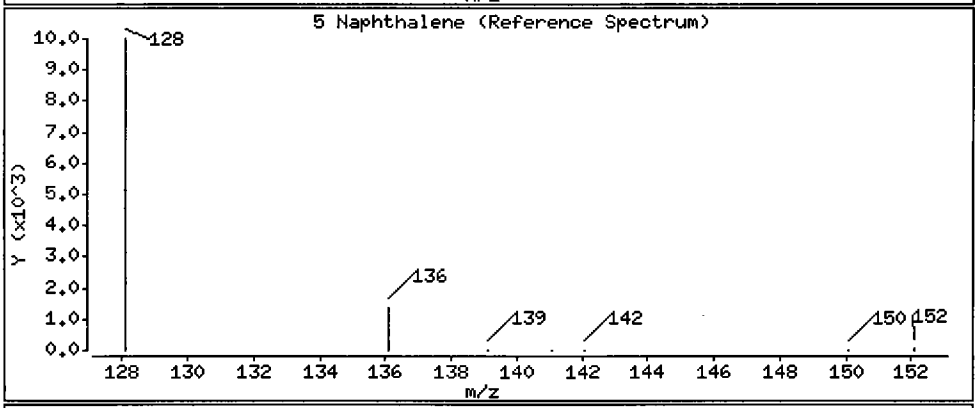
5 Naphthalene

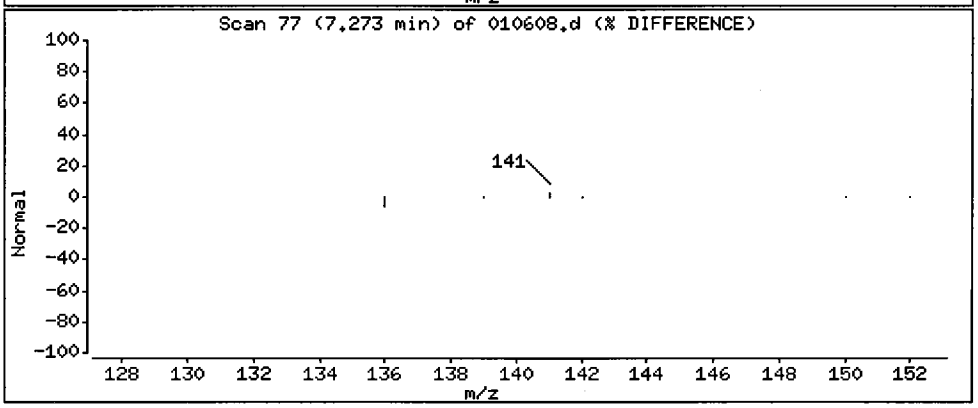
Concentration: 25.7 ug/L











Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

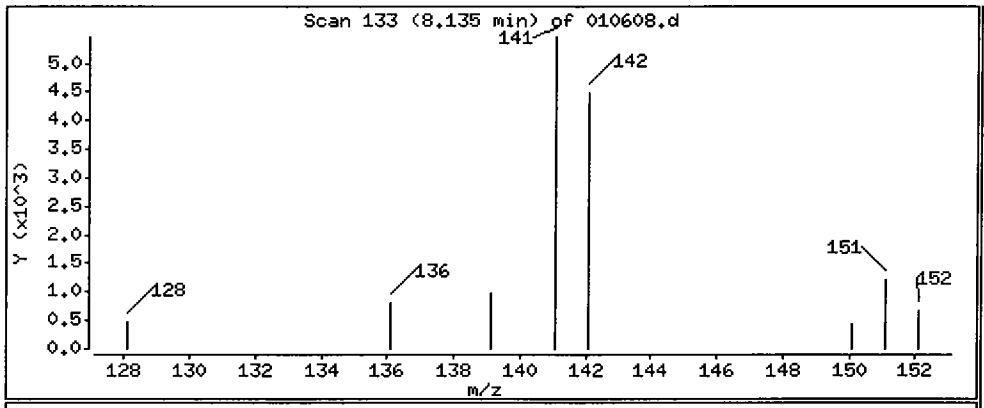
Operator: VTS

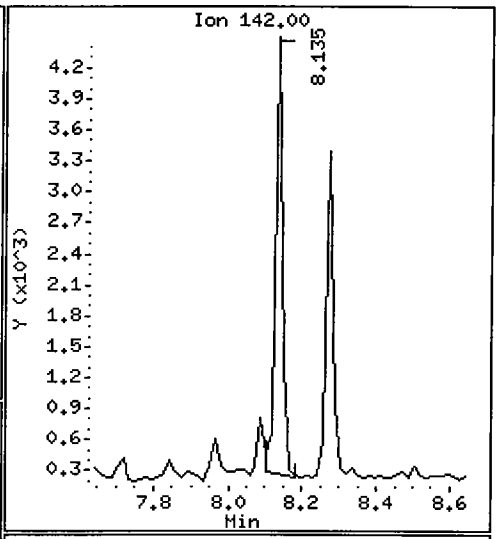
Column phase: ZB-5

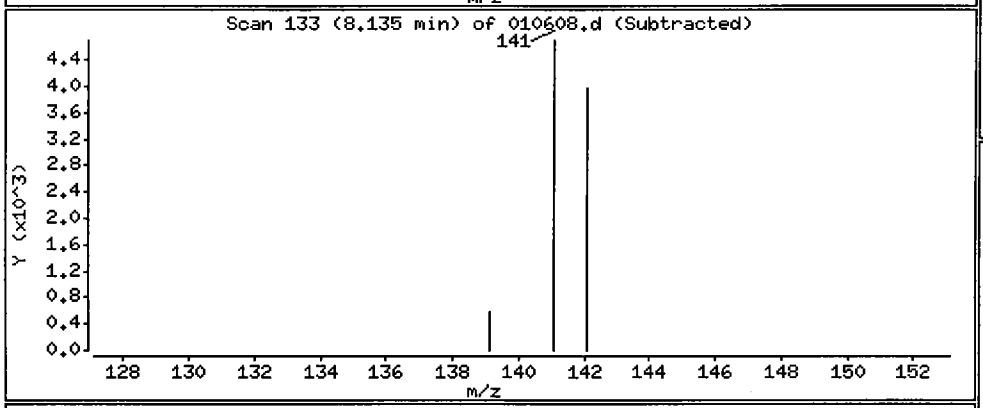
Column diameter: 0.25

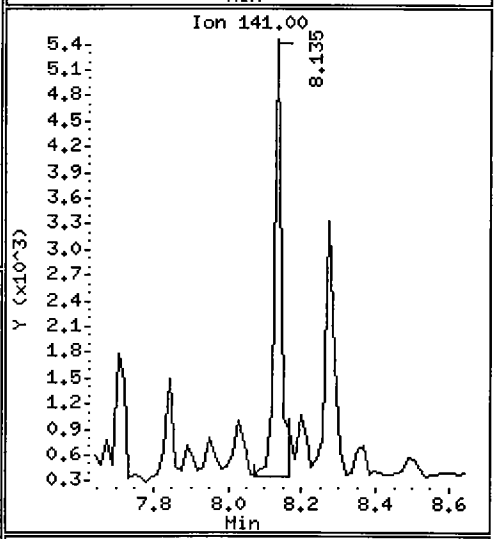
7 2-Methylnaphthalene

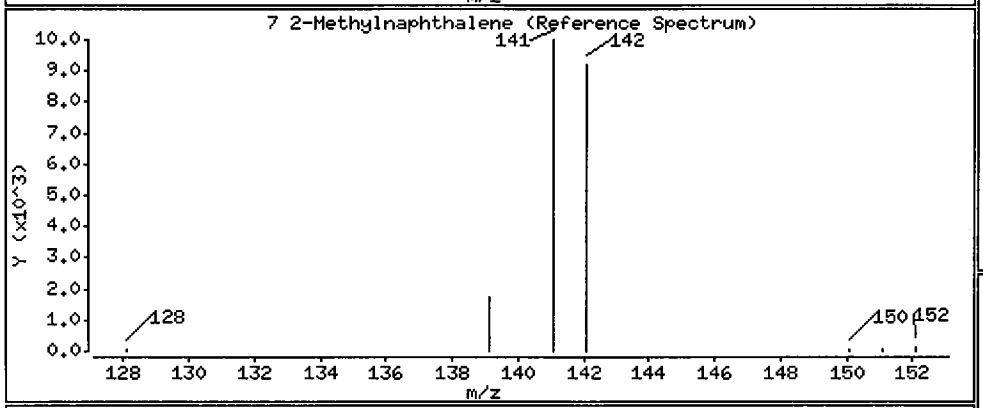
Concentration: 13.6 ug/L

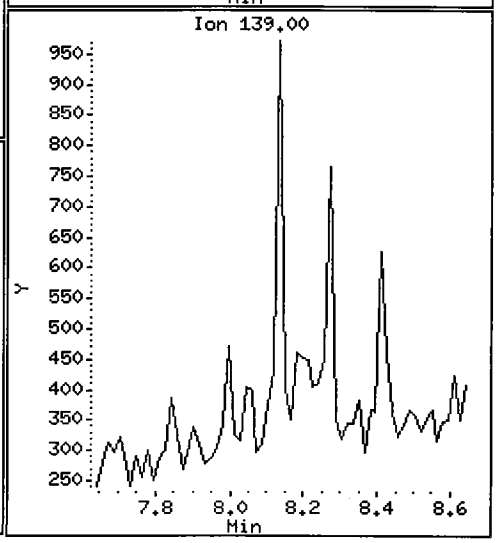


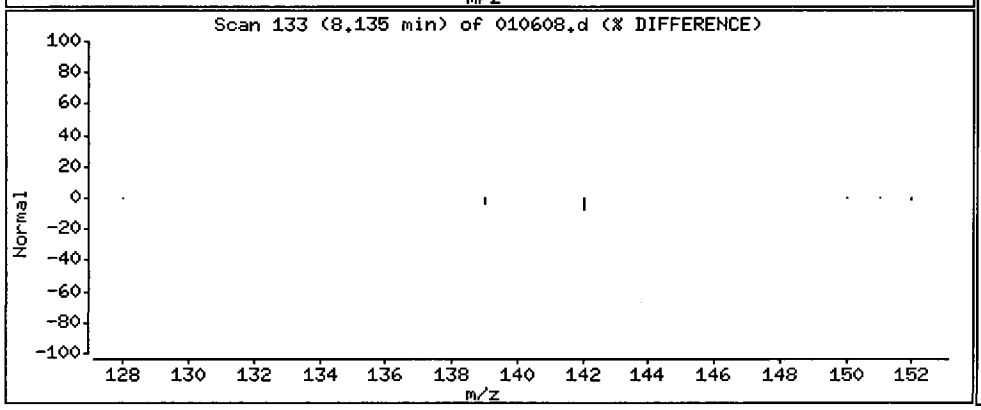












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

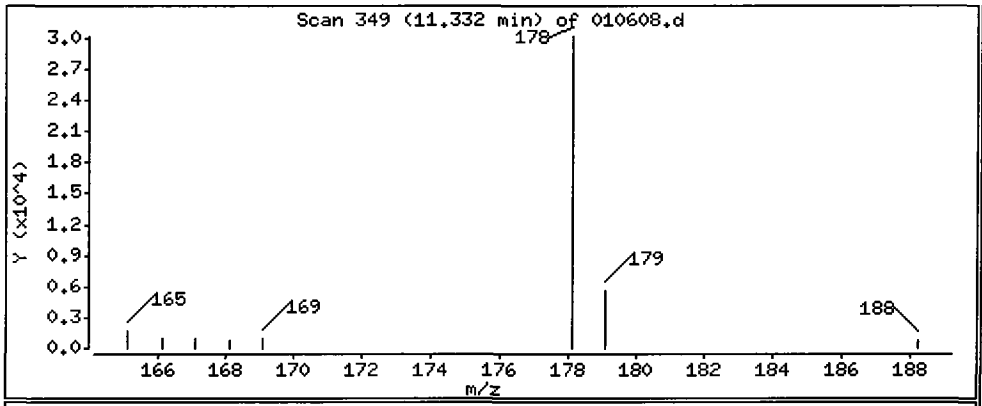
Operator: VTS

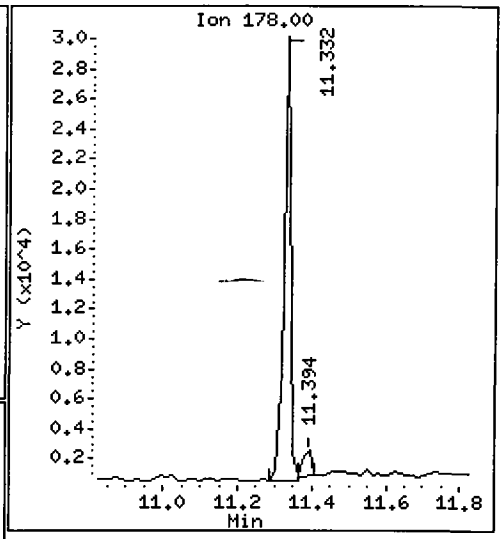
Column phase: ZB-5

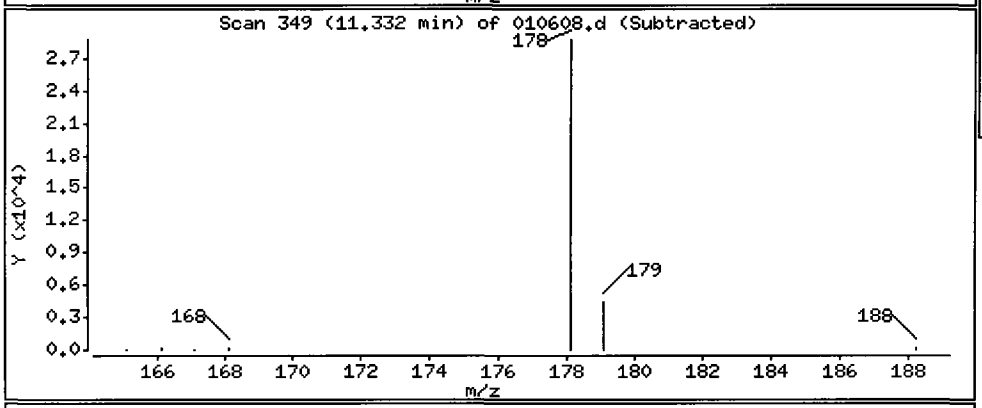
Column diameter: 0.25

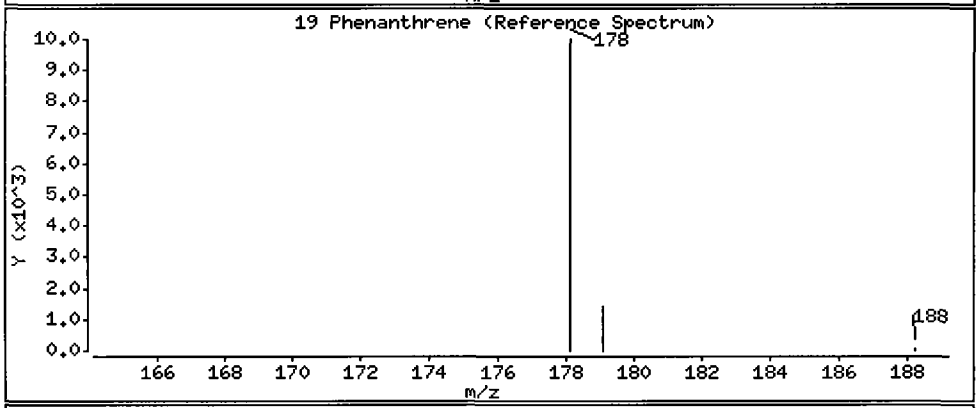
19 Phenanthrene

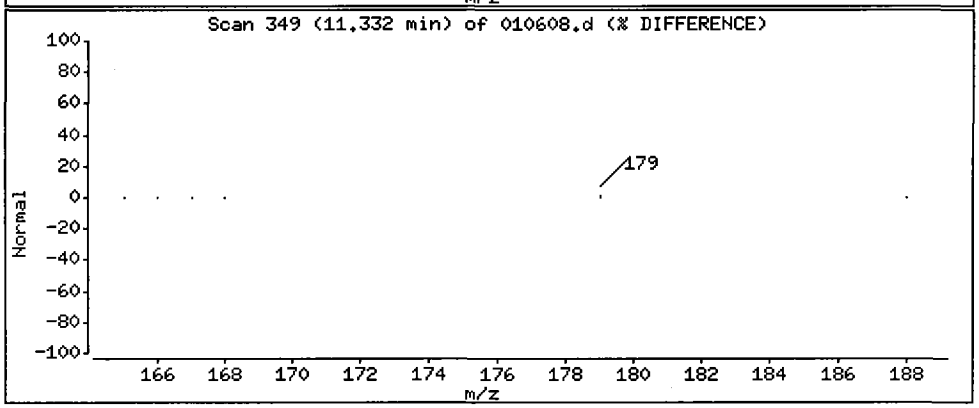
Concentration: 61.7 ug/L











Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

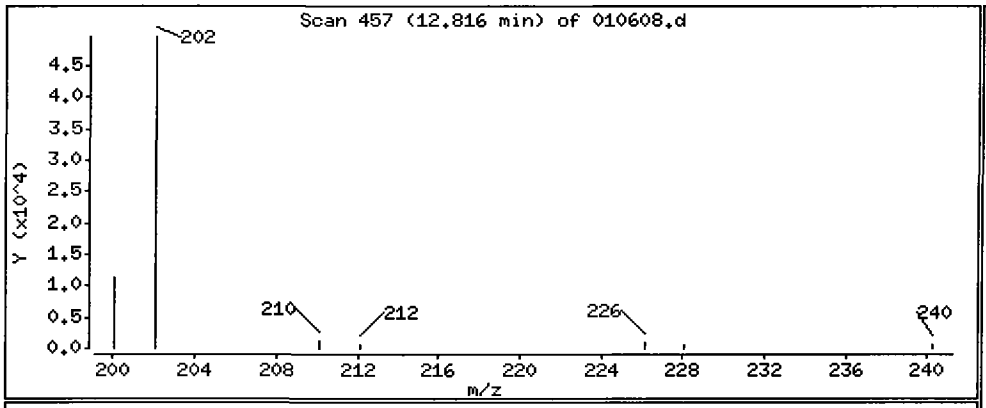
Operator: VTS

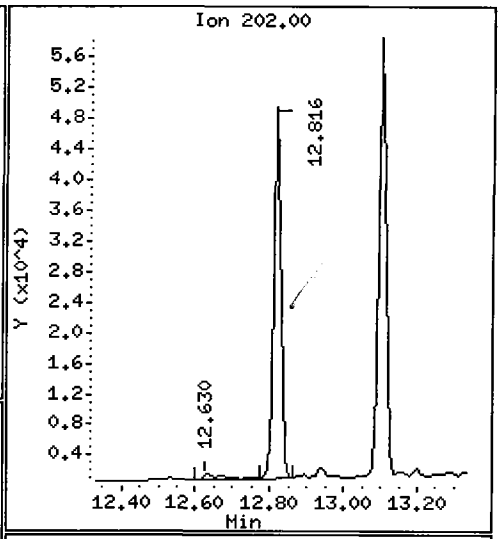
Column phase: ZB-5

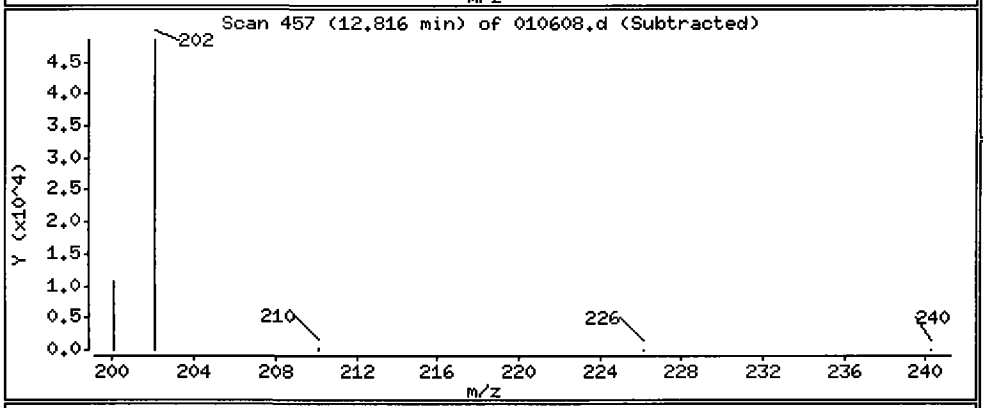
Column diameter: 0.25

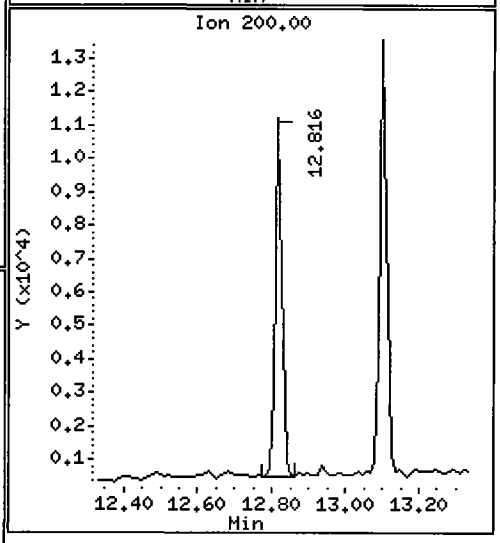
24 Fluoranthene

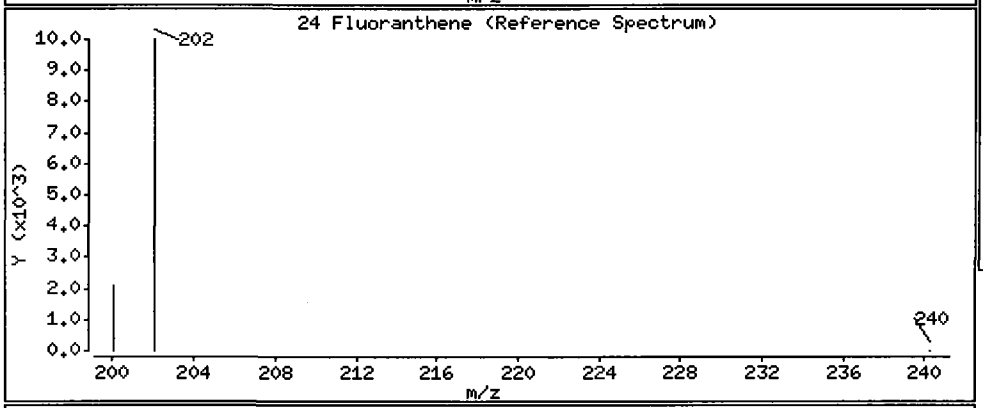
Concentration: 100 ug/L

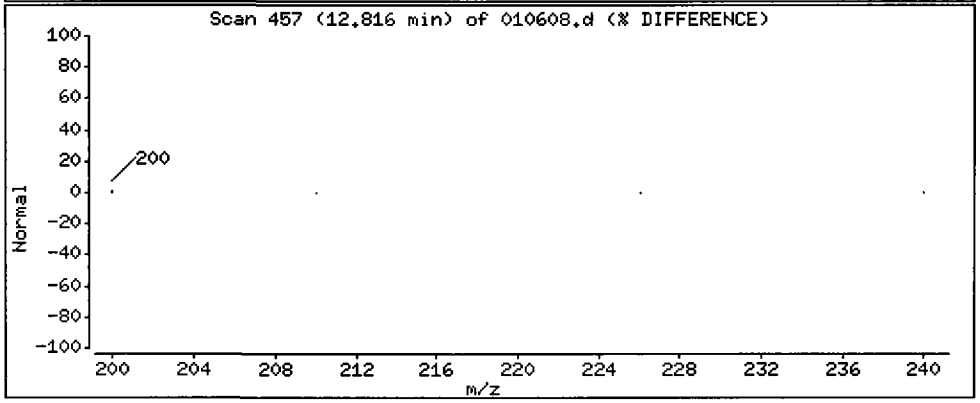












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

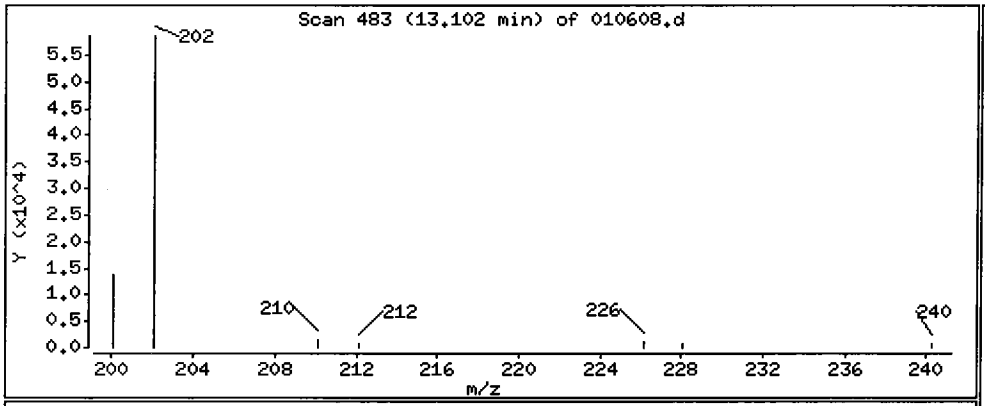
Operator: VTS

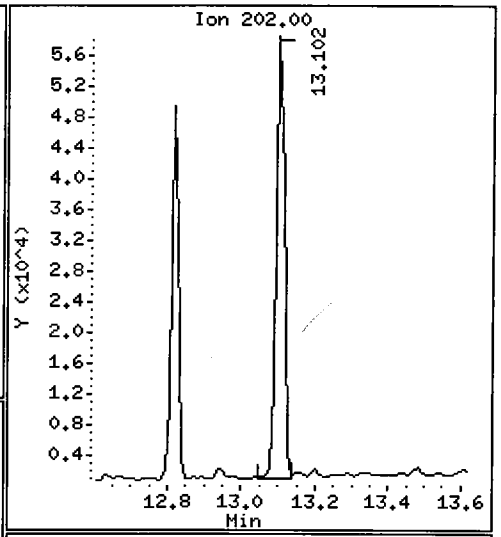
Column phase: ZB-5

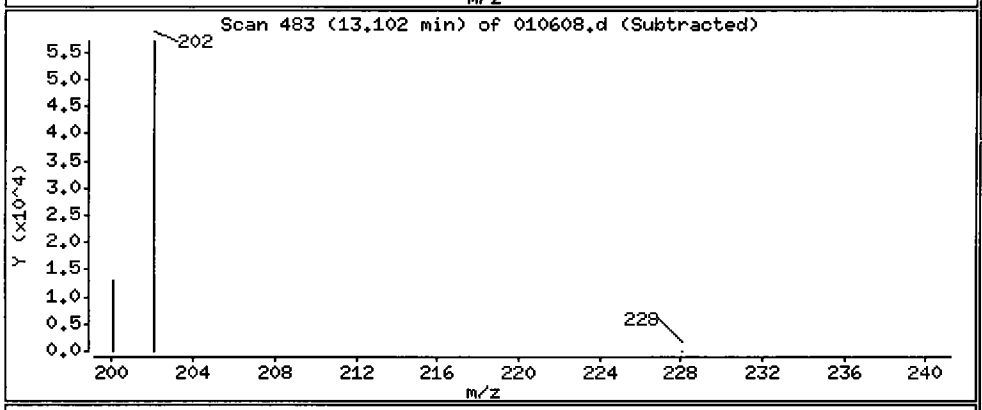
Column diameter: 0.25

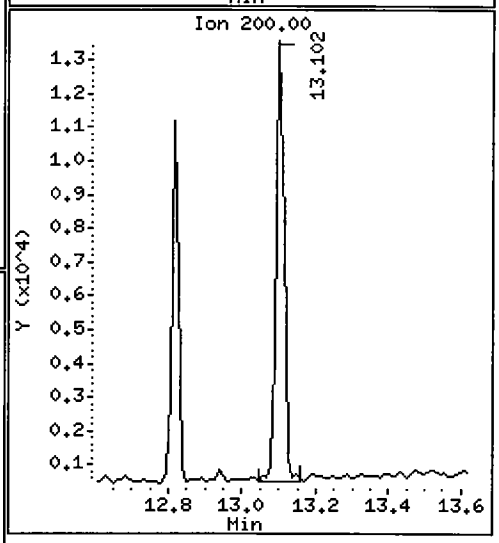
25 Pyrene

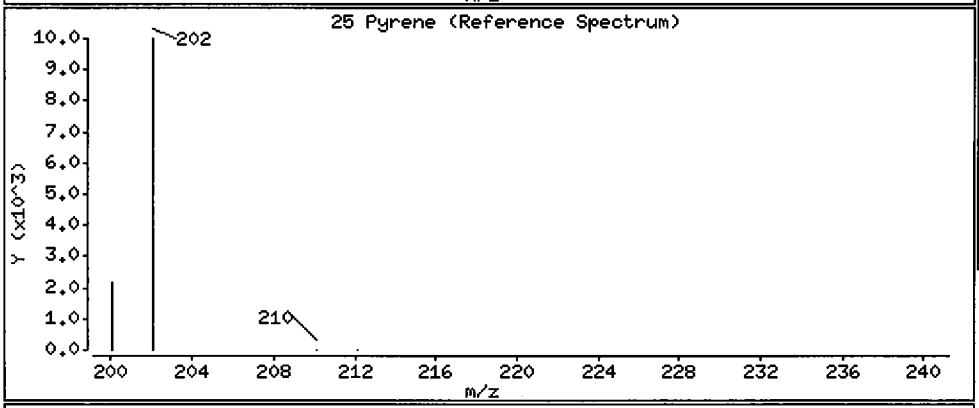
Concentration: 119 ug/L

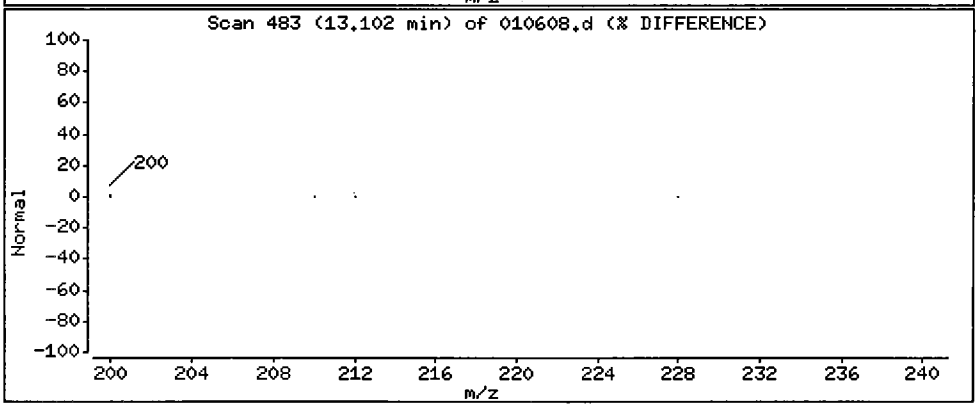












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

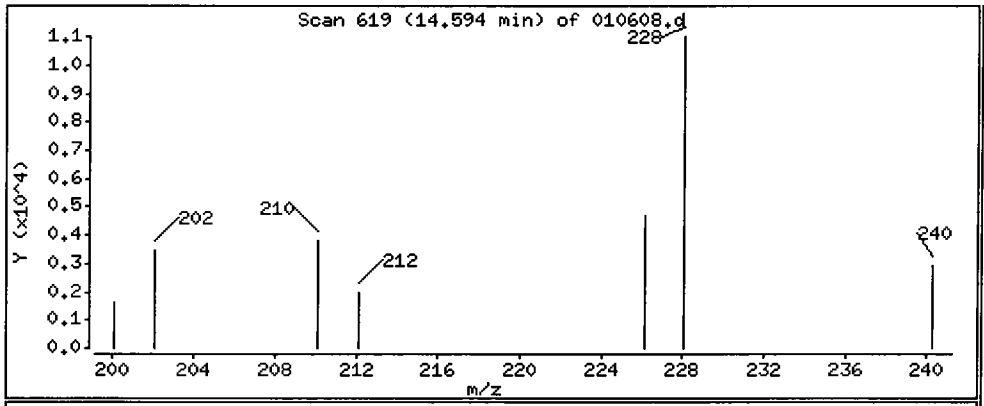
Operator: VTS

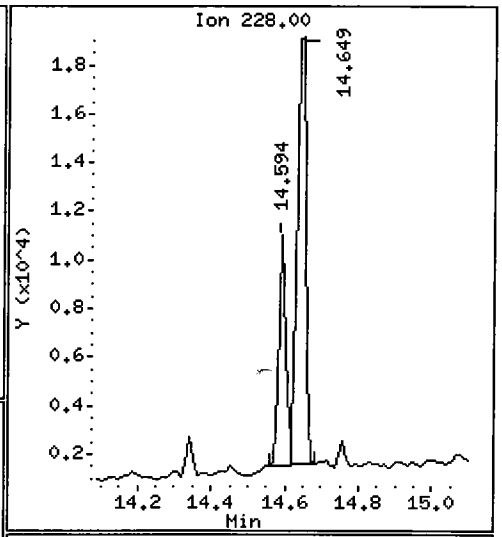
Column phase: ZB-5

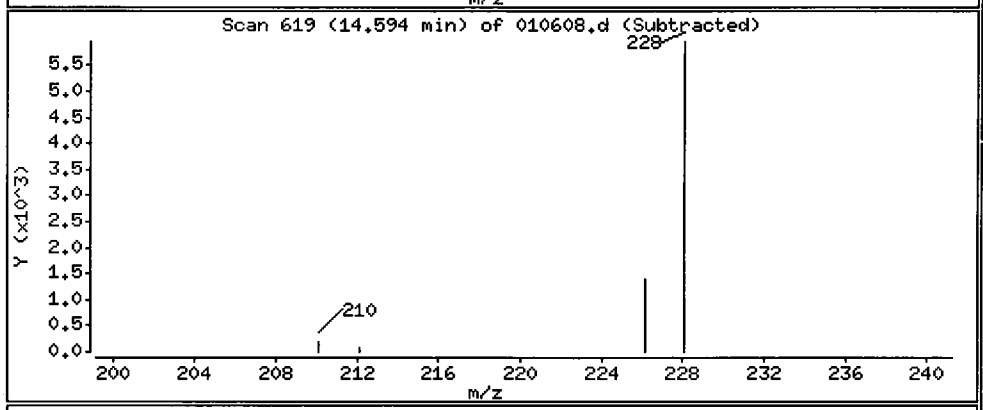
Column diameter: 0.25

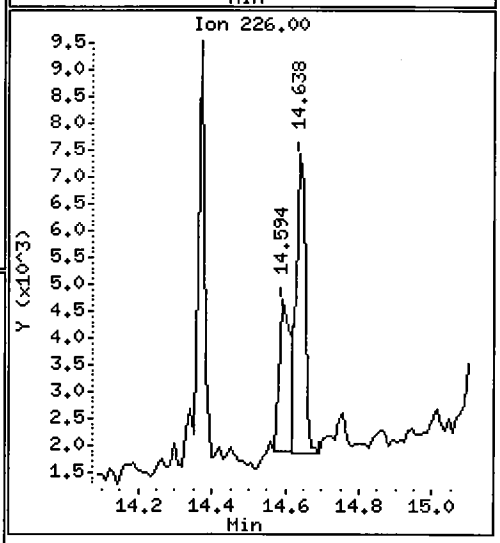
28 Benzo(a)anthracene

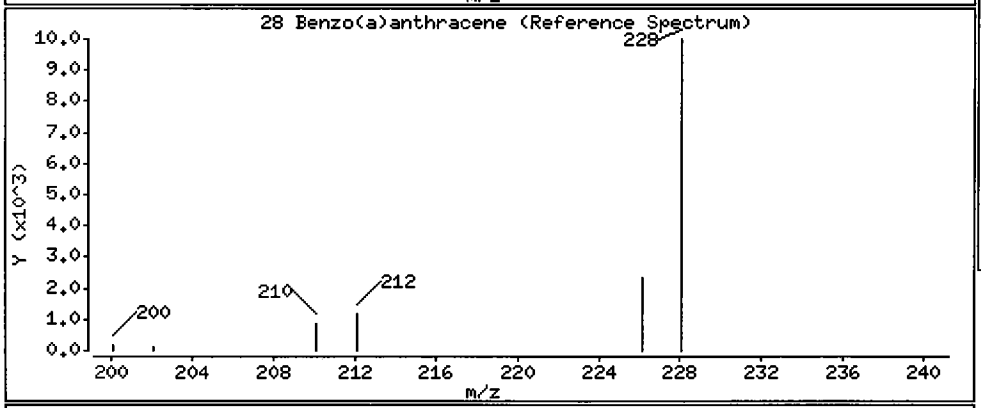
Concentration: 23.7 ug/L

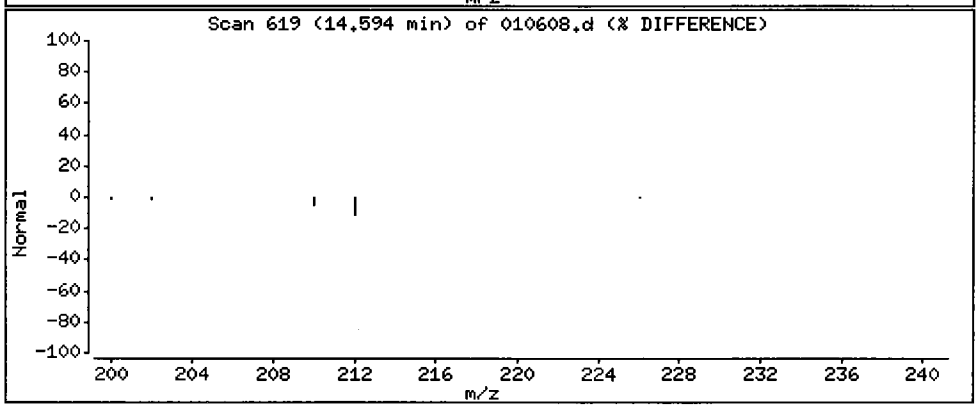












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

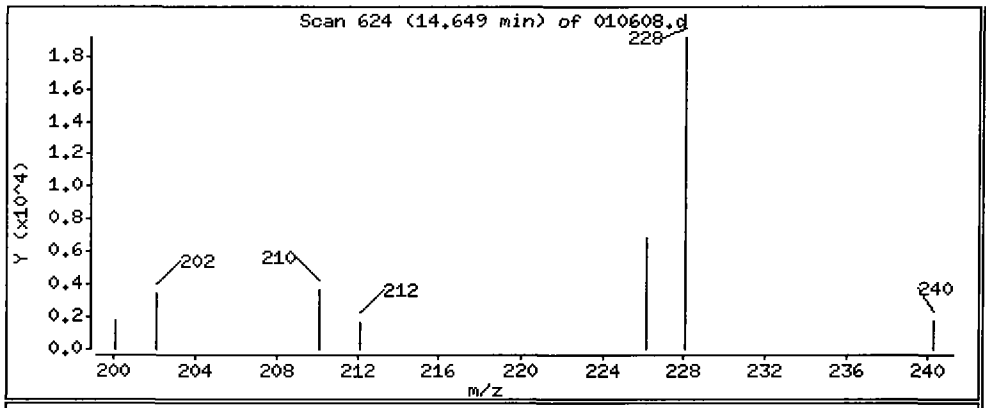
Operator: VTS

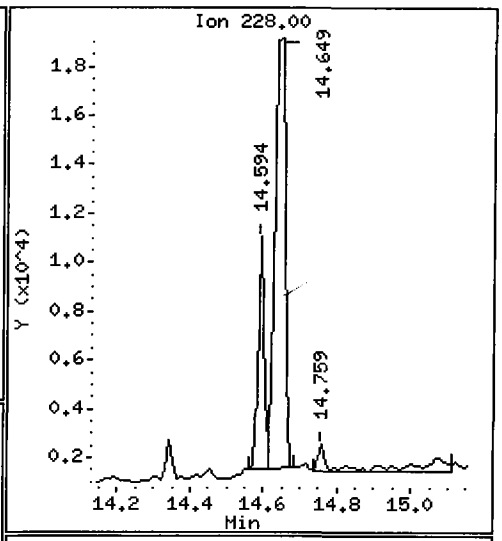
Column phase: ZB-5

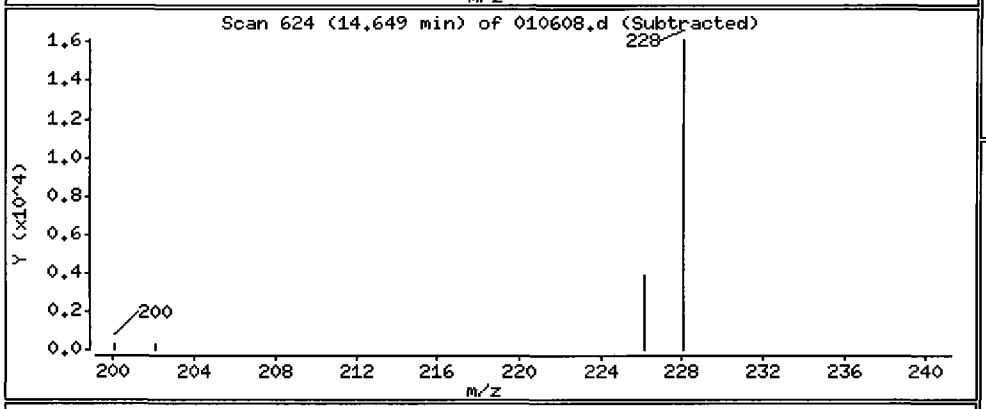
Column diameter: 0.25

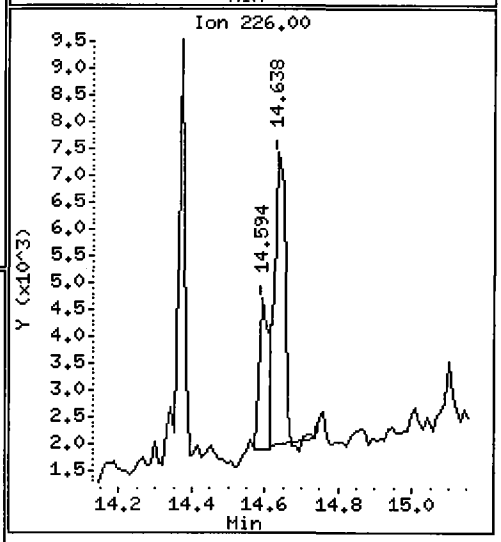
30 Chrysene

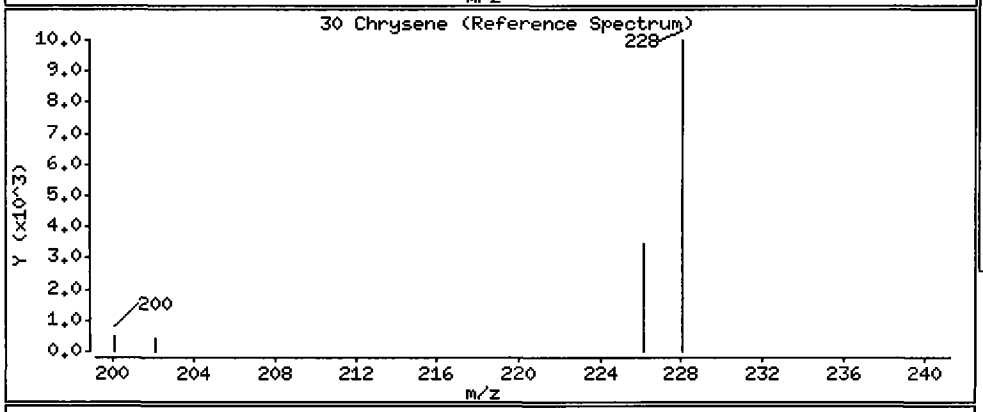
Concentration: 67.6 ug/L

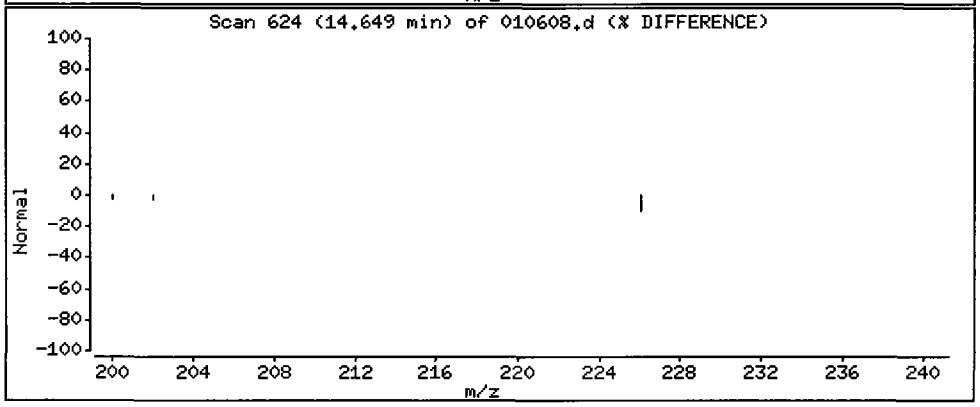












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

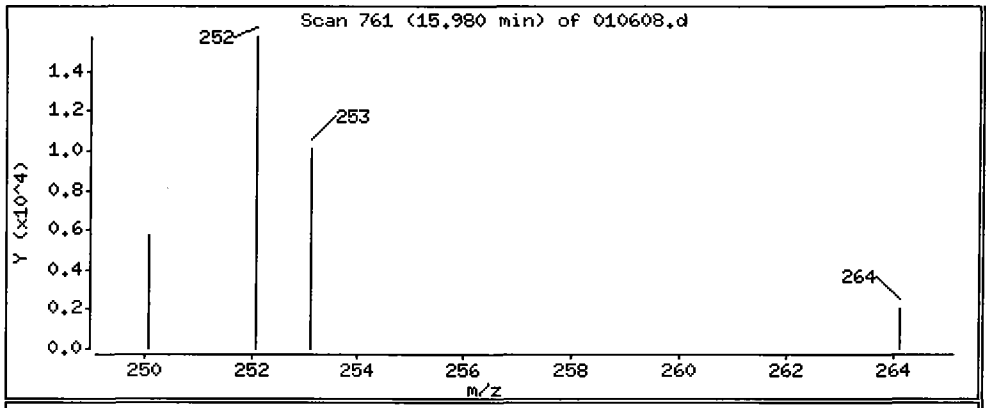
Operator: VTS

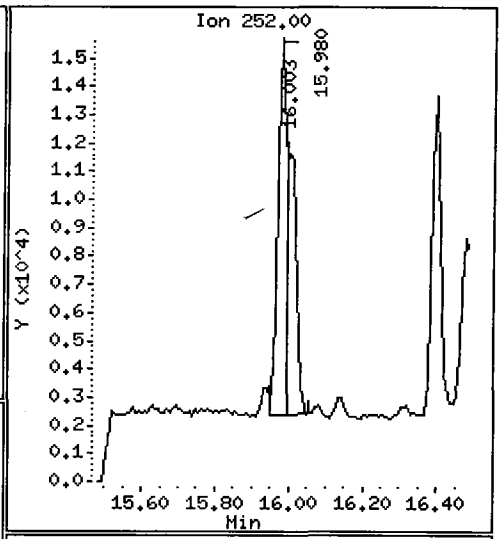
Column phase: ZB-5

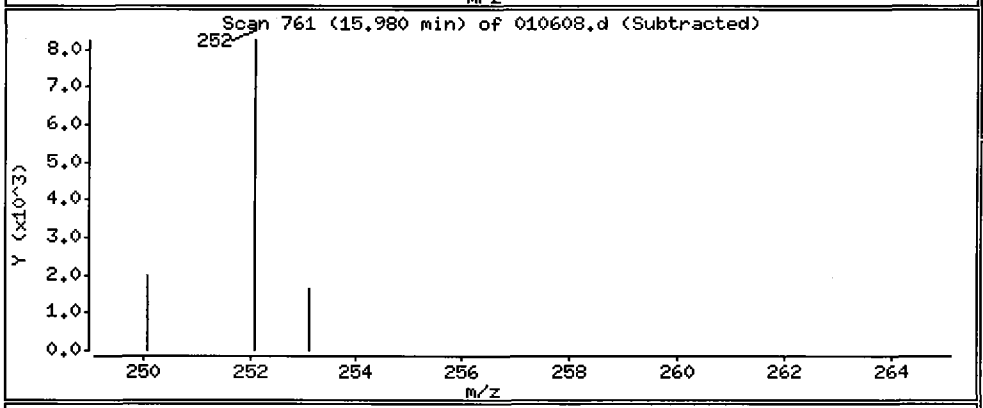
Column diameter: 0.25

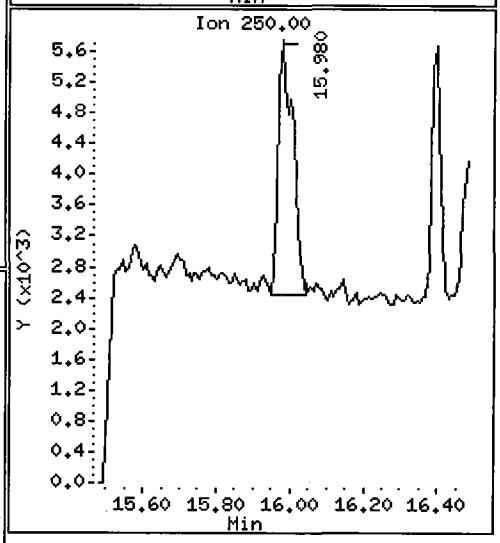
32 Benzo(b)fluoranthene

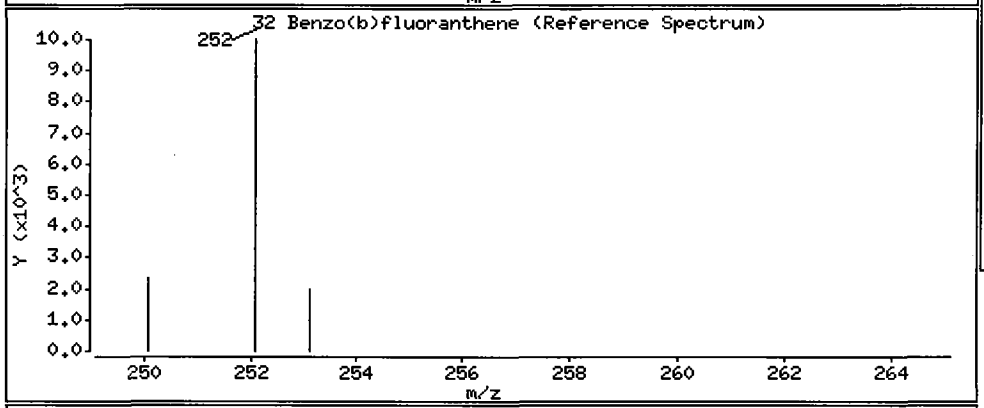
Concentration: 44.3 ug/L

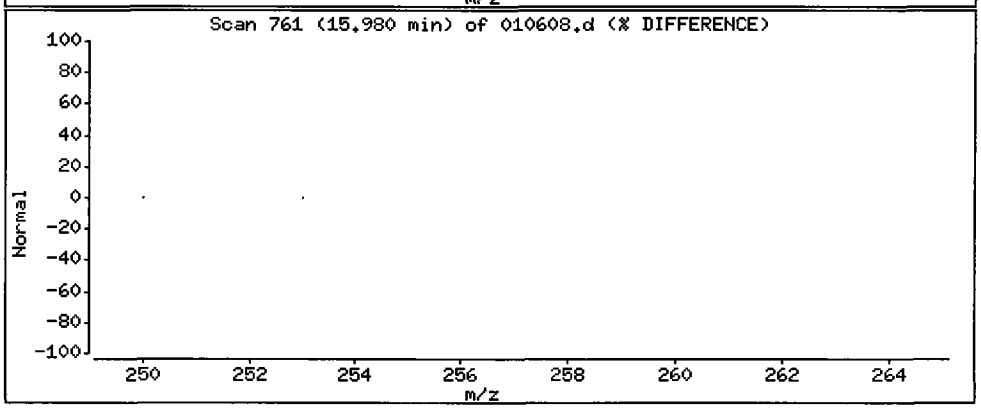












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

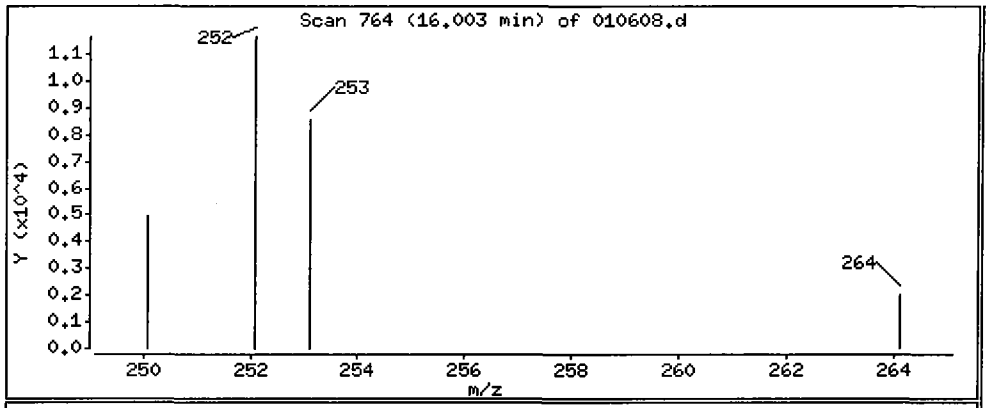
Operator: VTS

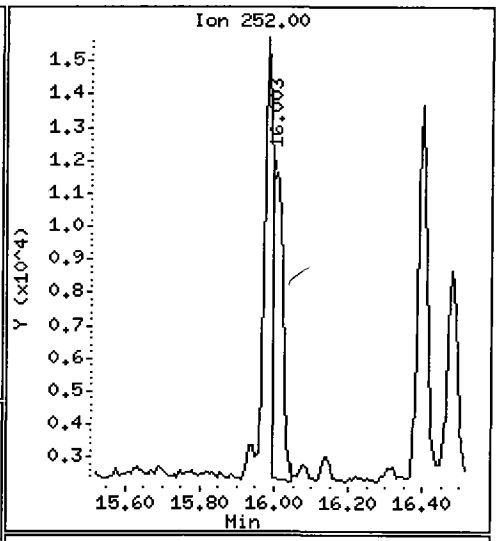
Column phase: ZB-5

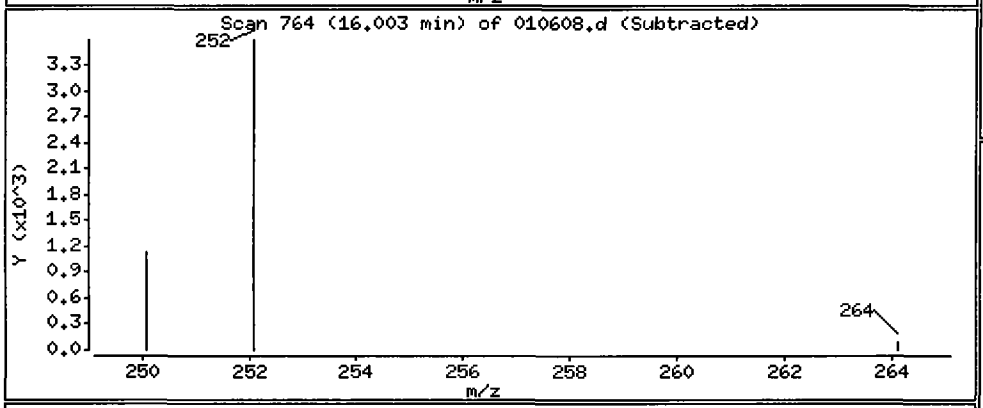
Column diameter: 0.25

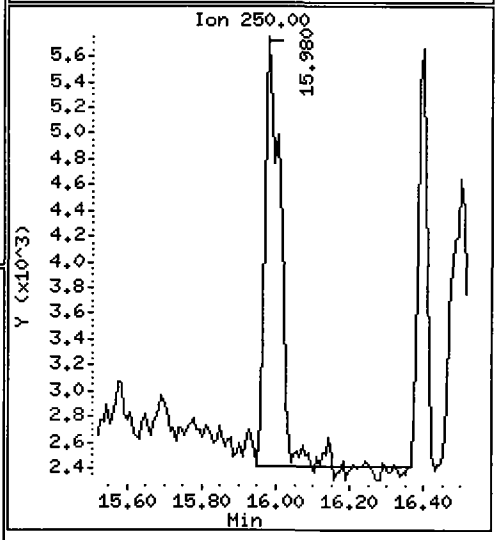
33 Benzo(k)fluoranthene

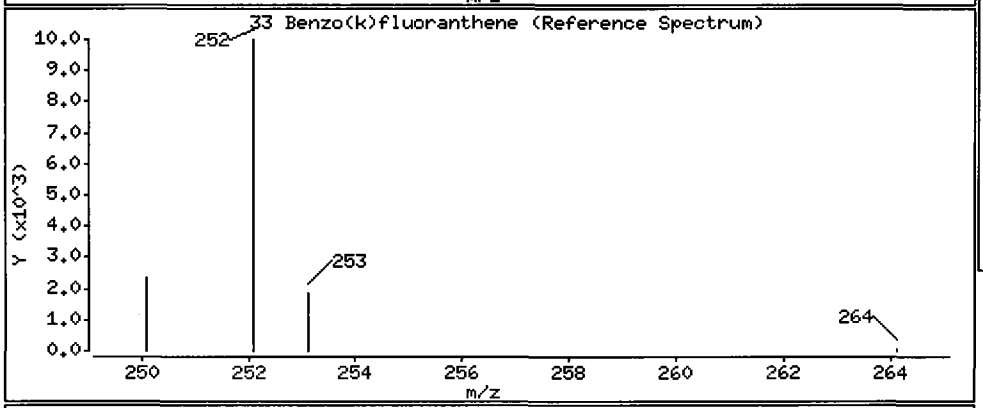
Concentration: 32.7 ug/L

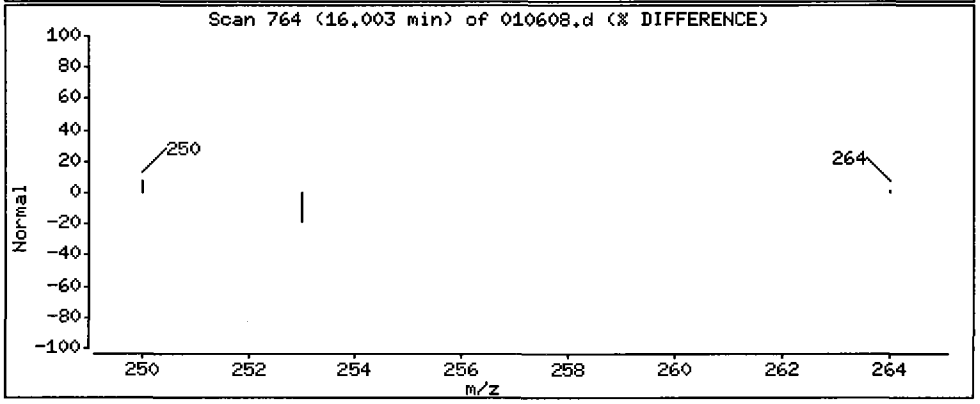












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

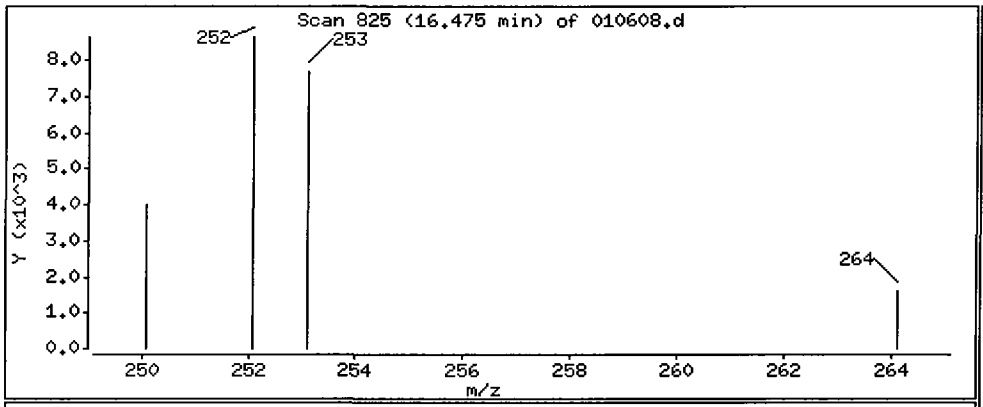
Operator: VTS

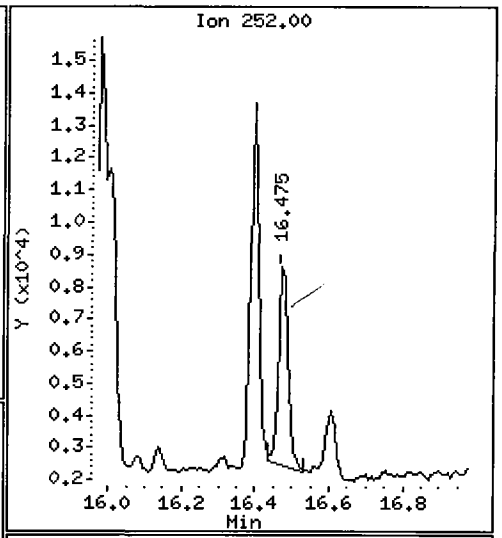
Column phase: ZB-5

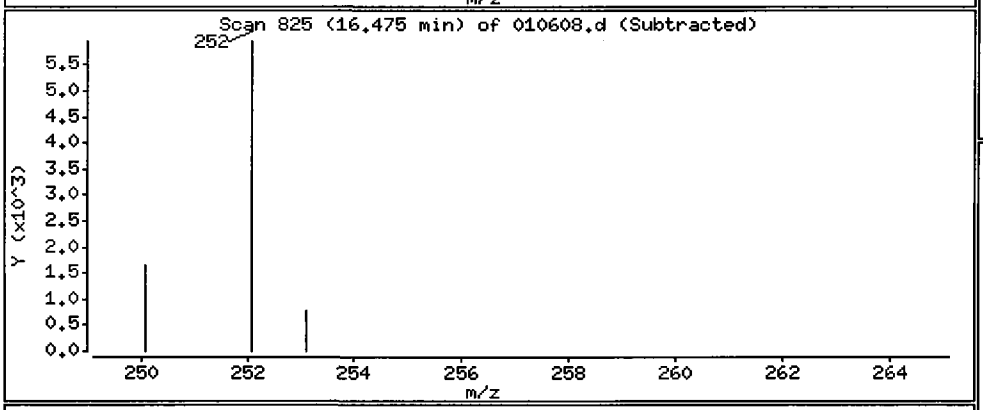
Column diameter: 0.25

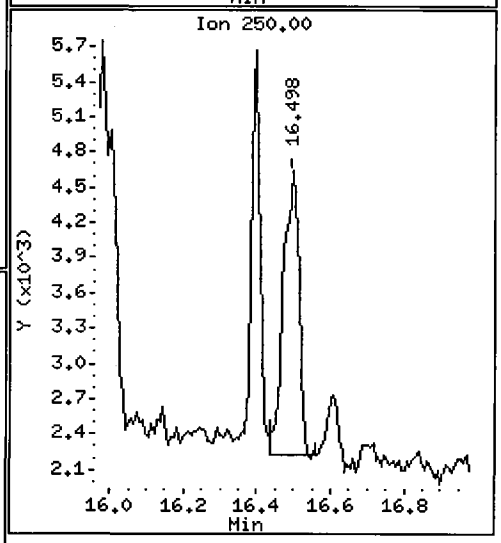
34 Benzo(a)pyrene

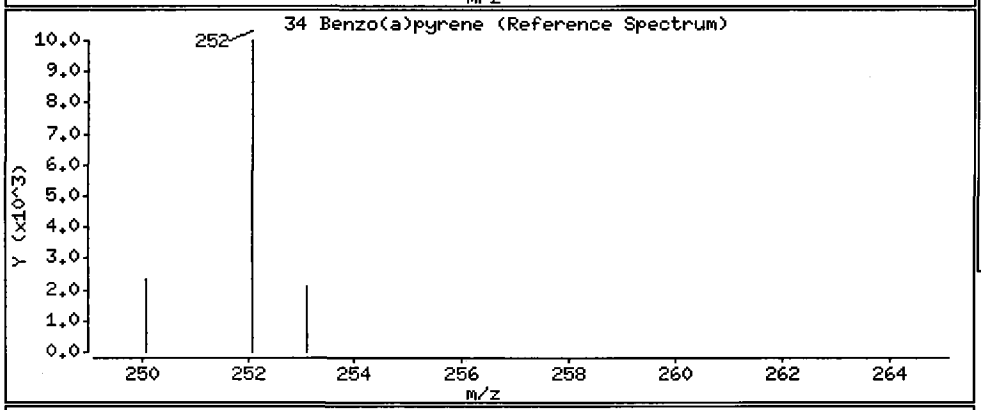
Concentration: 30.3 ug/L

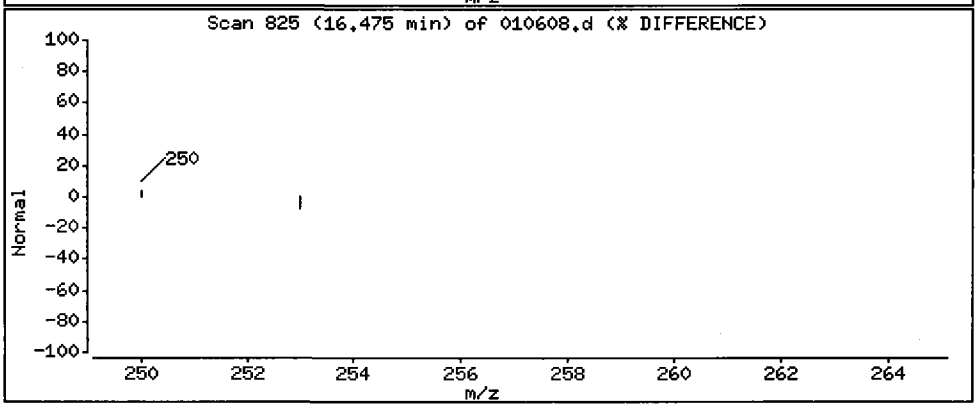












Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

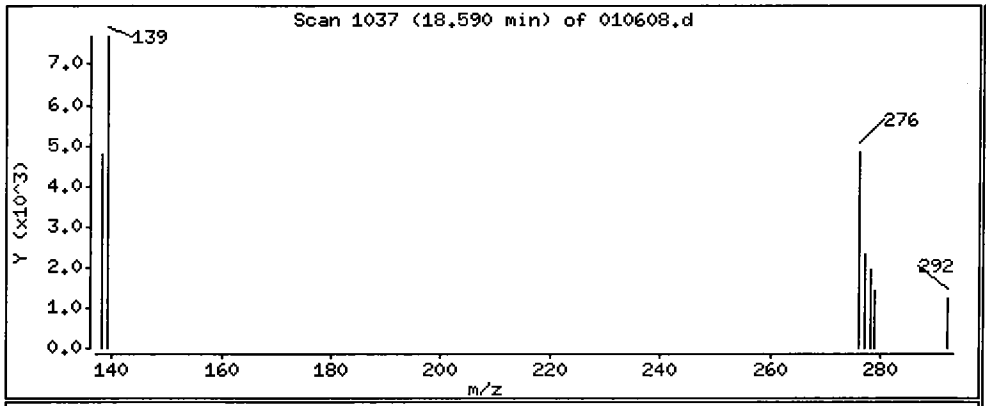
Operator: VTS

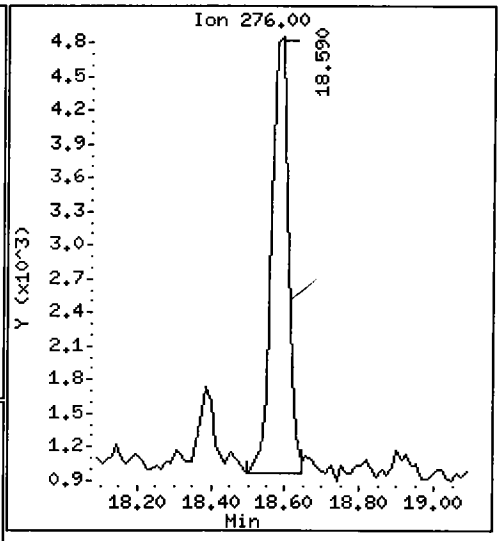
Column phase: ZB-5

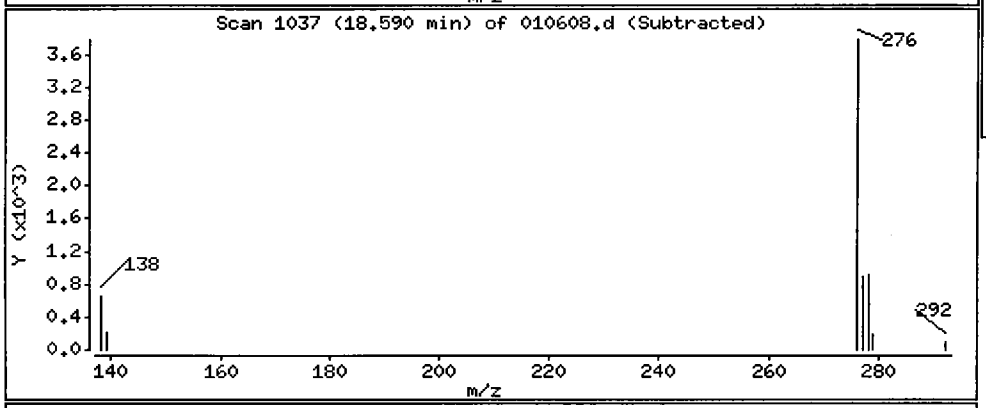
Column diameter: 0.25

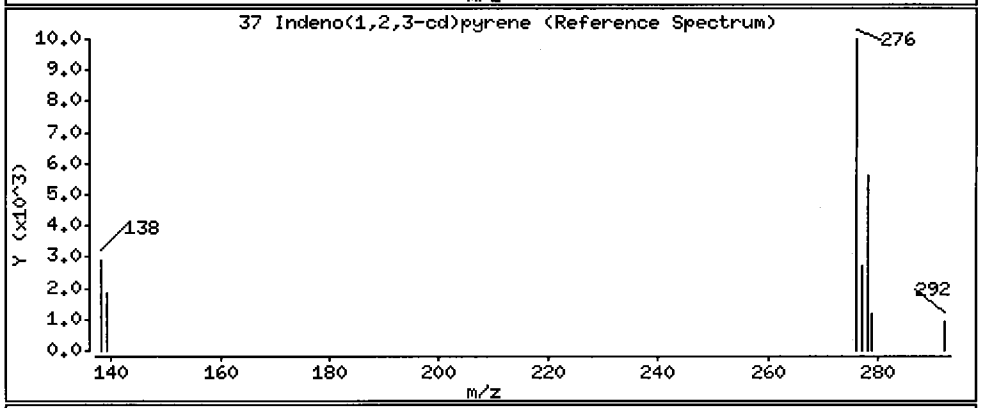
37 Indeno(1,2,3-cd)pyrene

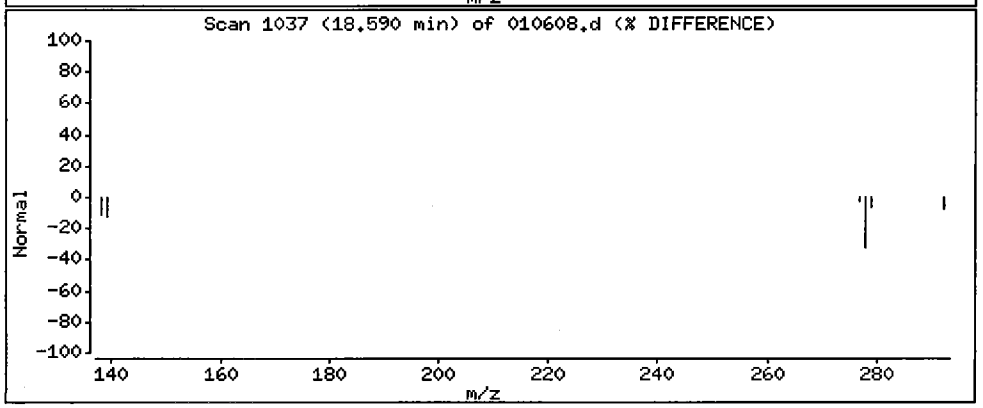
Concentration: 26.6 ug/L











Data File: /chem3/nt2.i/20100106.b/010608.d

Date : 06-JAN-2010 16:17

Client ID: CB4857123109COMP

Instrument: nt2.i

Sample Info: QD71B

Volume Injected (uL): 2.0

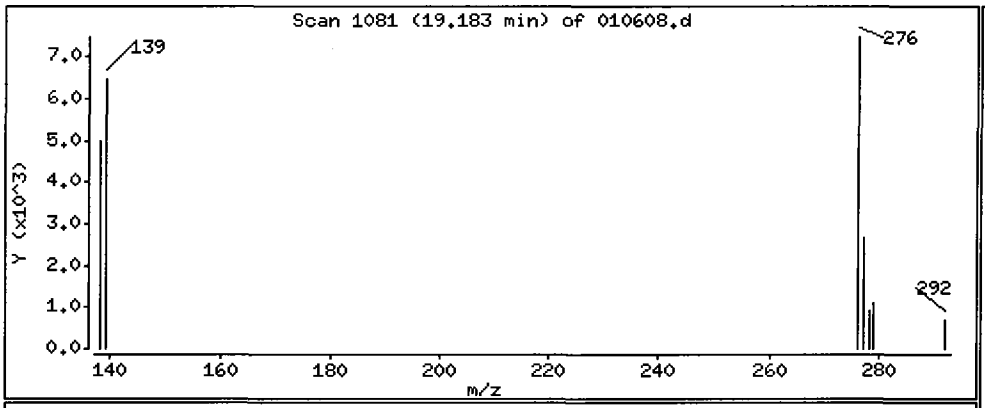
Operator: VTS

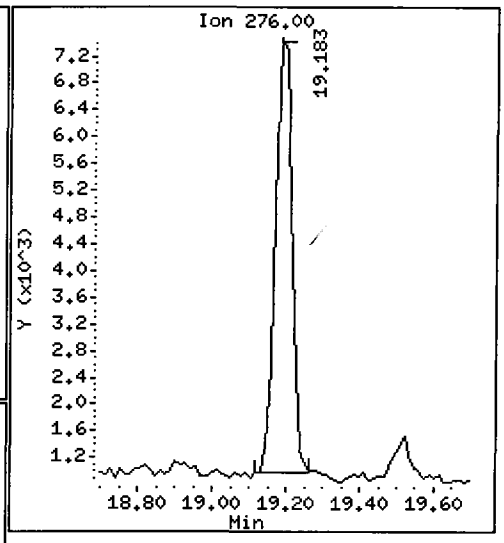
Column phase: ZB-5

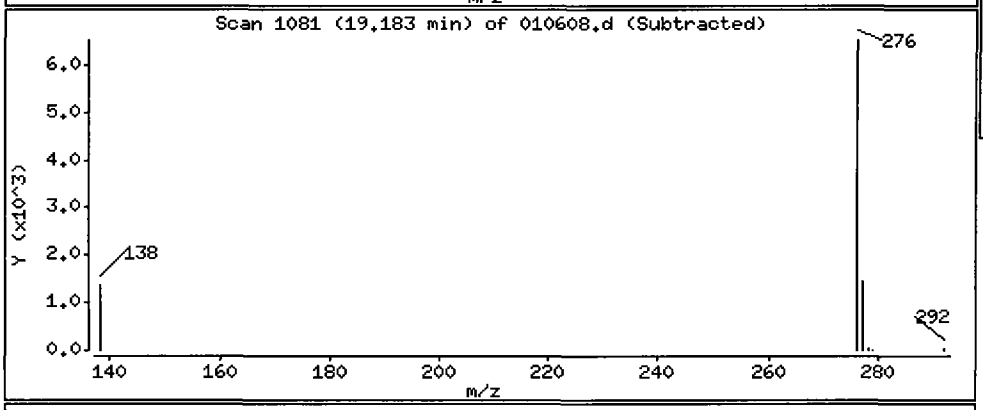
Column diameter: 0.25

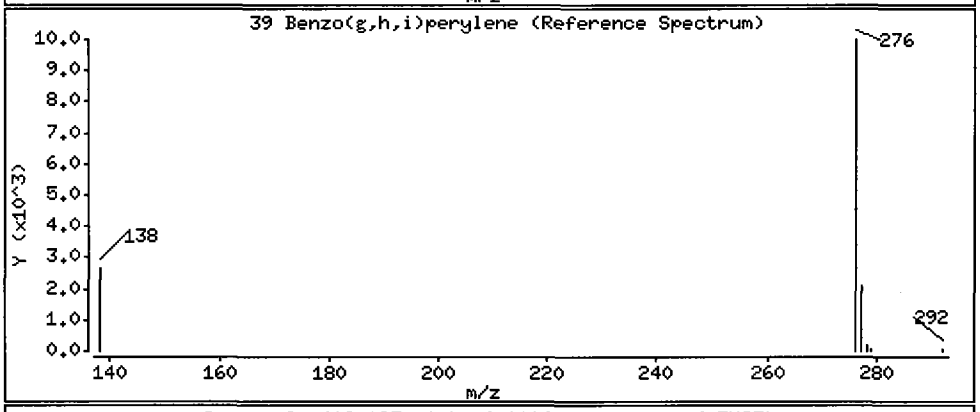
39 Benzo(g,h,i)perylene

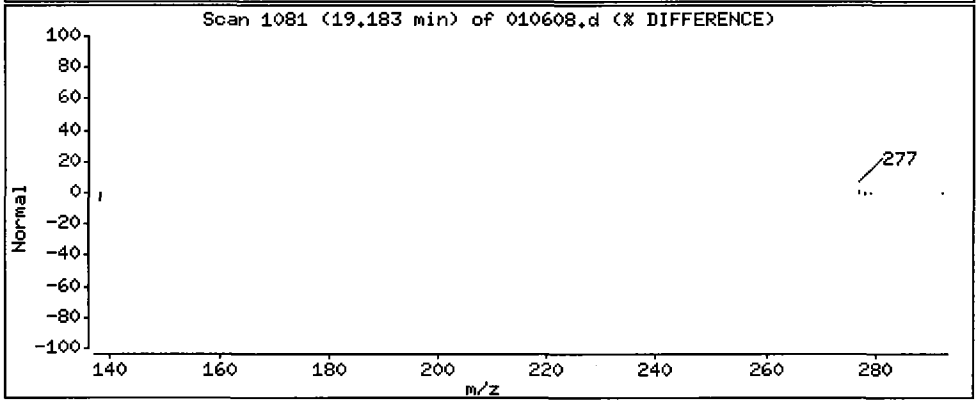
Concentration: 51.2 ug/L



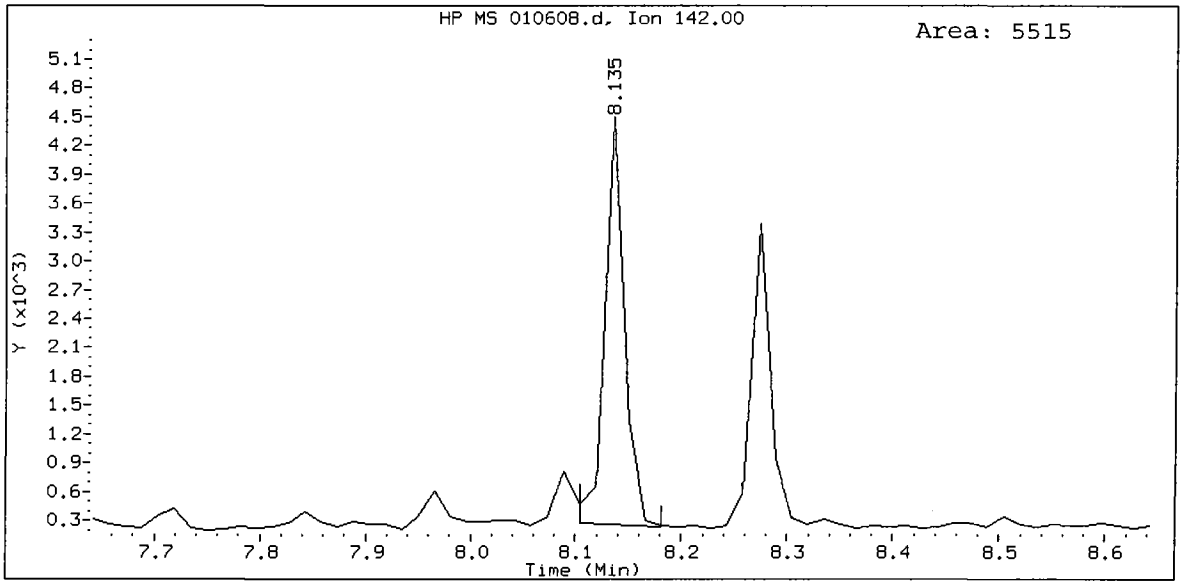


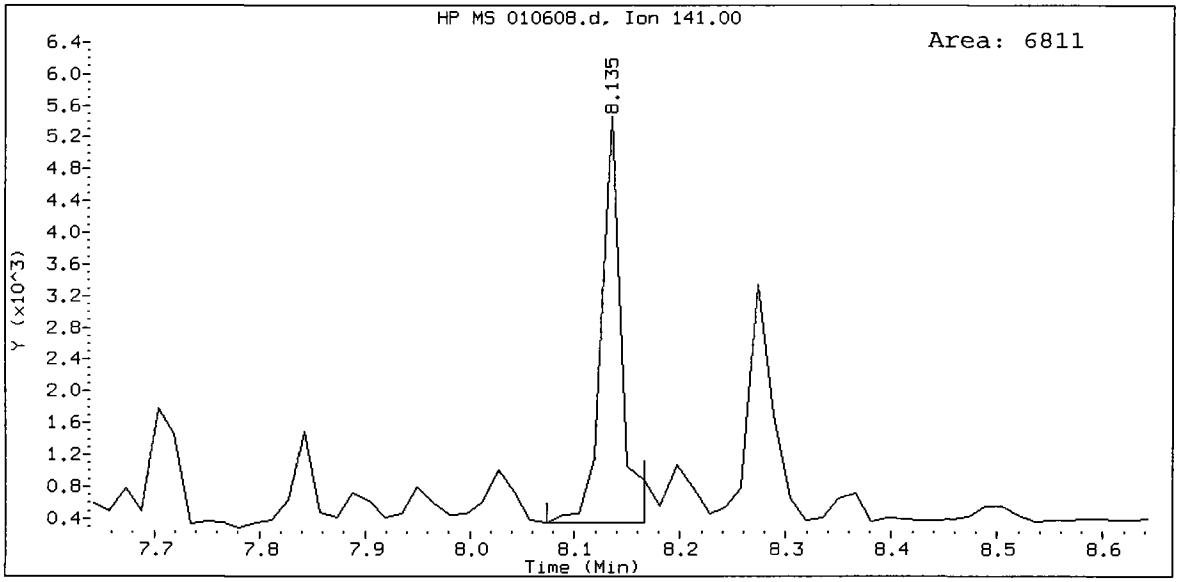


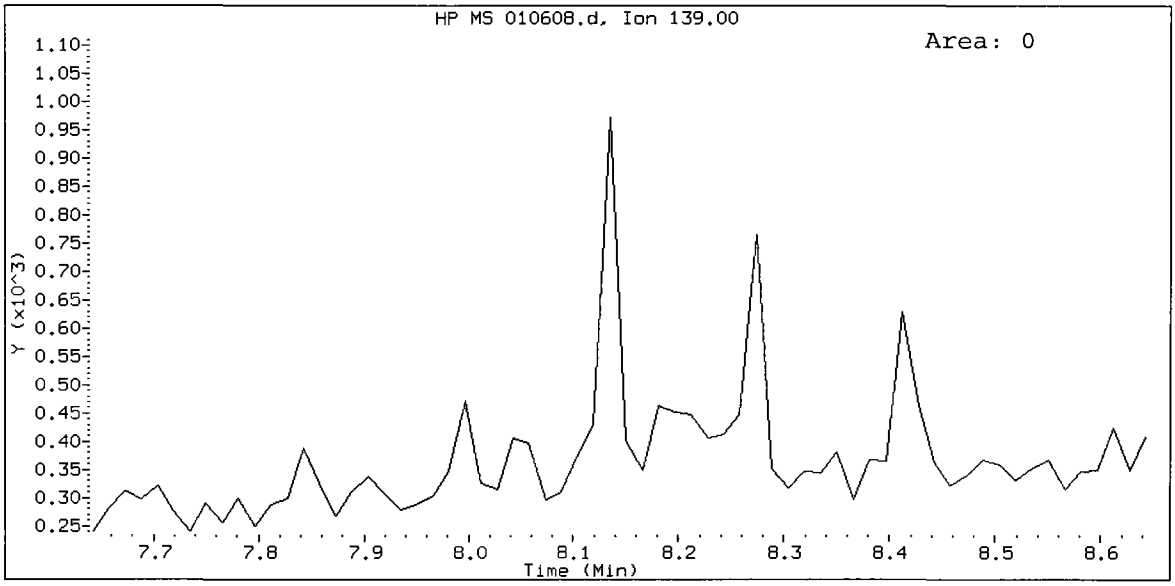




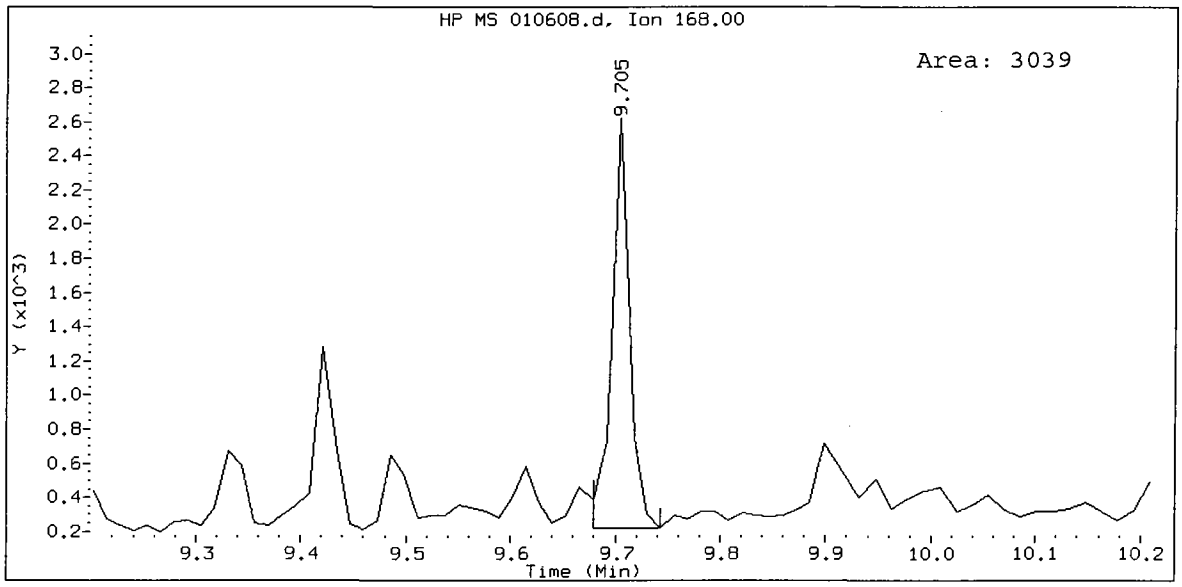
QD71B, /chem3/nt2.i/20100106.b/010608.d
2-Methylnaphthalene Amount: 13.60



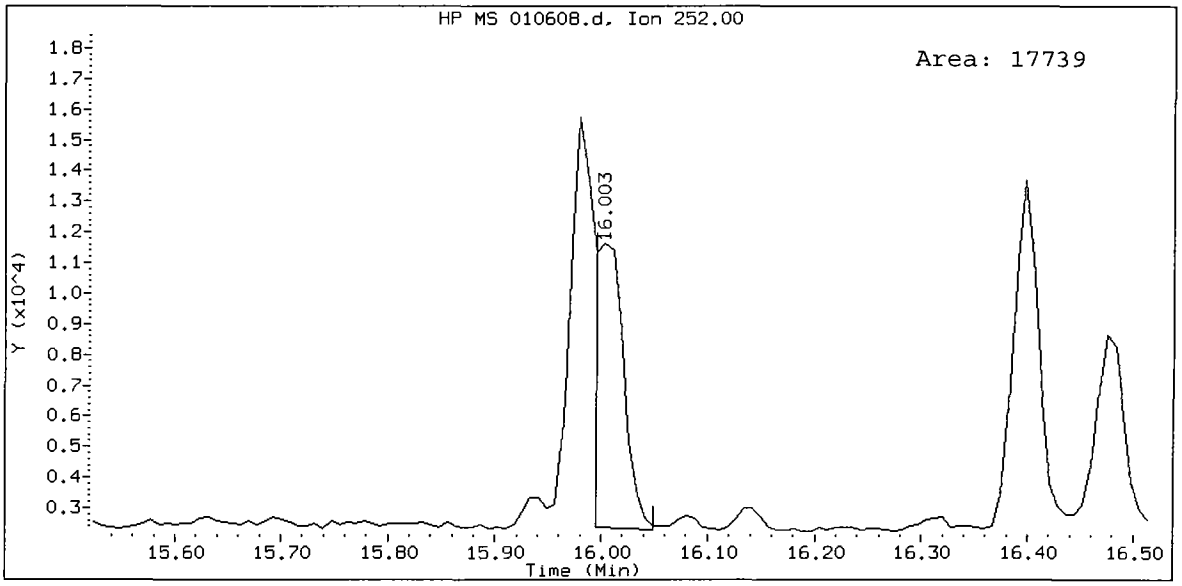


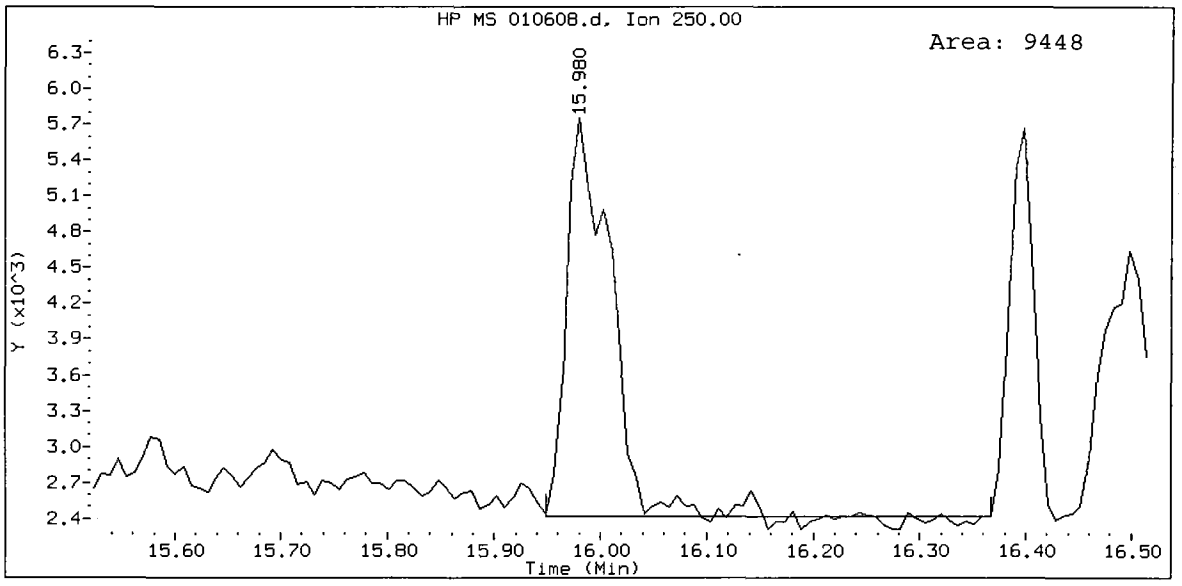


QD71B, /chem3/nt2.i/20100106.b/010608.d
Dibenzofuran Amount: 5.95

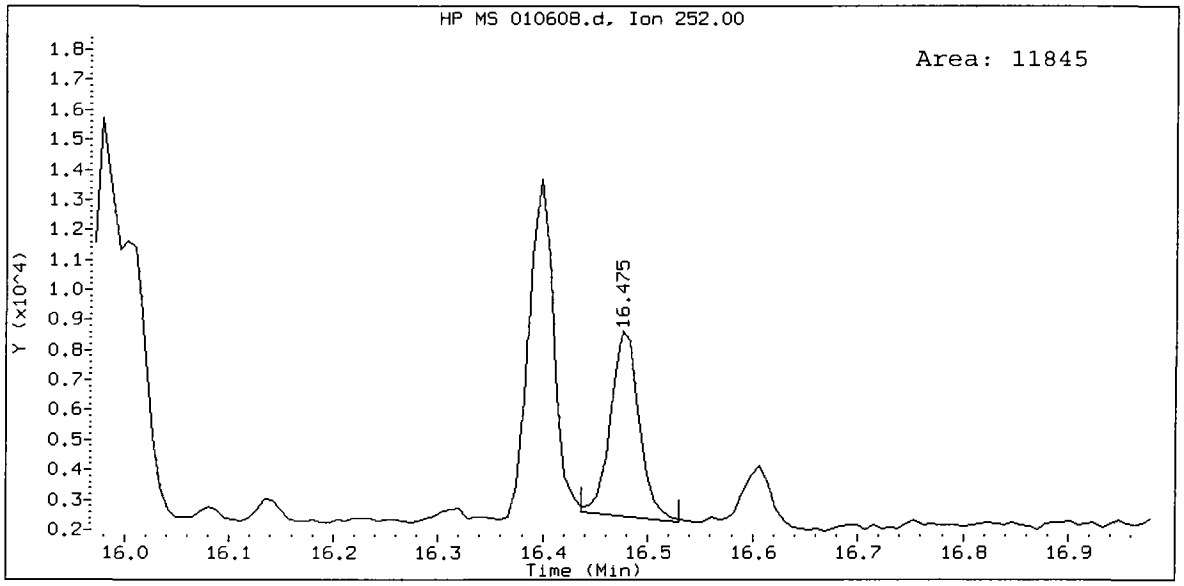


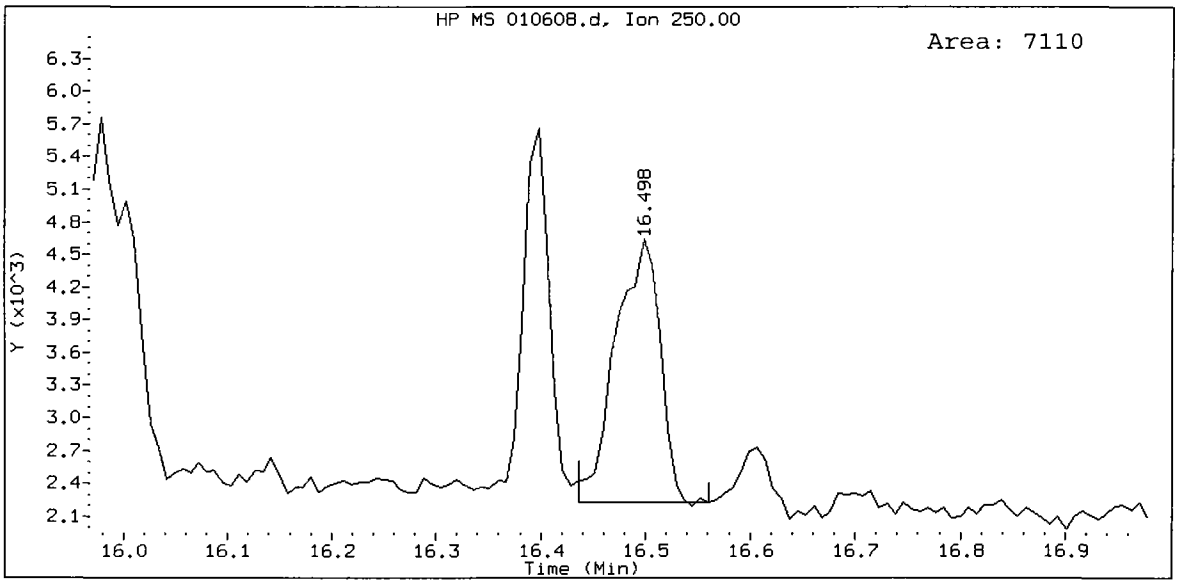
QD71B, /chem3/nt2.i/20100106.b/010608.d
Benzo(k)fluoranthene Amount: 32.72



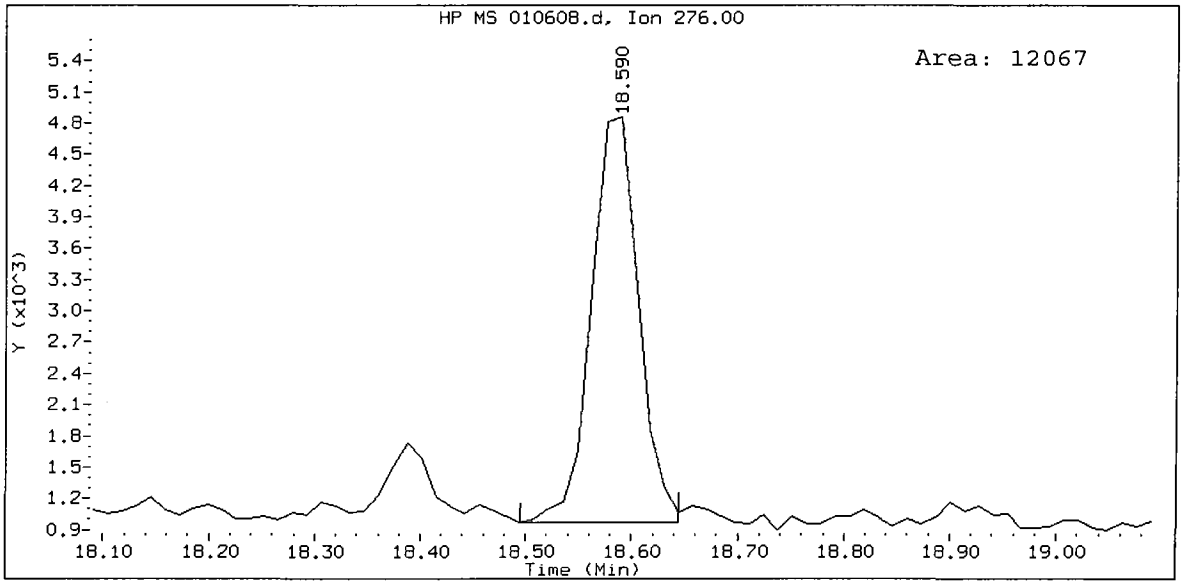


QD71B, /chem3/nt2.i/20100106.b/010608.d
Benzo(a)pyrene Amount: 30.28

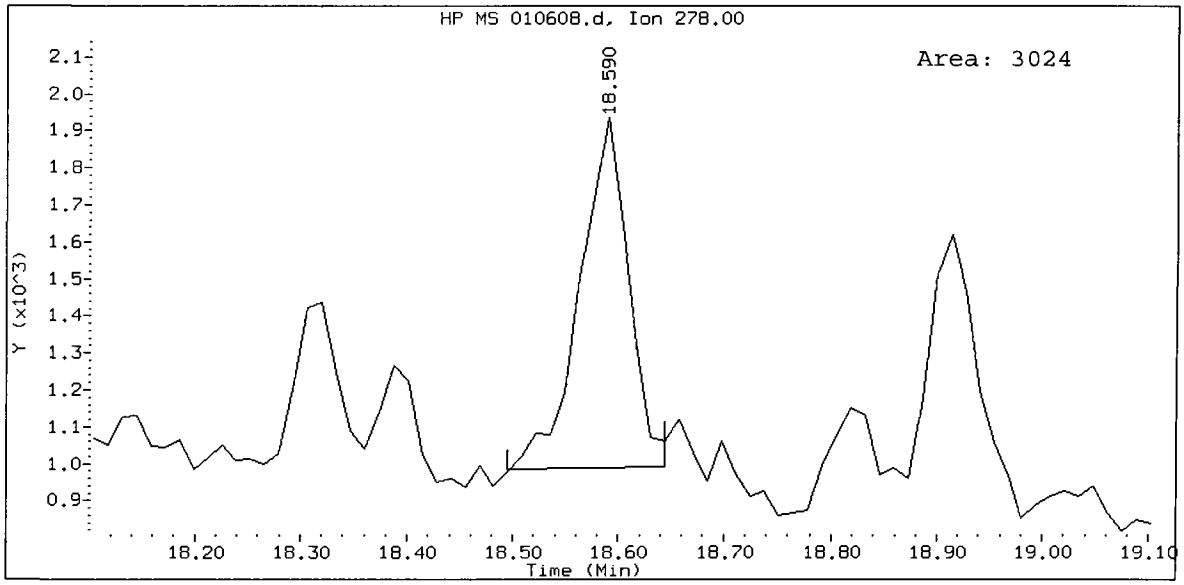




QD71B, /chem3/nt2.i/20100106.b/010608.d
Indeno(1,2,3-cd)pyrene Amount: 26.62



QD71B, /chem3/nt2.i/20100106.b/010608.d
Dibenzo(a,h)anthracene Amount: 8.53



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: CB1123109COMP
SAMPLE

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 16:42
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**	**0.017**
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**	**0.012**
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	67.3%
d14-Dibenzo(a,h)anthracene	59.3%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010609.d
Lab Smp Id: QD71C Client Smp ID: CB1123109COMP
Inj Date : 06-JAN-2010 16:42
Operator : VTS Inst ID: nt2.i
Smp Info : QD71C
Misc Info : 10-16
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 08-Jan-2010 11:09 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 9
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	7.260	7.260	(1.000)	140626	200.000	
	5 Naphthalene	128	7.275	7.275	(1.002)	11235	16.5914	16.6
$	6 2-Methylnaphthalene-d10	152	8.106	8.106	(1.117)	73073	201.746	202
	7 2-Methylnaphthalene	142	Compound Not Detected.					
	8 1-Methylnaphthalene	142	8.275	8.275	(1.140)	2508	6.10202	6.10
	10 Acenaphthylene	152	Compound Not Detected.					
*	11 Acenaphthene-d10	164	9.472	9.473	(1.000)	79881	200.000	
	12 Acenaphthene	153	Compound Not Detected.					
	14 Dibenzofuran	168	Compound Not Detected.					
	15 Fluorene	166	Compound Not Detected.					
*	18 Phenanthrene-d10	188	11.301	11.301	(1.000)	115741	200.000	
	19 Phenanthrene	178	11.332	11.332	(1.003)	6634	11.5317	11.5
	20 Anthracene	178	Compound Not Detected.					
	24 Fluoranthene	202	12.816	12.827	(1.134)	4866	7.76591	7.77
	25 Pyrene	202	13.101	13.112	(1.159)	5094	8.00890	8.01
	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	14.616	14.616	(1.000)	85042	200.000	
30 Chrysene	228	14.638	14.649	(1.002)	3274	7.81814	7.82(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	16.567	16.568	(1.000)	84037	200.000	
37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$ 36 Dibenzo(a,h)anthracene-d14	292	18.523	18.523	(1.118)	45437	178.378	178(M)
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: 010609.d
Lab Smp Id: QD71C
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-16

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: CB1123109COMP
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	140626	-18.76
11 Acenaphthene-d10	96677	48338	193354	79881	-17.37
18 Phenanthrene-d10	147750	73875	295500	115741	-21.66
29 Chrysene-d12	135219	67610	270438	85042	-37.11
35 Perylene-d12	125815	62908	251630	84037	-33.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.26	0.00
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	-0.01
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.00
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.00
35 Perylene-d12	16.57	16.07	17.07	16.57	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: QD71C
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-16

Client SDG: QD71
Fraction: SV
Client Smp ID: CB1123109COMP
Operator: VTS
SampleType: SAMPLE
Quant Type: ISTD

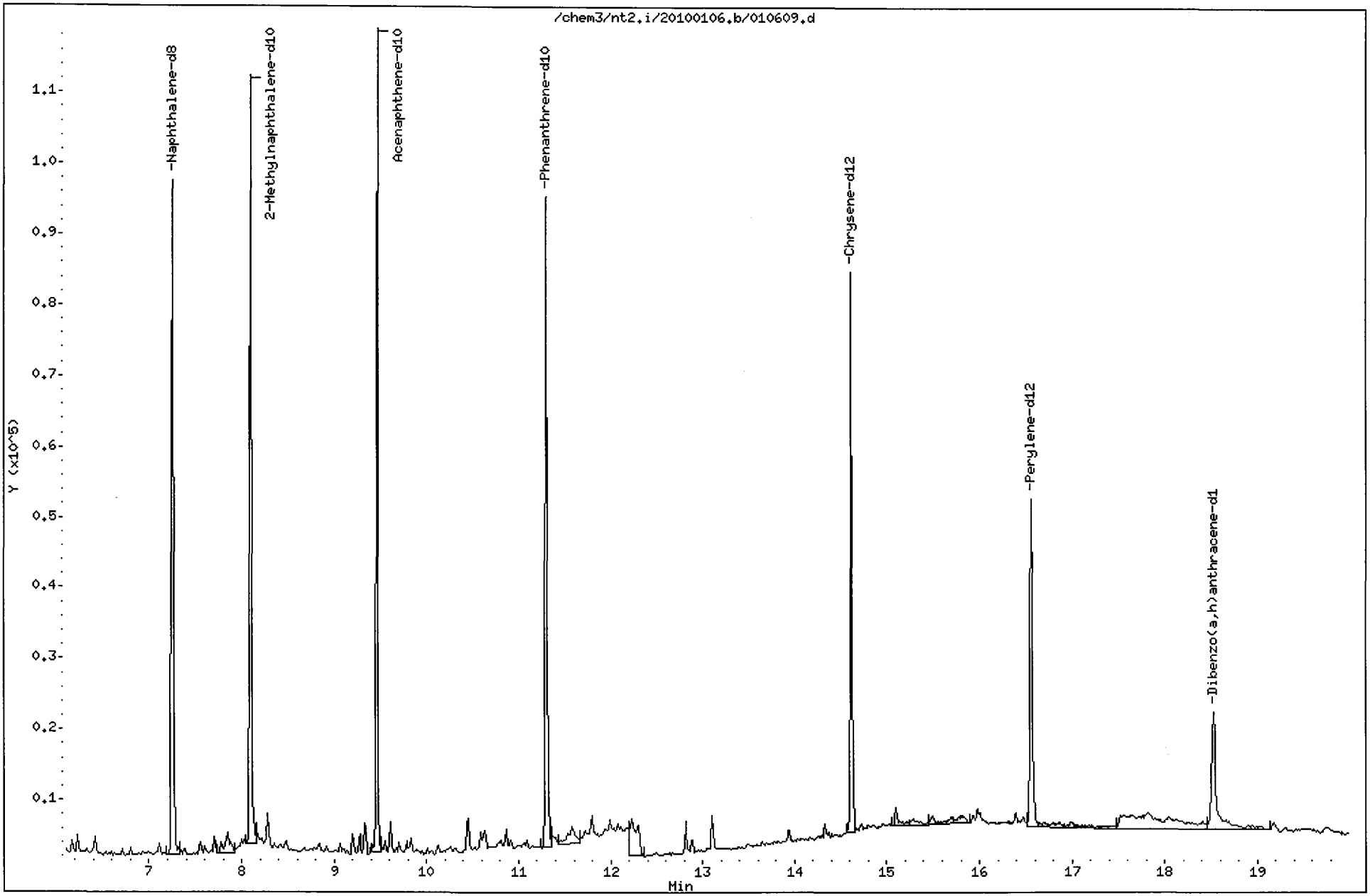
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	202	67.25	31-109
$ 36 Dibenzo(a,h)anthra	300	178	59.46	10-133

Data File: /chem3/nt2.i/20100106.b/010609.d
Date : 06-JAN-2010 16:42
Client ID: CB1123109COMP
Sample Info: QD71C
Volume Injected (uL): 2.0
Column phase: ZB-5

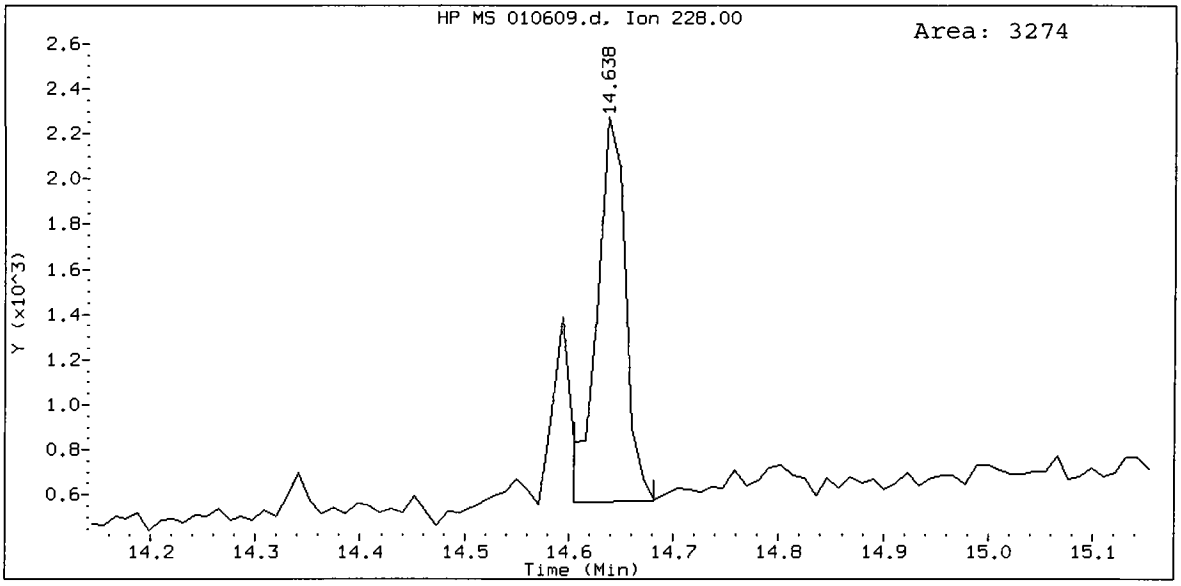
Instrument: nt2.i

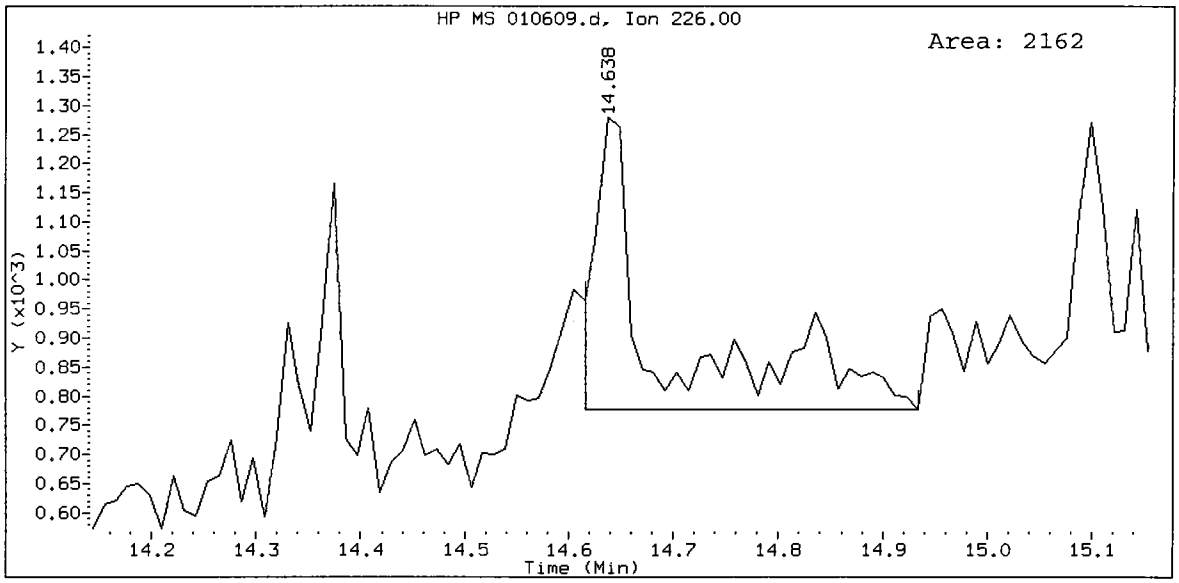
Operator: VTS
Column diameter: 0.25

QD71 : 00424

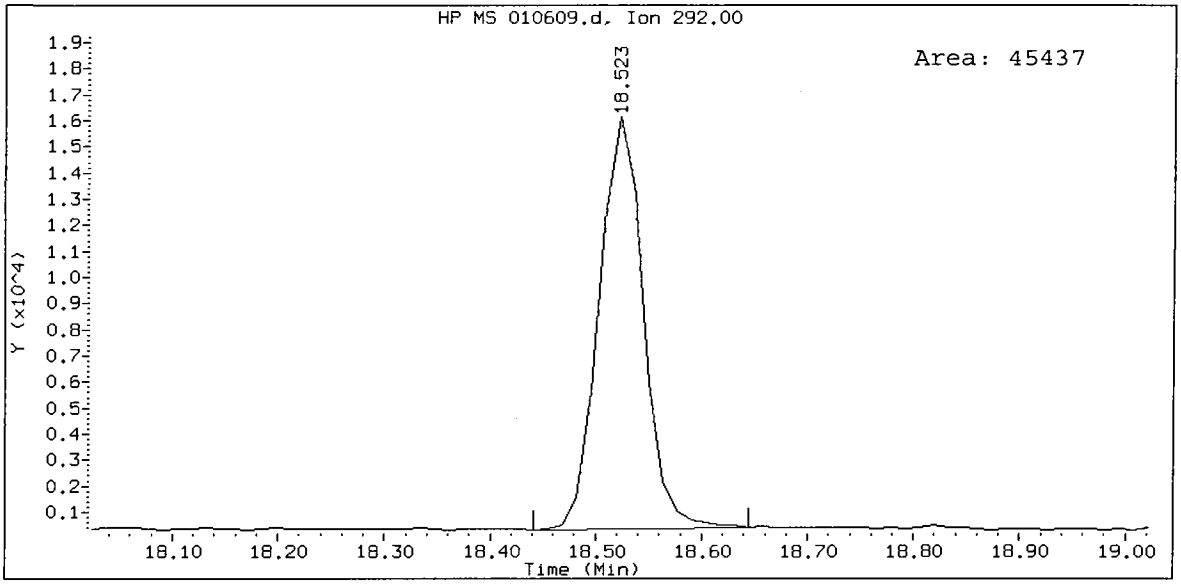


QD71C, /chem3/nt2.i/20100106.b/010609.d
Chrysene Amount: 7.82





QD71C, /chem3/nt2.i/20100106.b/010609.d
Dibenzo(a,h)anthracene-d14 Amount: 178.38



Data File: /chem3/nt2.i/20100106.b/010609.d

Date : 06-JAN-2010 16:42

Client ID: CB1123109COMP

Instrument: nt2.i

Sample Info: QD71C

Volume Injected (uL): 2.0

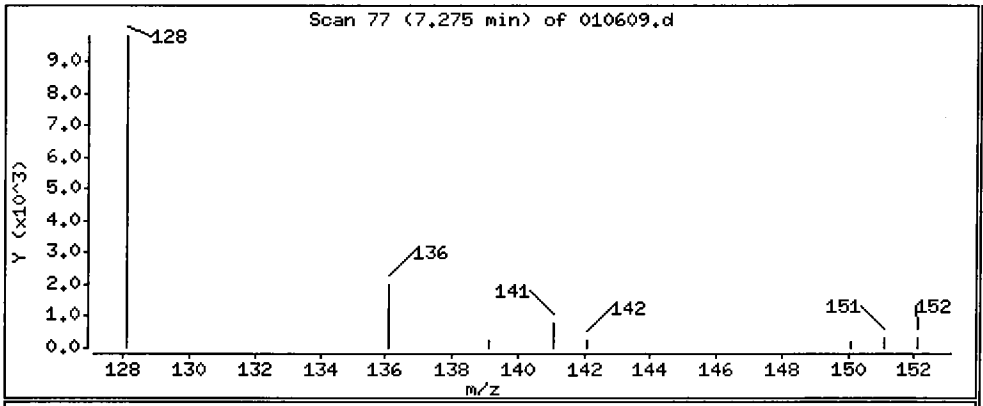
Operator: VTS

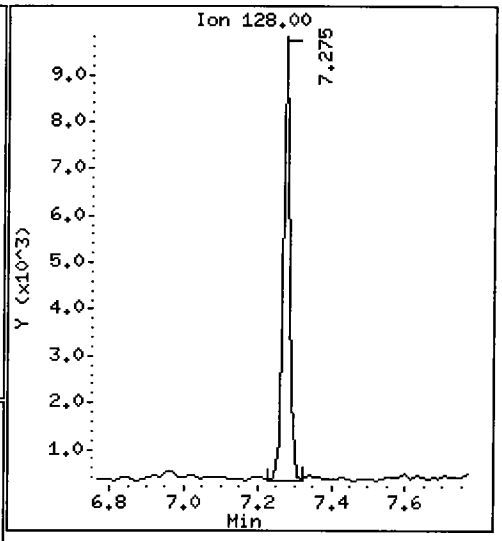
Column phase: ZB-5

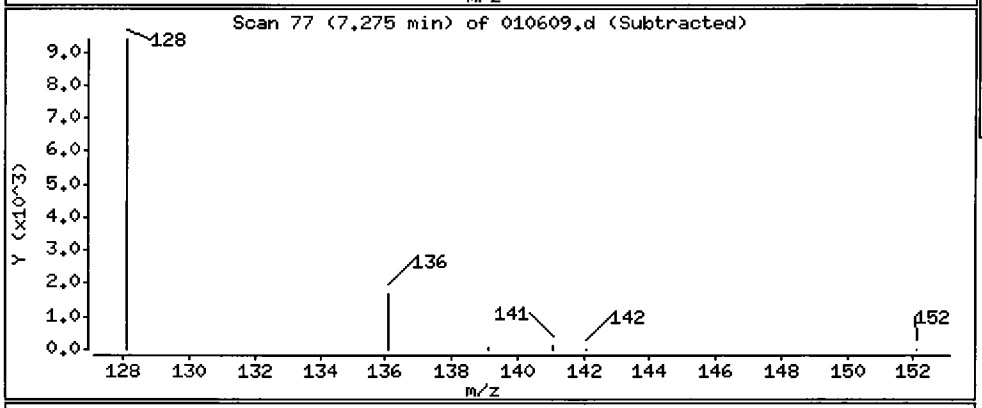
Column diameter: 0.25

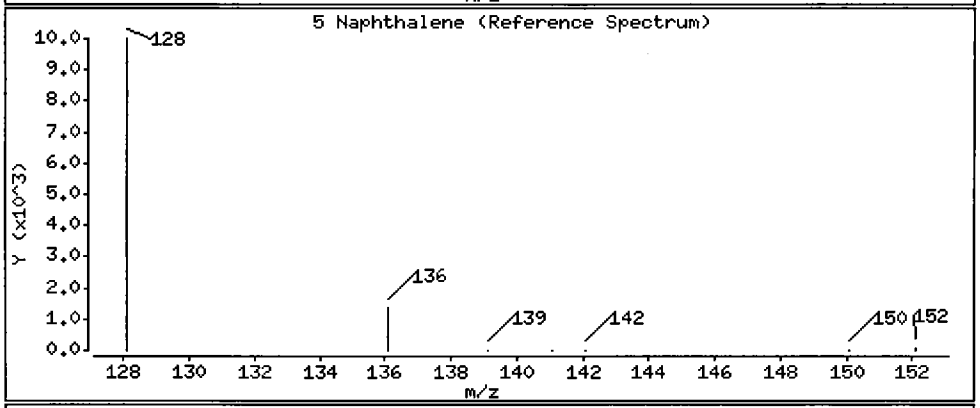
5 Naphthalene

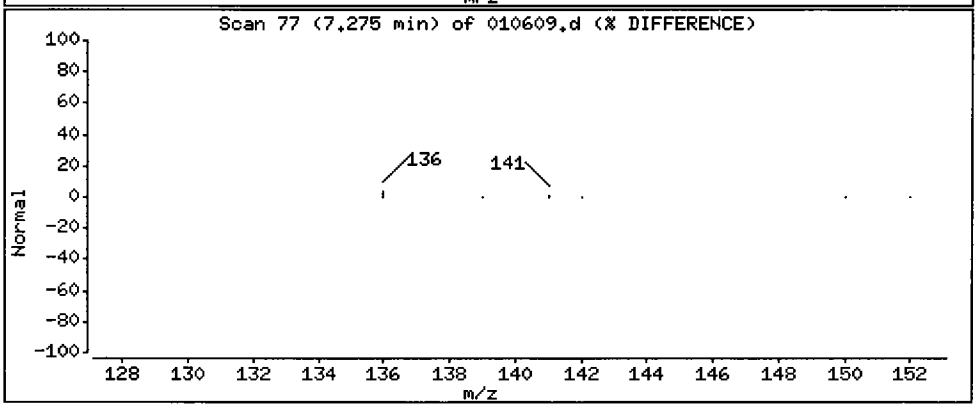
Concentration: 16.6 ug/L











Data File: /chem3/nt2.i/20100106.b/010609.d

Date : 06-JAN-2010 16:42

Client ID: CB1123109COMP

Instrument: nt2.i

Sample Info: QD71C

Volume Injected (uL): 2.0

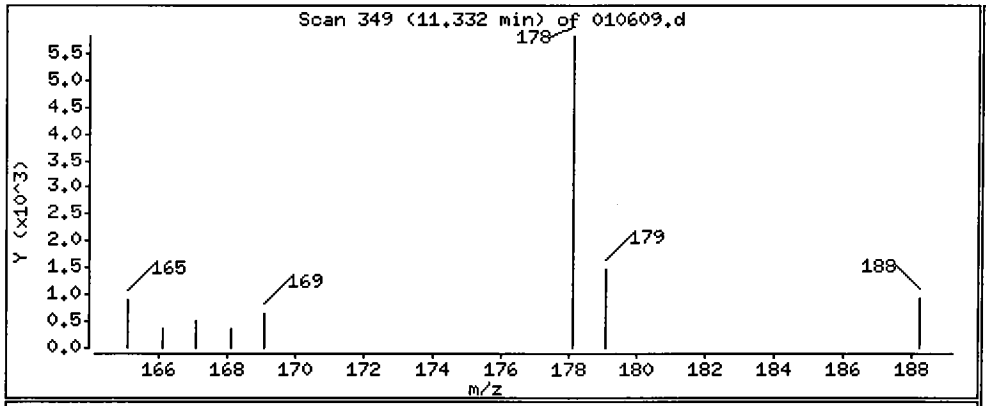
Operator: VTS

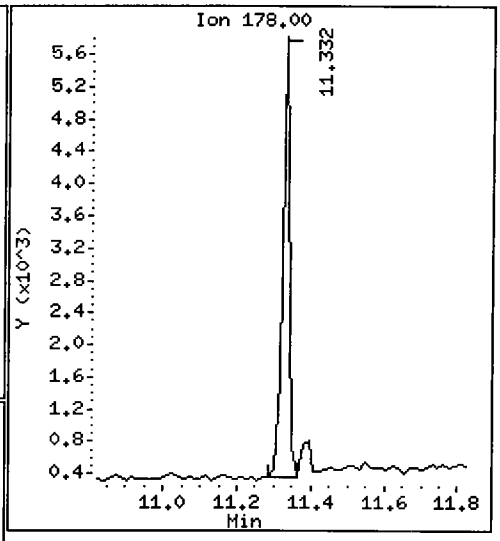
Column phase: ZB-5

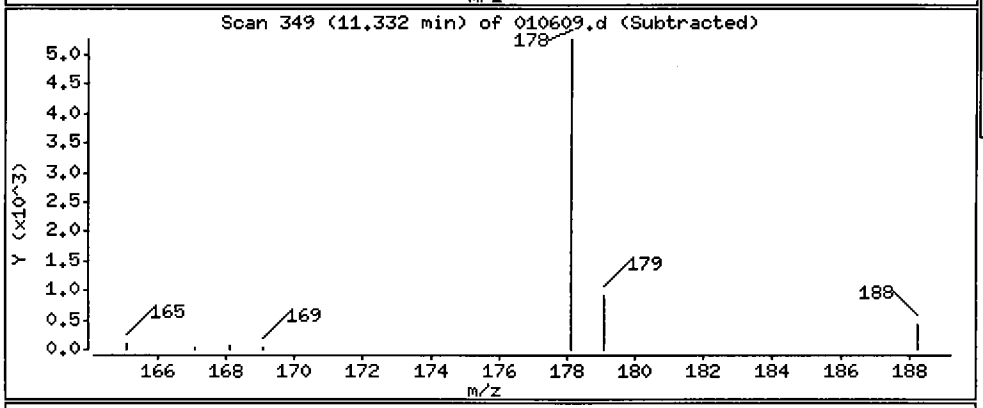
Column diameter: 0.25

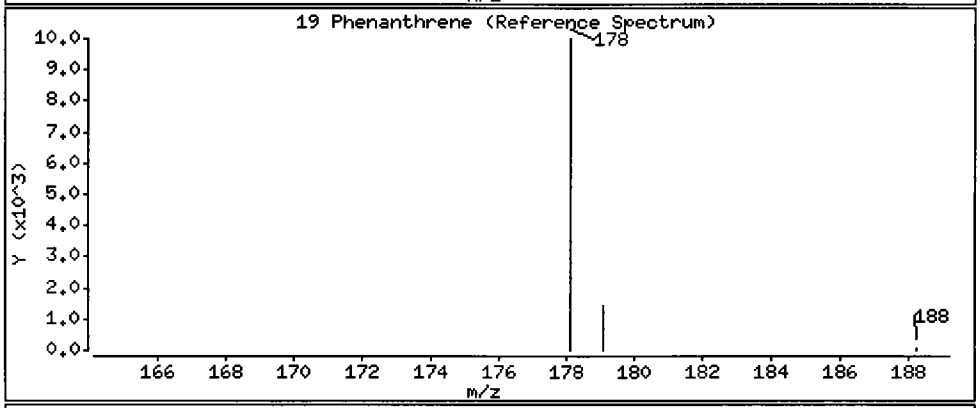
19 Phenanthrene

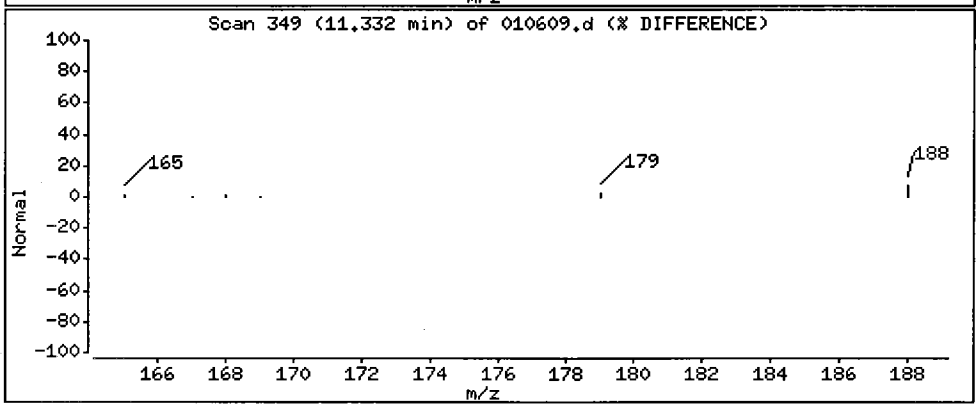
Concentration: 11.5 ug/L



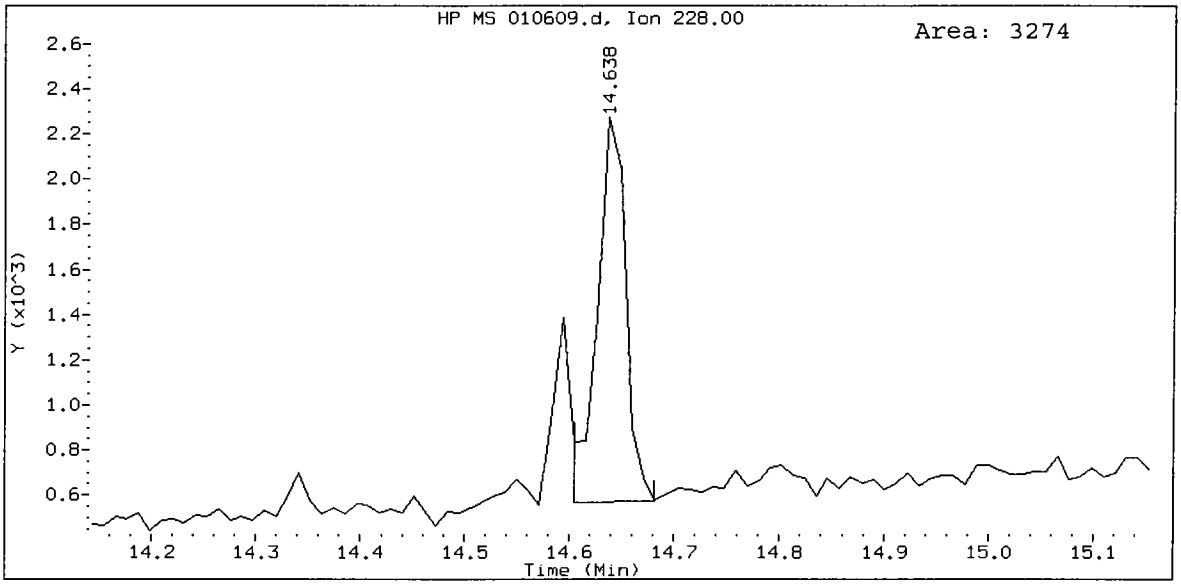


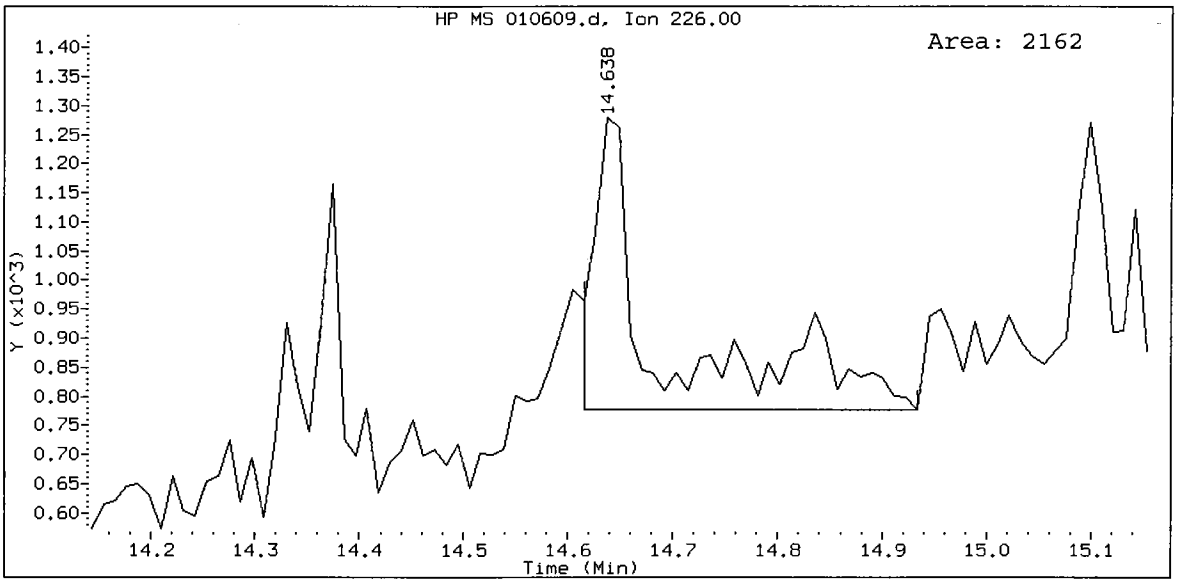






QD71C, /chem3/nt2.i/20100106.b/010609.d
Chrysene Amount: 7.82





SIM Semivolatile Analysis
Standard Raw Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QD71 Project: LORA LAKES APTS

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	$\overline{RRF}$	%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

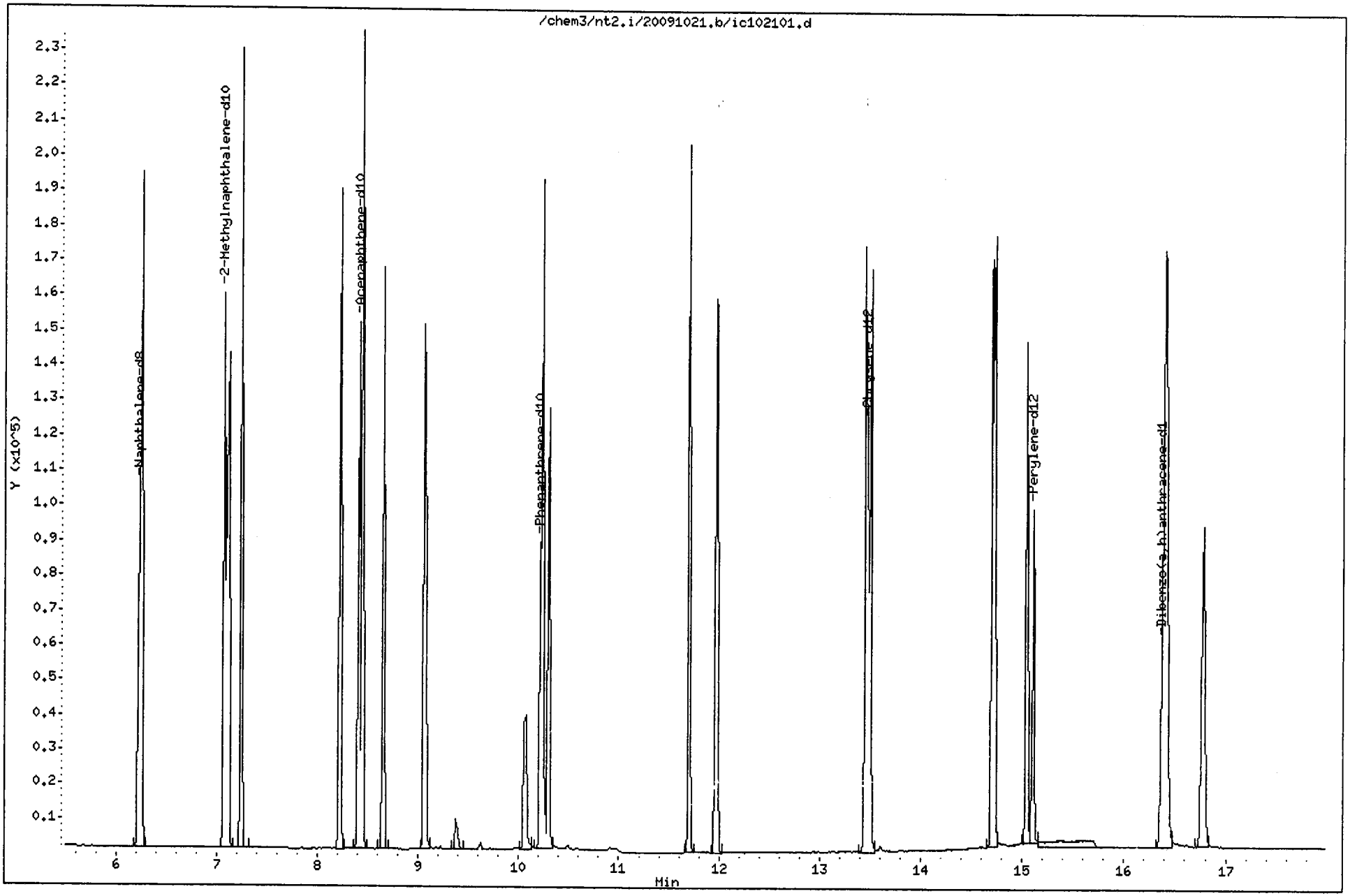
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.00
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	0.00
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.11	0.00

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

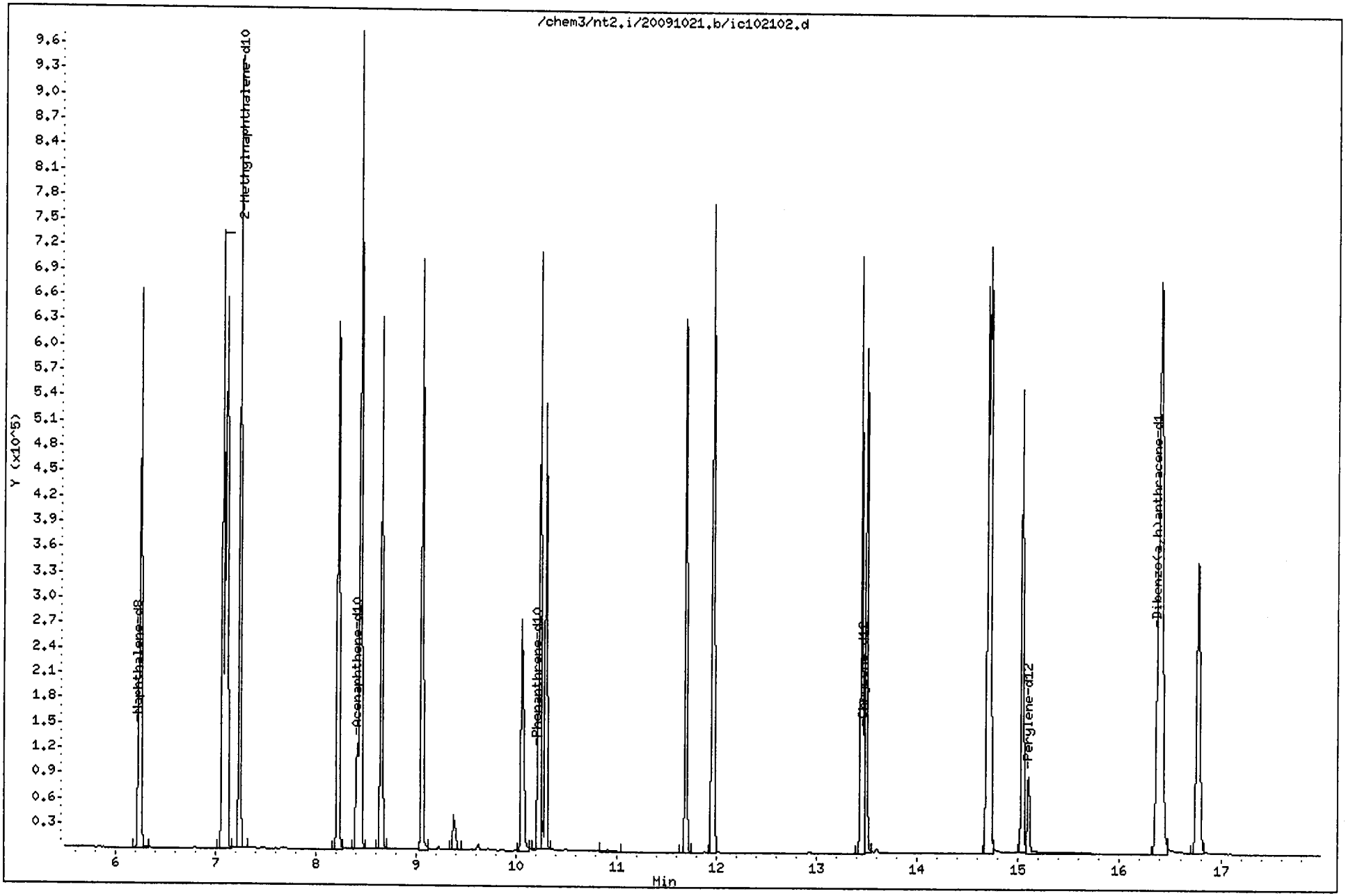
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	6.23	5.73	6.73	6.23	0.02
11 Acenaphthene-d10	8.42	7.92	8.92	8.42	-0.01
18 Phenanthrene-d10	10.21	9.71	10.71	10.21	0.00
29 Chrysene-d12	13.47	12.97	13.97	13.47	0.00
35 Perylene-d12	15.11	14.61	15.61	15.10	0.00

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.

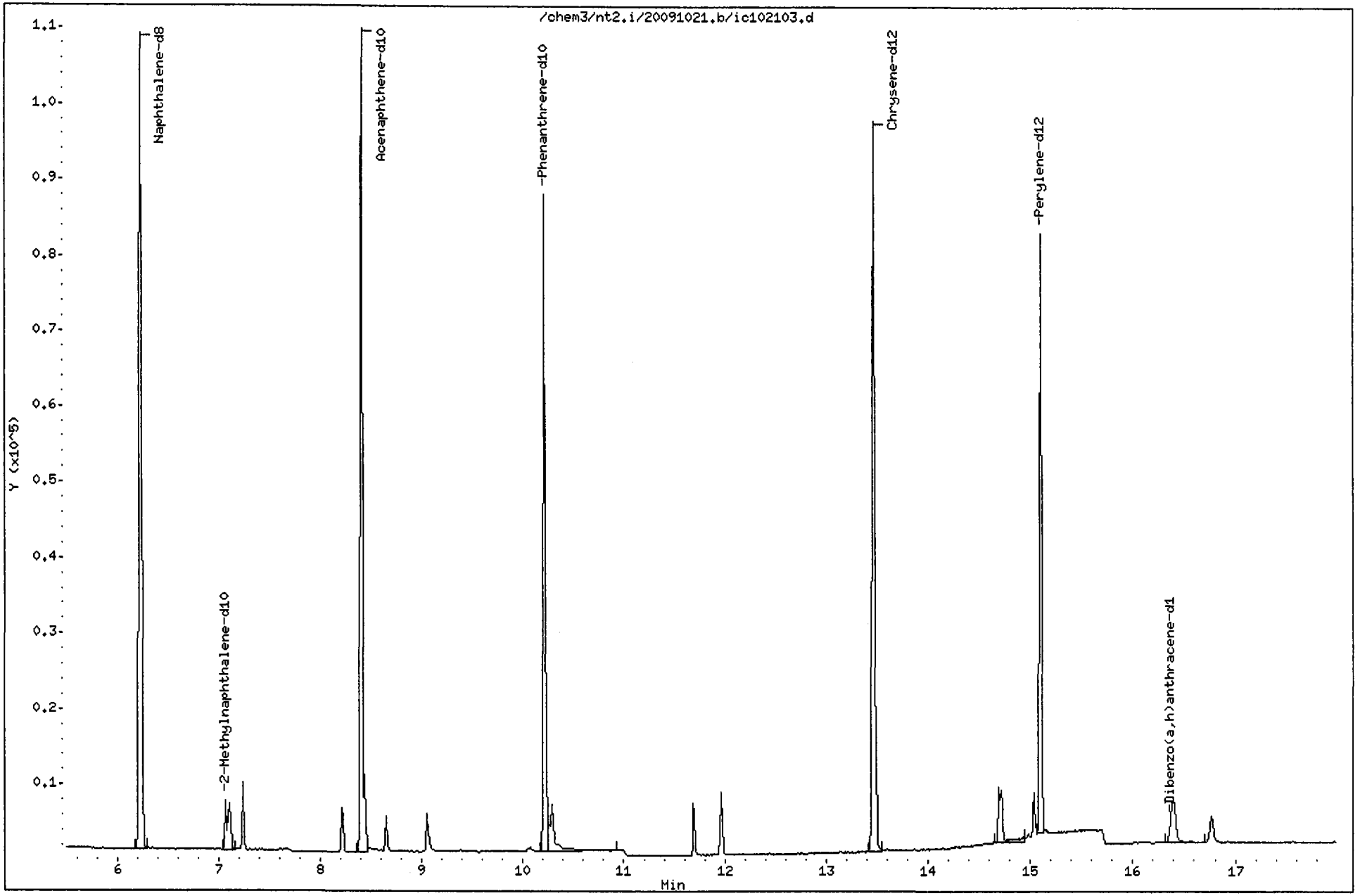
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	163657	-5.46
11 Acenaphthene-d10	96677	48338	193354	80791	-16.43
18 Phenanthrene-d10	147750	73875	295500	128448	-13.06
29 Chrysene-d12	135219	67610	270438	118404	-12.44
35 Perylene-d12	125815	62908	251630	109902	-12.65

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

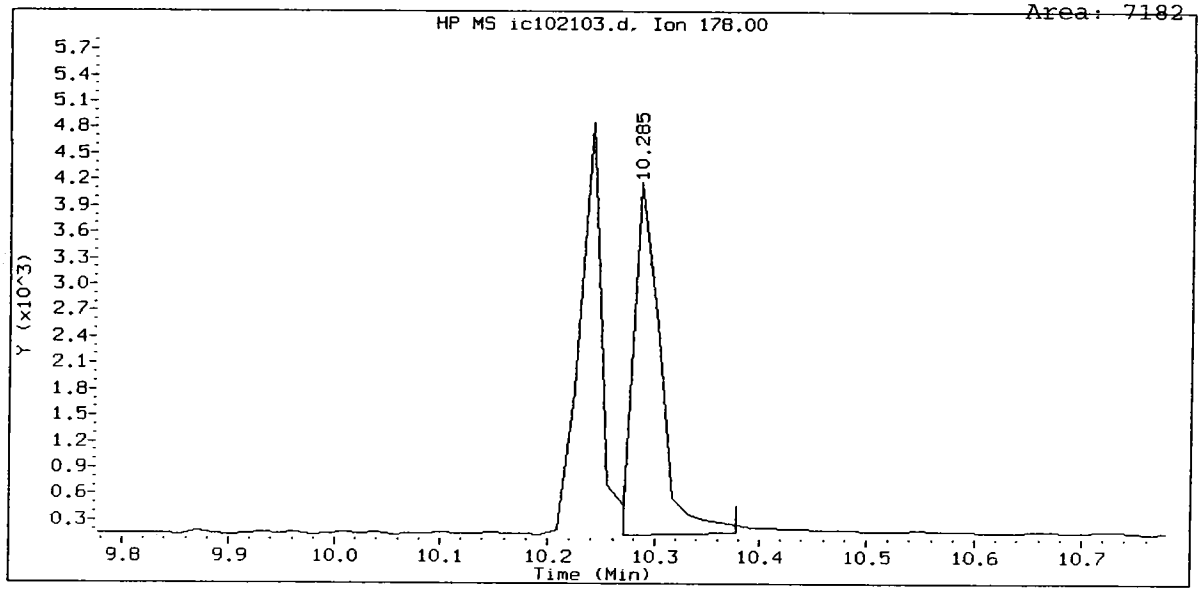
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt2.i/20091021.b/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.

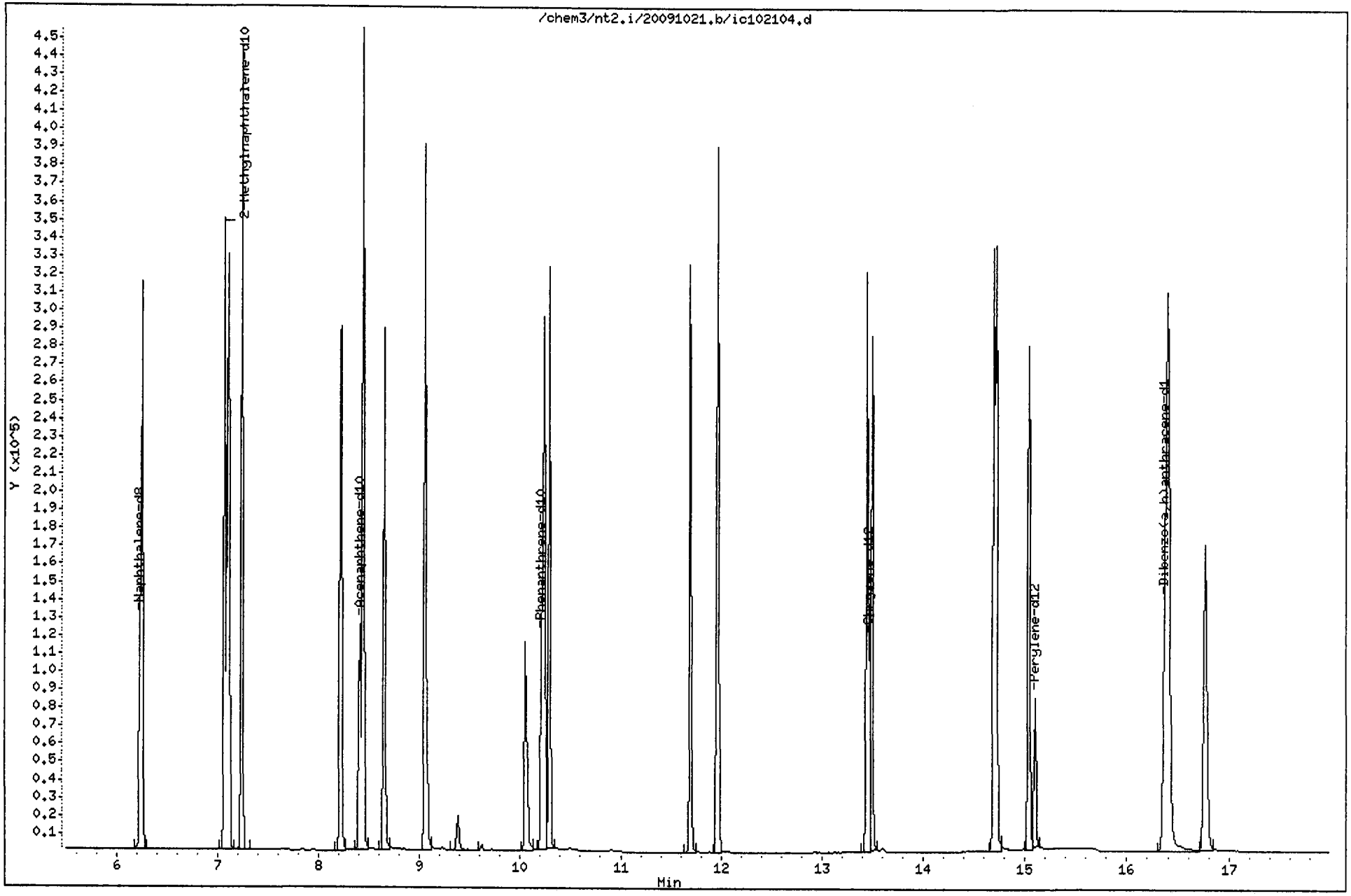
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	177186	2.36
11 Acenaphthene-d10	96677	48338	193354	88802	-8.15
18 Phenanthrene-d10	147750	73875	295500	144260	-2.36
29 Chrysene-d12	135219	67610	270438	127406	-5.78
35 Perylene-d12	125815	62908	251630	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: 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)	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.

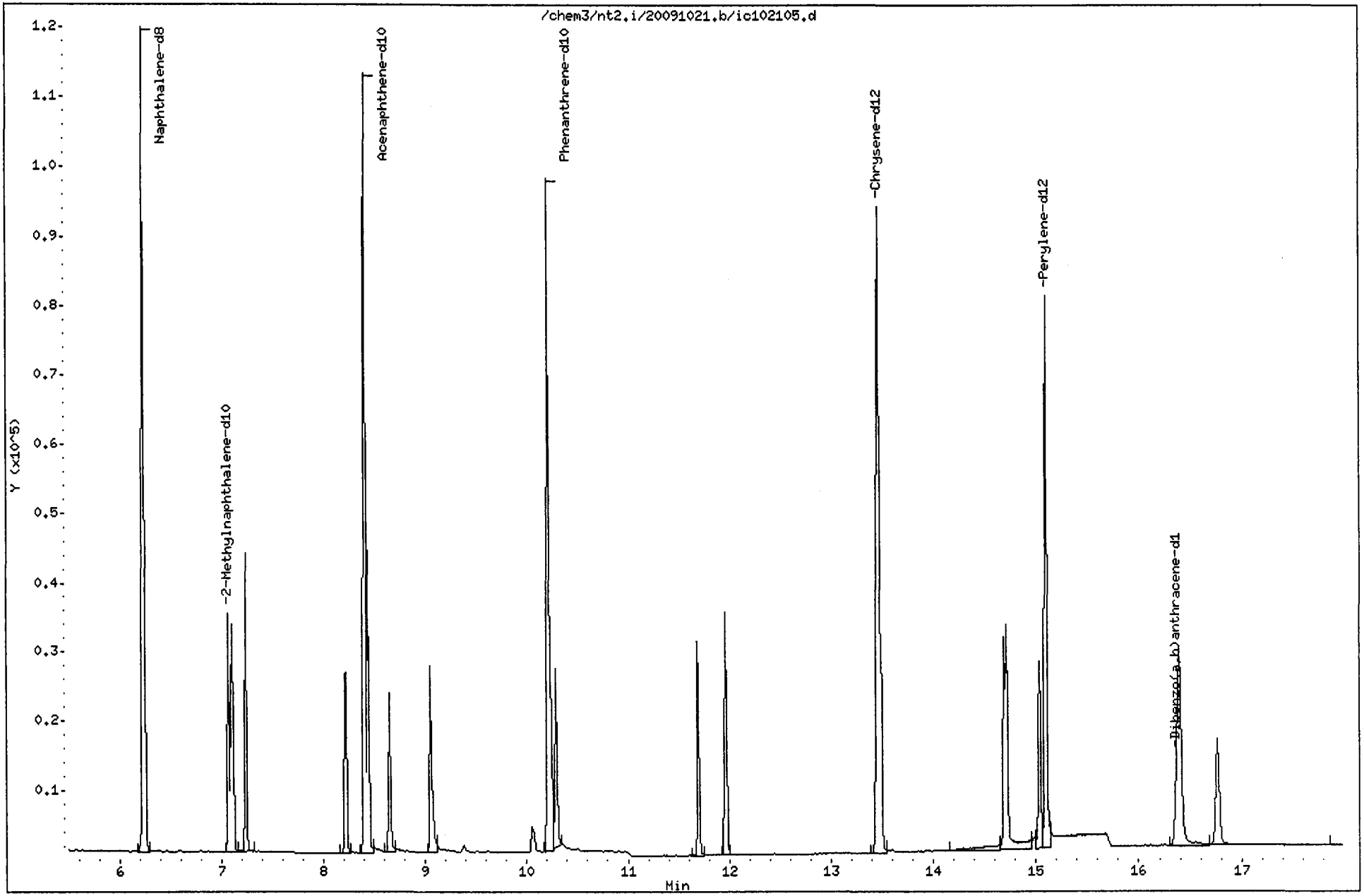
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	163275	-5.68
11 Acenaphthene-d10	96677	48338	193354	80083	-17.16
18 Phenanthrene-d10	147750	73875	295500	130872	-11.42
29 Chrysene-d12	135219	67610	270438	119291	-11.78
35 Perylene-d12	125815	62908	251630	109601	-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

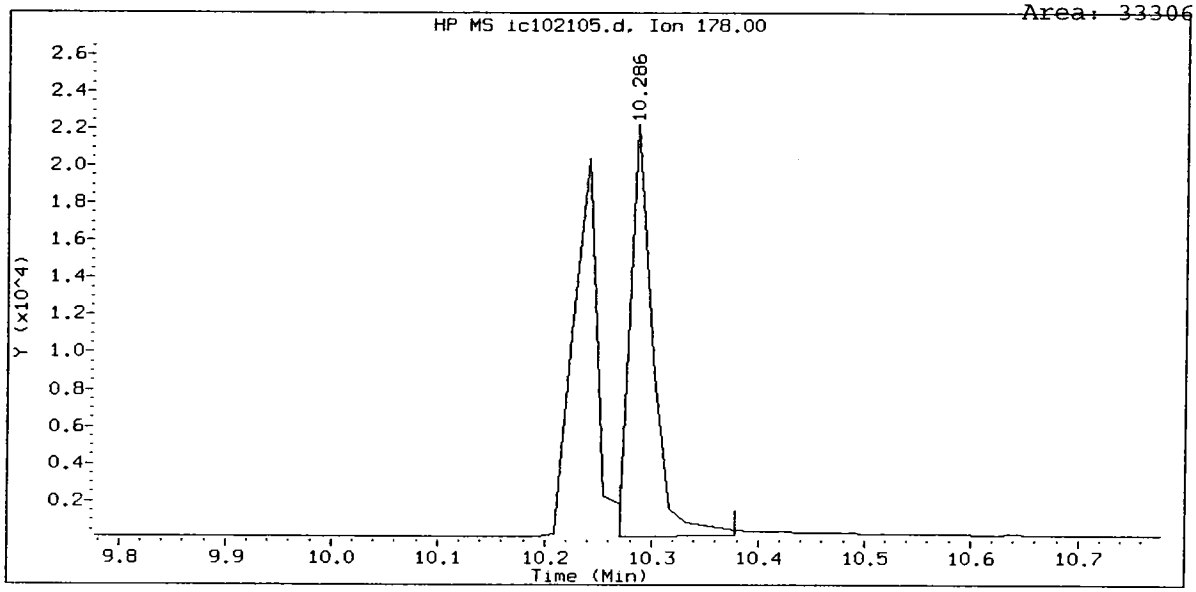
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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: 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)	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.

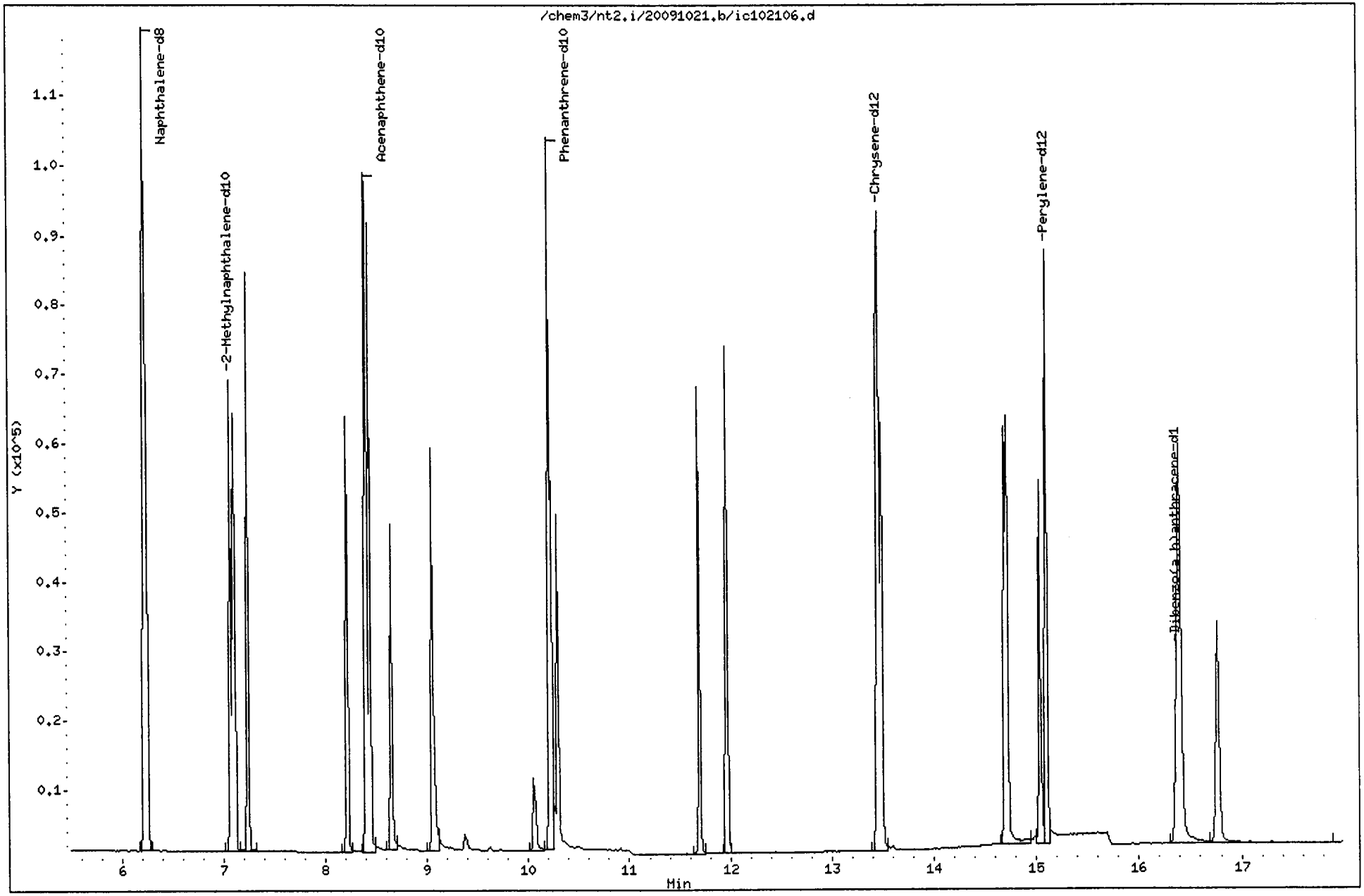
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	164822	-4.79
11 Acenaphthene-d10	96677	48338	193354	82096	-15.08
18 Phenanthrene-d10	147750	73875	295500	134536	-8.94
29 Chrysene-d12	135219	67610	270438	122702	-9.26
35 Perylene-d12	125815	62908	251630	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

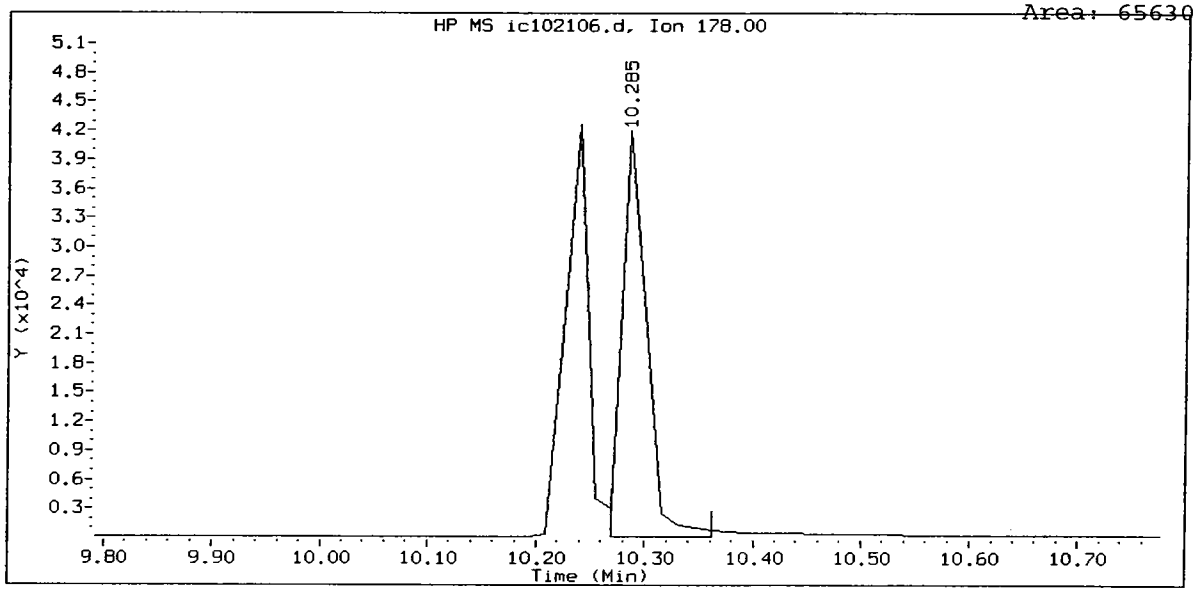
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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)	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)	CONCENTRATIONS 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:
Client SDG: 20091021
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: ICV
Level: LOW
Operator: VTS
Data Type: MS DATA
SampleType: LCS
SpikeList File: waterlcs.spk
Quant Type: ISTD
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20091021.b/lowsim.m
Misc Info:

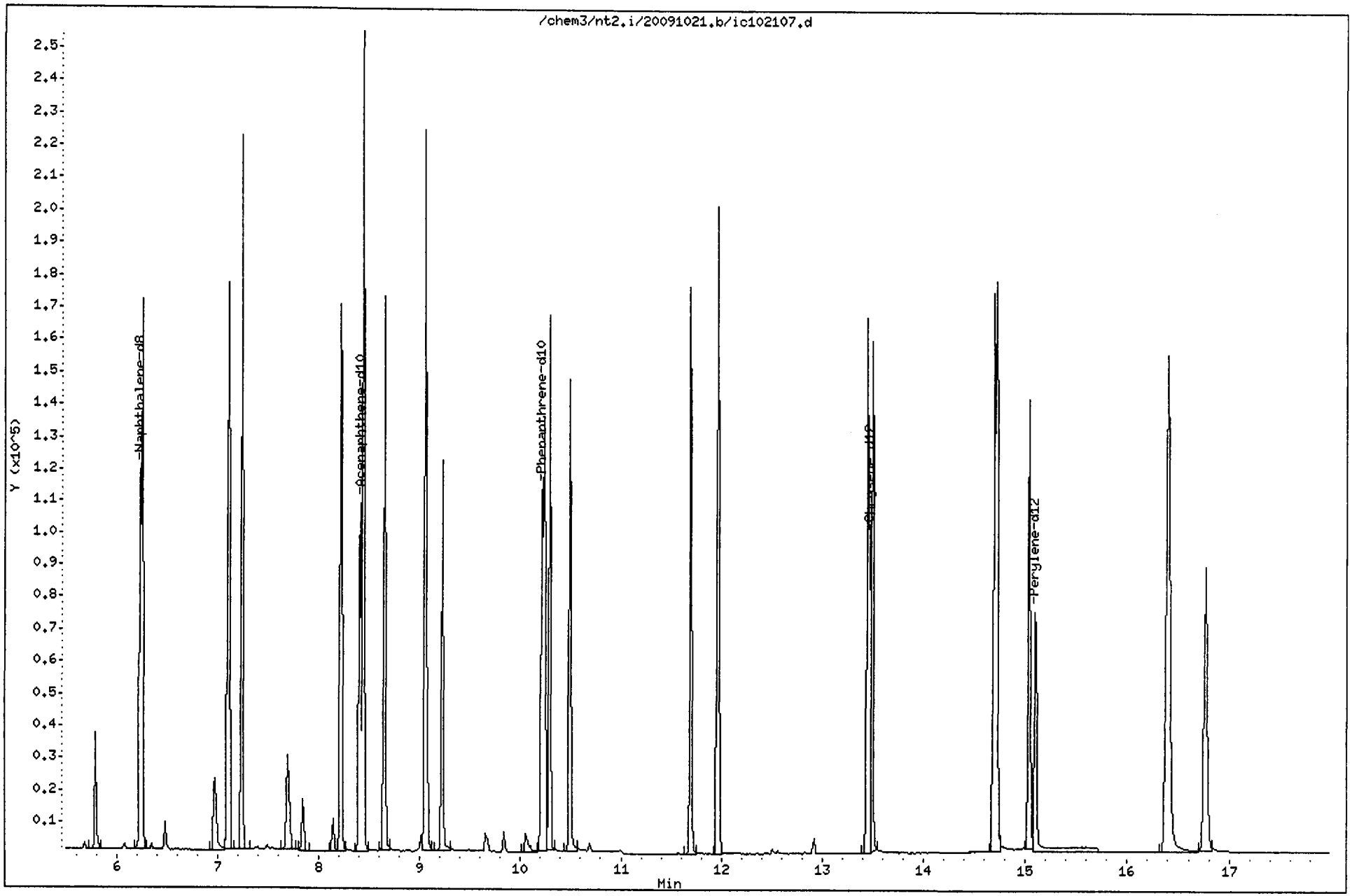
SPIKE COMPOUND	CONC ADDED ng/L	CONC RECOVERED ng/L	% RECOVERED	LIMITS
5 Naphthalene	300	279	93.10	41-101
7 2-Methylnaphthalen	300	287	95.51	47-100
8 1-Methylnaphthalen	300	276	92.09	30-160
10 Acenaphthylene	300	288	96.06	35-100
12 Acenaphthene	300	276	92.16	43-104
14 Dibenzofuran	300	315	105.11*	37-100
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: QD71 Project: LORA LAKES APTS

Instrument ID: NT2 Cont. Calib. Date: 01/06/10

Init. Calib. Date: 10/21/09 Cont. Calib. Time: 1047

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.963	0.838	0.700	AVRG	-13.0
2-Methylnaphthalene	0.562	0.543	0.400	AVRG	-3.4
Acenaphthylene	1.583	1.570	0.900	AVRG	-0.8
Acenaphthene	0.982	0.937	0.900	AVRG	-4.6
Dibenzofuran	1.280	1.347	0.800	AVRG	5.2
Fluorene	1.058	1.113	0.900	AVRG	5.2
Phenanthrene	0.994	1.034	0.700	AVRG	4.0
Anthracene	1.016	1.004	0.700	AVRG	-1.2
Fluoranthene	1.083	0.985	0.600	AVRG	-9.0
Pyrene	1.099	0.988	0.600	AVRG	-10.1
Benzo(a)anthracene	0.998	1.012	0.800	AVRG	1.4
Chrysene	0.985	0.942	0.700	AVRG	-4.4
Benzo(b)fluoranthene	1.146	1.012	0.700	AVRG	-11.7
Benzo(k)fluoranthene	1.244	1.145	0.700	AVRG	-8.0
Benzo(a)pyrene	0.898	0.846	0.700	AVRG	-5.8
Indeno(1,2,3-cd)pyrene	1.040	0.975	0.500	AVRG	-6.2
Dibenzo(a,h)anthracene	0.814	0.777	0.400	AVRG	-4.5
Benzo(g,h,i)perylene	0.897	0.806	0.500	AVRG	-10.1
1-Methylnaphthalene	0.584	0.539	0.010	AVRG	-7.7
2-Methylnaphthalene-d10	0.515	0.536	0.010	AVRG	4.1
Dibenzo(a,h)anthracene-d14	0.606	0.582	0.010	AVRG	-4.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc0106.d
Analysis Type: SOIL
Lab Sample ID: PNA 250
Method: /chem3/nt2.i/20100106.b/lowsim.m

Injection Date: 06-JAN-2010 10:47
Init. Cal. Date(s): 21-OCT-2009 21-OCT-2009
Init. Cal. Times: 11:37 13:30
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
5 Naphthalene	0.96306	0.83790	0.010	-12.99607	20.00000	Averaged
$ 6 2-Methylnaphthalene-d10	0.51513	0.53583	0.010	4.01960	20.00000	Averaged
7 2-Methylnaphthalene	0.56162	0.54335	0.010	-3.25352	20.00000	Averaged
8 1-Methylnaphthalene	0.58455	0.53919	0.010	-7.75957	20.00000	Averaged
10 Acenaphthylene	1.58274	1.57058	0.010	-0.76815	20.00000	Averaged
12 Acenaphthene	0.98217	0.93661	0.010	-4.63819	20.00000	Averaged
14 Dibenzofuran	1.27956	1.34699	0.010	5.26992	20.00000	Averaged
15 Fluorene	1.05778	1.11281	0.010	5.20235	20.00000	Averaged
19 Phenanthrene	0.99408	1.03389	0.010	4.00472	20.00000	Averaged
20 Anthracene	1.01580	1.00394	0.010	-1.16758	20.00000	Averaged
24 Fluoranthene	1.08274	0.98511	0.010	-9.01613	20.00000	Averaged
25 Pyrene	1.09908	0.98768	0.010	-10.13560	20.00000	Averaged
28 Benzo(a)anthracene	0.99821	1.01219	0.010	1.40048	20.00000	Averaged
30 Chrysene	0.98485	0.94177	0.010	-4.37478	20.00000	Averaged
32 Benzo(b)fluoranthene	1.14586	1.01184	0.010	-11.69602	20.00000	Averaged
33 Benzo(k)fluoranthene	1.24411	1.14489	0.010	-7.97496	20.00000	Averaged
34 Benzo(a)pyrene	0.89782	0.84569	0.010	-5.80589	20.00000	Averaged
37 Indeno(1,2,3-cd)pyrene	1.04041	0.97531	0.010	-6.25707	20.00000	Averaged
$ 36 Dibenzo(a,h)anthracene-d14	0.60622	0.58185	0.010	-4.02077	20.00000	Averaged
38 Dibenzo(a,h)anthracene	0.81379	0.77693	0.010	-4.52884	20.00000	Averaged
39 Benzo(g,h,i)perylene	0.89714	0.80582	0.010	-10.17900	20.00000	Averaged

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/cc0106.d
Lab Smp Id: PNA 250
Inj Date : 06-JAN-2010 10:47
Operator : VTS Inst ID: nt2.i
Smp Info : PNA 250
Misc Info :
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 08-Jan-2010 11:09 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/(Ws * (100-M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	10.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)

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	7.260	7.260	(1.000)	176475	200.000	
	5 Naphthalene	128	7.275	7.275	(1.002)	184836	250.000	218
$	6 2-Methylnaphthalene-d10	152	8.106	8.106	(1.117)	118202	250.000	260
	7 2-Methylnaphthalene	142	8.137	8.137	(1.121)	119860	250.000	242
	8 1-Methylnaphthalene	142	8.275	8.275	(1.140)	118941	250.000	231
	10 Acenaphthylene	152	9.280	9.280	(0.980)	189229	250.000	248
*	11 Acenaphthene-d10	164	9.473	9.473	(1.000)	96387	200.000	
	12 Acenaphthene	153	9.512	9.512	(1.004)	112846	250.000	238
	14 Dibenzofuran	168	9.705	9.705	(1.024)	162290	250.000	263
	15 Fluorene	166	10.131	10.131	(1.069)	134075	250.000	263
*	18 Phenanthrene-d10	188	11.301	11.301	(1.000)	144535	200.000	
	19 Phenanthrene	178	11.332	11.332	(1.003)	186793	250.000	260
	20 Anthracene	178	11.393	11.393	(1.008)	181381	250.000	247
	24 Fluoranthene	202	12.827	12.827	(1.135)	177980	250.000	227
	25 Pyrene	202	13.112	13.112	(1.160)	178443	250.000	225

	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	14.594	14.594	(0.998)	141287	250.000	254
*	29 Chrysene-d12	240	14.616	14.616	(1.000)	111668	200.000	
	30 Chrysene	228	14.649	14.649	(1.002)	131457	250.000	239
	32 Benzo(b)fluoranthene	252	15.979	15.979	(0.964)	133850	250.000	221
	33 Benzo(k)fluoranthene	252	16.010	16.010	(0.966)	151451	250.000	230
	34 Benzo(a)pyrene	252	16.475	16.475	(0.994)	111871	250.000	235
*	35 Perylene-d12	264	16.568	16.568	(1.000)	105827	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	18.590	18.590	(1.122)	129018	250.000	234
$	36 Dibenzo(a,h)anthracene-d14	292	18.523	18.523	(1.118)	76969	250.000	240
	38 Dibenzo(a,h)anthracene	278	18.604	18.604	(1.123)	102776	250.000	239
	39 Benzo(g,h,i)perylene	276	19.197	19.197	(1.159)	106597	250.000	225

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: cc0106.d
Lab Smp Id: PNA 250
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info:

Calibration Date: 06-JAN-2010
Calibration Time: 09:54

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	176475	1.94
11 Acenaphthene-d10	96677	48338	193354	96387	-0.30
18 Phenanthrene-d10	147750	73875	295500	144535	-2.18
29 Chrysene-d12	135219	67610	270438	111668	-17.42
35 Perylene-d12	125815	62908	251630	105827	-15.89

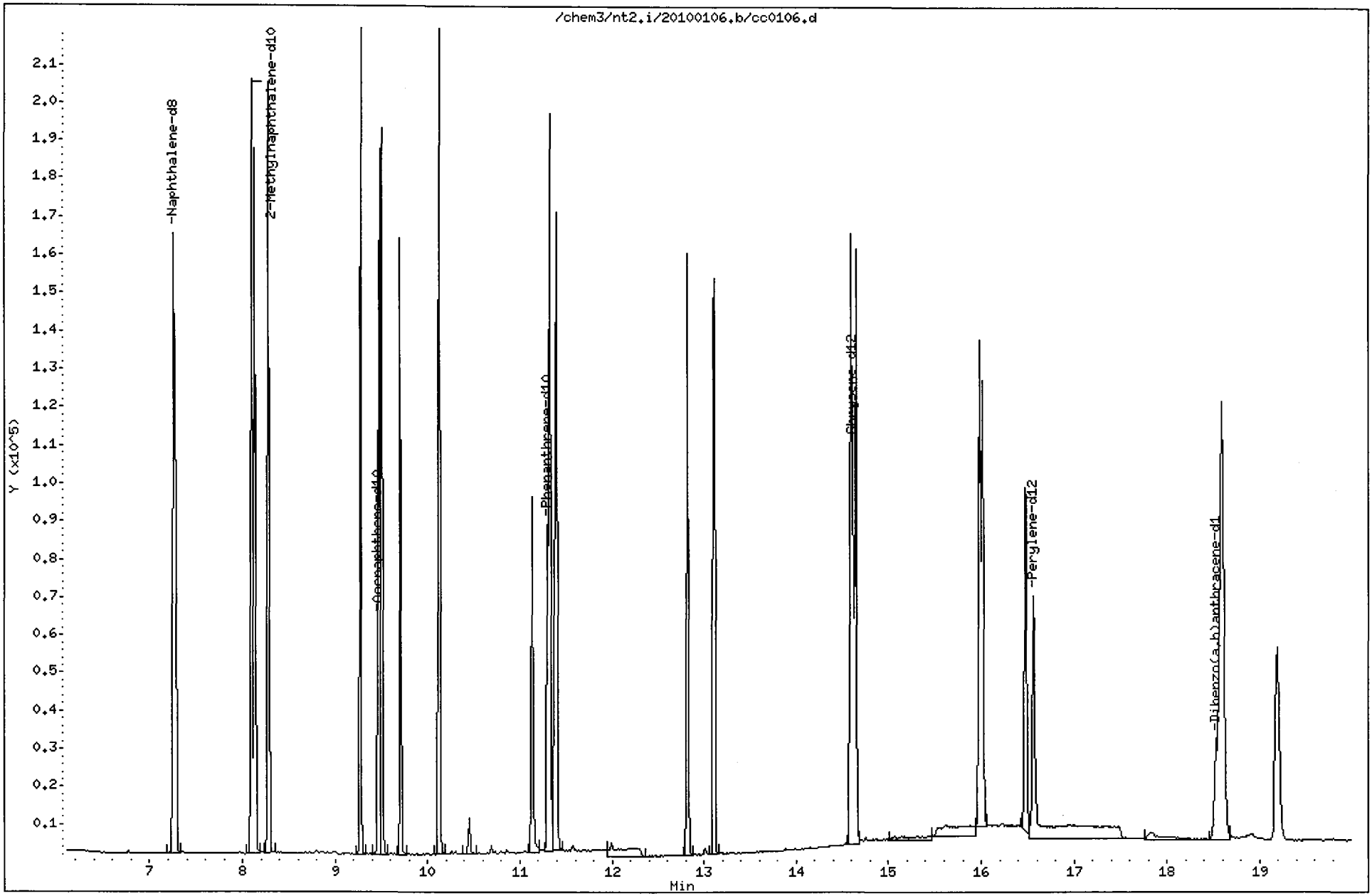
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.26	0.00
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	0.00
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.00
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.00
35 Perylene-d12	16.57	16.07	17.07	16.57	0.00

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/20100106.b/cc0106.d
Date : 06-JAN-2010 10:47
Client ID:
Sample Info: PNA 250
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



SIM Semivolatile Analysis
QC Raw Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

Data File: /chem3/nt2.i/20091021.b/df1021.d

Date : 21-OCT-2009 10:55

Client ID:

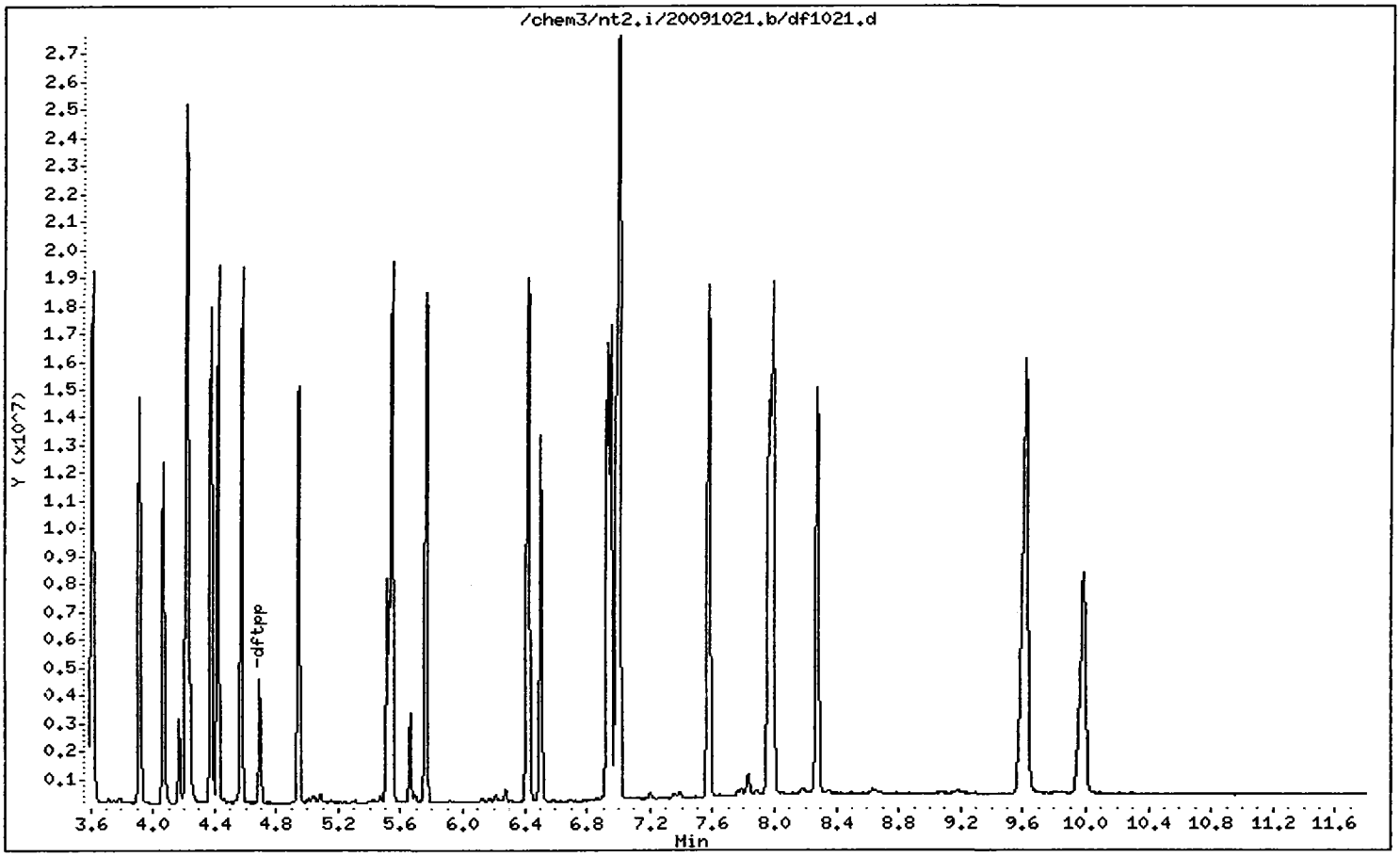
Instrument: nt2.i

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

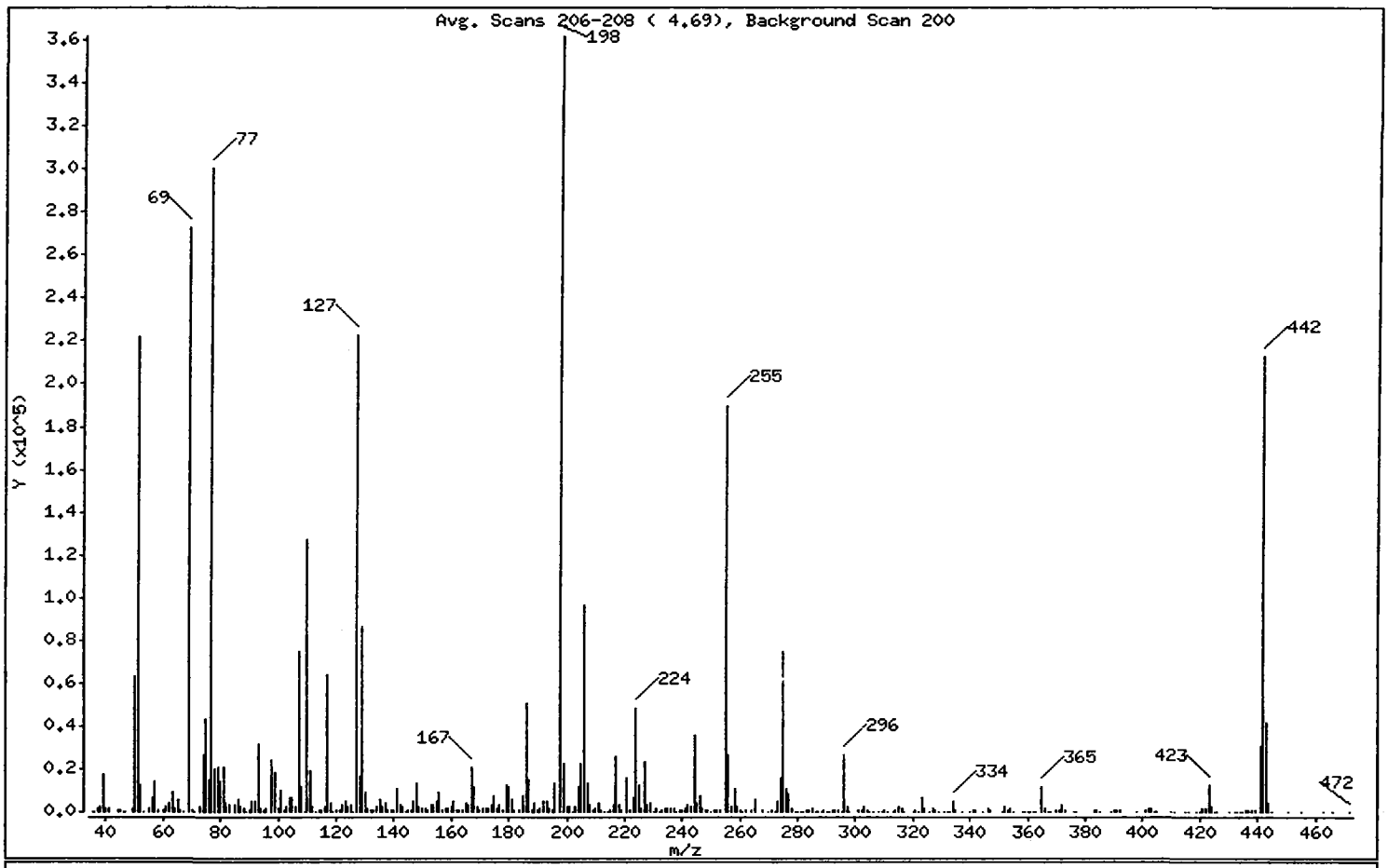
Sample Info: DFTPP

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		

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

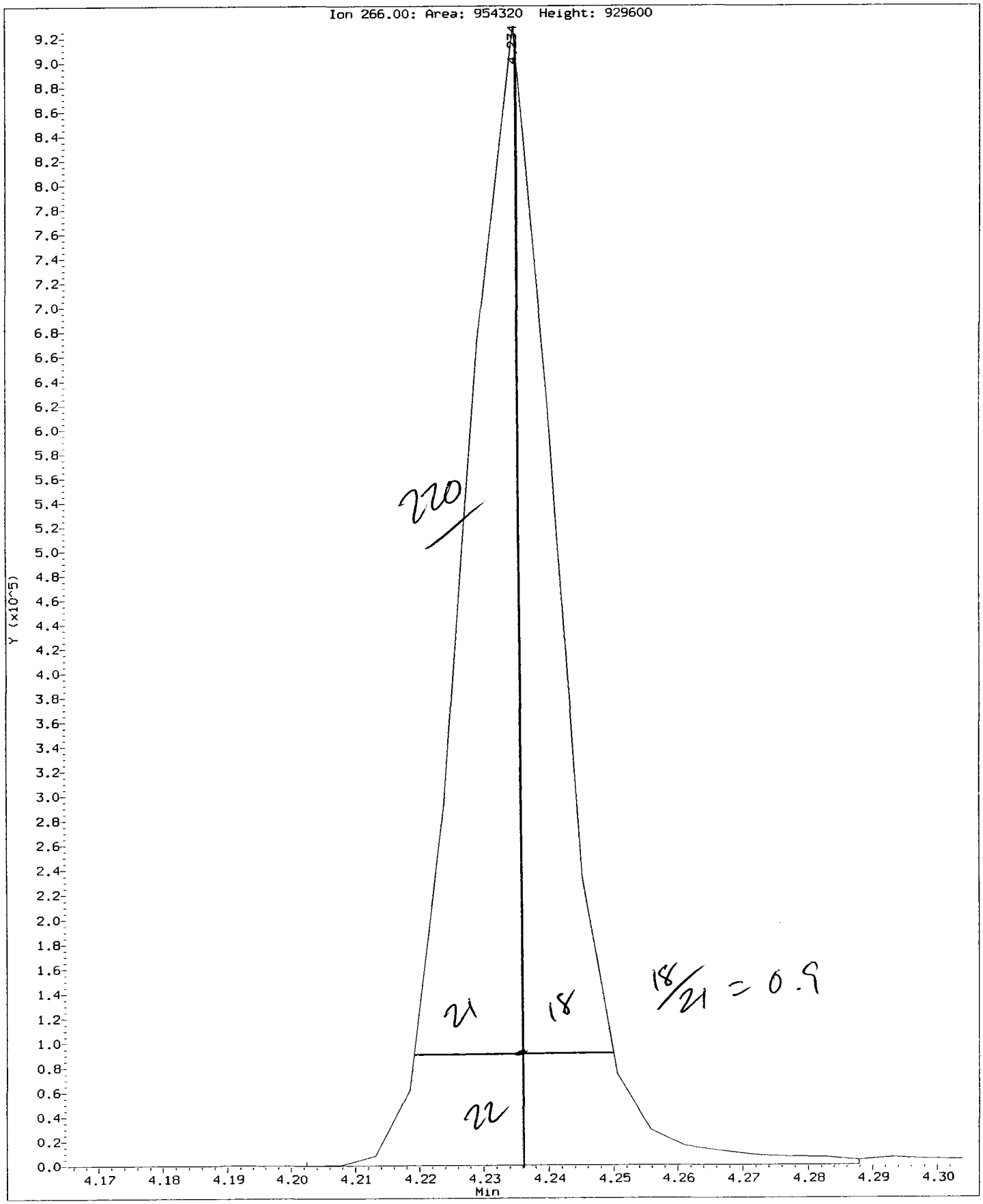
$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 3029 + 41668) * 100}{(\ 3029 + 41668 + 2284724)}$$

DDT Percent Breakdown = 1.9 %

Data File: /chem3/nt2.i/20091021.b/ddt.b/df1021.d
Injection Date: 21-OCT-2009 10:55
Instrument: nt2.i
Client Sample ID:

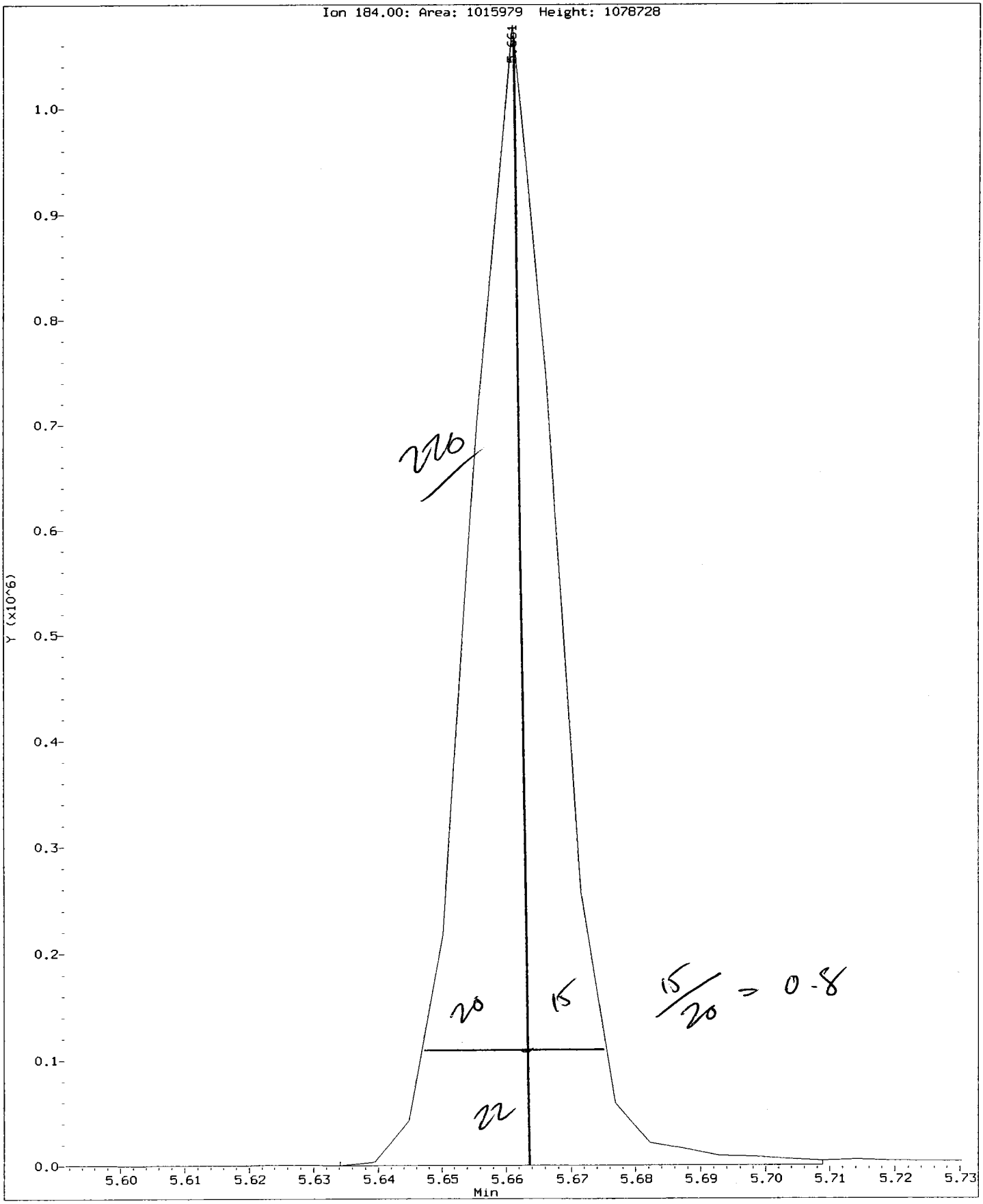
Compound: Pentachlorophenol
CAS Number: 87-86-5



QD71:00179

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:



Data File: /chem3/nt2.i/20100106.b/df0106.d

Date : 06-JAN-2010 10:27

Client ID:

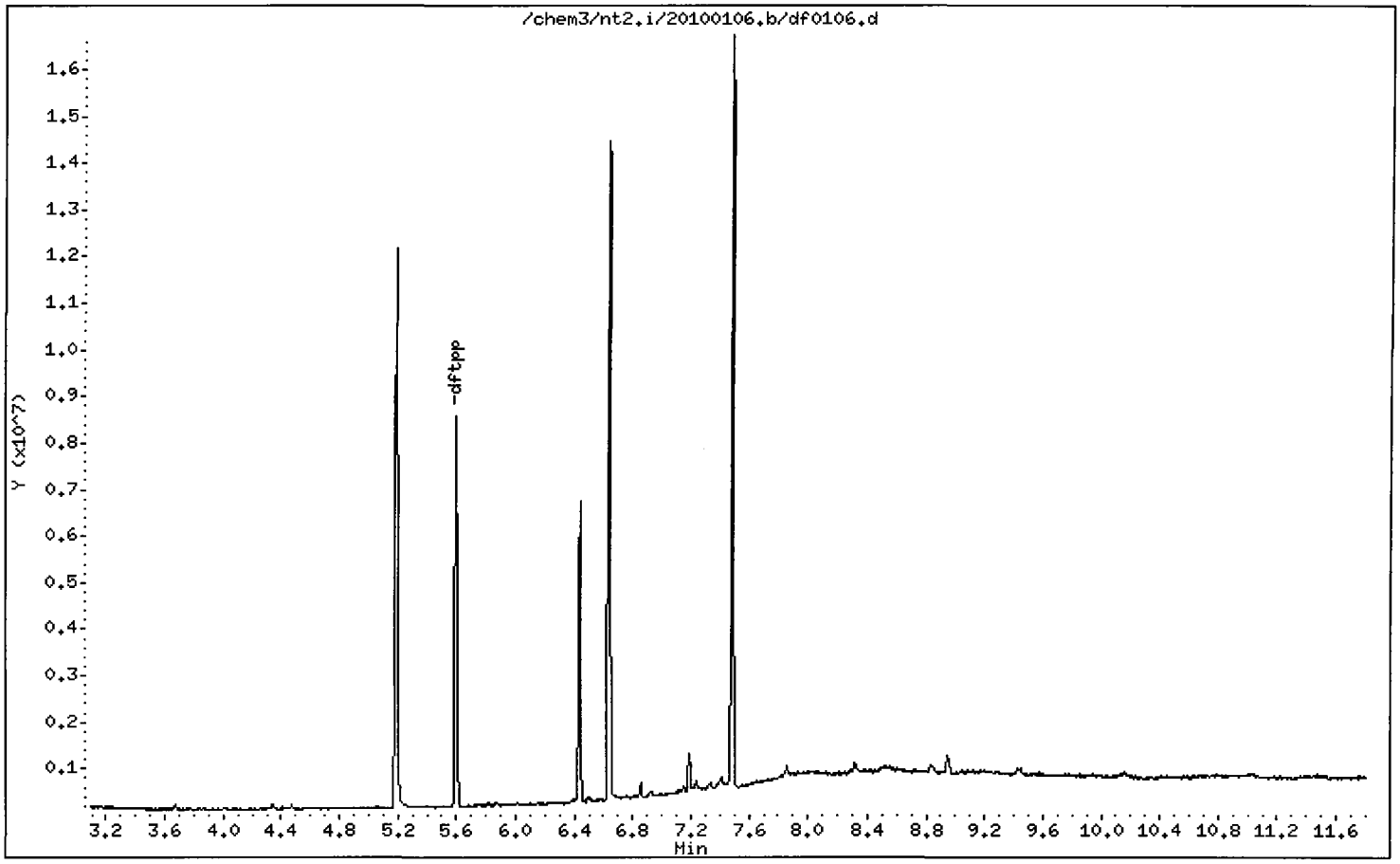
Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: /chem3/nt2.i/20100106.b/df0106.d

Date : 06-JAN-2010 10:27

Client ID:

Instrument: nt2.i

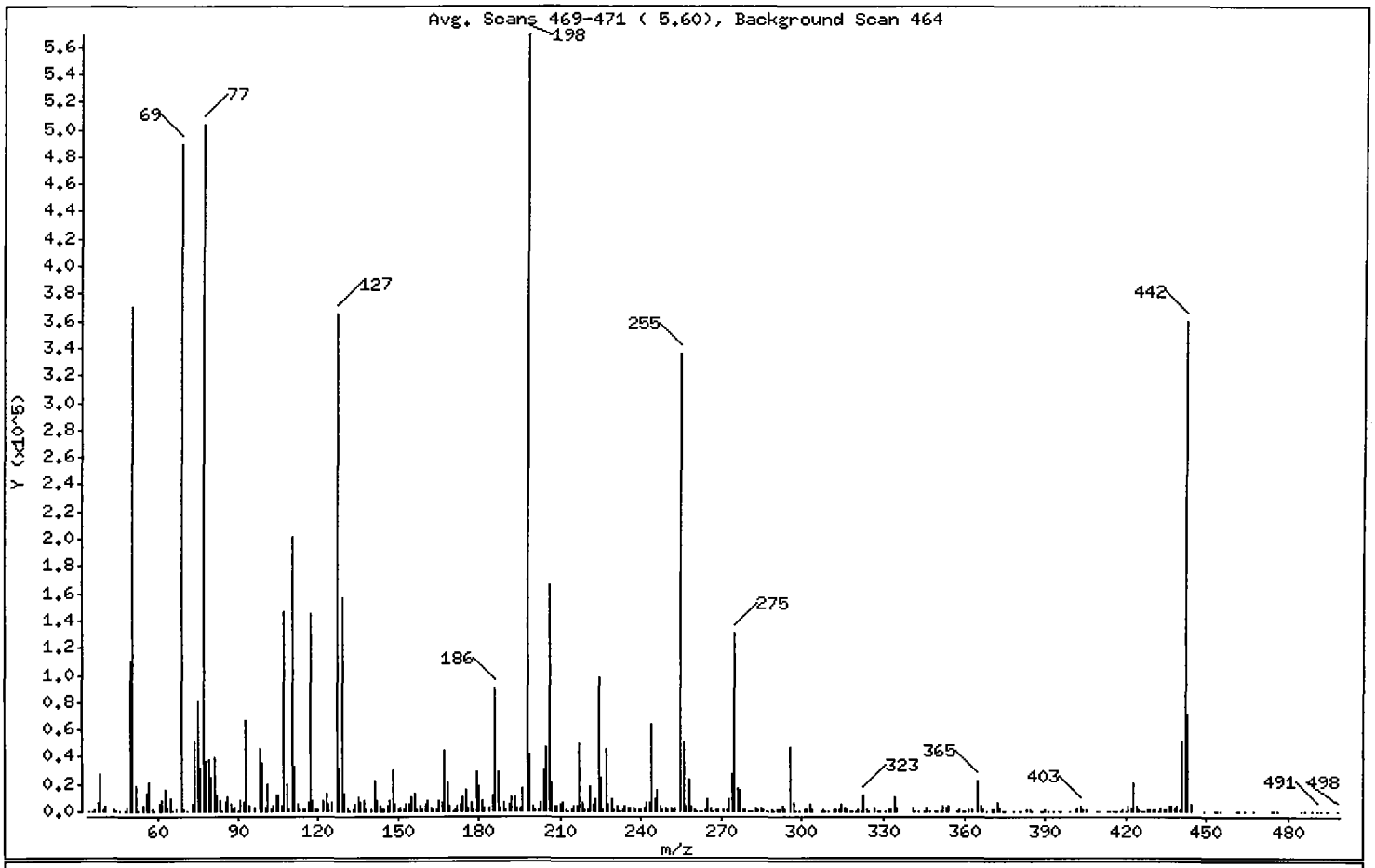
Sample Info: DFTPP

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	30.00 - 80.00% of mass 198	65.01
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	85.88
70	Less than 2.00% of mass 69	0.33 (0.39)
127	25.00 - 75.00% of mass 198	64.09
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.32
275	10.00 - 30.00% of mass 198	22.96
365	Greater than 0.75% of mass 198	3.92
441	Present, but less than mass 443	8.96
442	40.00 - 110.00% of mass 198	63.28
443	15.00 - 24.00% of mass 442	12.49 (19.74)

Data File: /chem3/nt2.i/20100106.b/df0106.d

Date : 06-JAN-2010 10:27

Client ID:

Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25

Data File: df0106.d
Spectrum: Avg. Scans 469-471 (5.60), Background Scan 464
Location of Maximum: 198.00
Number of points: 378

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	285	142.00	7212	239.00	1836	350.00	207
36.00	425	143.00	4046	240.00	1767	351.00	357
37.00	1404	144.00	1104	241.00	2619	352.00	4335
38.00	7153	145.00	846	242.00	6203	353.00	2776
39.00	28016	146.00	3501	243.00	5991	354.00	3751
40.00	1594	147.00	8339	244.00	64488	357.00	352
41.00	3933	148.00	30056	245.00	8578	358.00	822
44.00	1072	149.00	5550	246.00	15849	359.00	638
45.00	372	150.00	1418	247.00	3315	360.00	331
46.00	226	151.00	2339	248.00	1336	361.00	796
48.00	108	152.00	1164	249.00	2585	363.00	942
49.00	2427	153.00	5620	250.00	839	365.00	22272
50.00	109792	154.00	5434	251.00	2102	366.00	3587
51.00	369664	155.00	10590	252.00	1506	367.00	668
52.00	18456	156.00	13001	253.00	2902	368.00	235
53.00	34	157.00	1902	255.00	335360	370.00	684
55.00	3492	158.00	4093	256.00	51128	371.00	805
56.00	13653	159.00	796	257.00	4216	372.00	6782
57.00	21208	160.00	5853	258.00	22936	373.00	1974
58.00	1120	161.00	7753	259.00	4414	374.00	159
59.00	542	162.00	3237	260.00	1126	375.00	145
61.00	4735	163.00	1289	261.00	373	378.00	361
62.00	7364	164.00	947	262.00	346	380.00	466
63.00	16168	165.00	7291	263.00	21	381.00	83
64.00	2585	166.00	6771	264.00	678	383.00	1849
65.00	9548	167.00	44584	265.00	9554	384.00	702
66.00	608	168.00	21112	266.00	2165	385.00	391
67.00	1184	169.00	4072	267.00	35	388.00	547
69.00	488320	170.00	596	268.00	804	389.00	397
70.00	1887	171.00	1490	269.00	678	390.00	1599
71.00	558	172.00	4291	271.00	1039	391.00	642
73.00	5705	173.00	5835	272.00	998	393.00	120
74.00	50888	174.00	10422	273.00	9080	395.00	87
75.00	80840	175.00	16116	274.00	27808	396.00	201
76.00	30720	176.00	2791	275.00	130576	399.00	89

Date : 06-JAN-2010 10:27

Client ID: Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0106.d
Spectrum: Avg. Scans 469-471 (5.60), Background Scan 464
Location of Maximum: 198.00
Number of points: 378

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	503360	177.00	6122	276.00	16416	401.00	849
78.00	36224	178.00	1195	277.00	15380	402.00	2779
79.00	37376	179.00	28280	278.00	1691	403.00	4104
80.00	24344	180.00	17824	279.00	813	404.00	1366
81.00	38816	181.00	8346	280.00	542	405.00	676
82.00	11740	182.00	2097	281.00	406	409.00	141
83.00	7610	184.00	3264	282.00	339	410.00	124
84.00	59	185.00	12063	283.00	2426	413.00	384
85.00	6812	186.00	90064	284.00	882	414.00	81
86.00	10458	187.00	28264	285.00	2478	415.00	446
87.00	4642	188.00	2081	286.00	722	416.00	27
88.00	1373	189.00	7141	287.00	268	417.00	403
89.00	2062	190.00	1008	288.00	350	418.00	508
90.00	177	191.00	5159	289.00	796	419.00	898
91.00	8064	192.00	9912	290.00	559	420.00	230
92.00	6533	193.00	10495	291.00	773	421.00	3726
93.00	67160	194.00	2635	292.00	714	422.00	3234
94.00	4133	195.00	2959	293.00	3812	423.00	20656
96.00	2072	196.00	16816	294.00	987	424.00	3672
98.00	45840	198.00	568640	296.00	47544	425.00	804
99.00	35504	199.00	41608	297.00	5920	426.00	575
100.00	3113	200.00	4326	298.00	530	427.00	189
101.00	19520	201.00	1951	299.00	77	428.00	1159
102.00	878	202.00	1152	301.00	933	429.00	948
103.00	4498	203.00	6560	302.00	1168	430.00	1322
104.00	12260	204.00	29568	303.00	5612	431.00	884
105.00	12050	205.00	47368	304.00	1408	432.00	558
106.00	3575	206.00	166592	307.00	110	433.00	2200
107.00	147008	207.00	20704	308.00	905	434.00	1146
108.00	20184	208.00	4213	309.00	191	435.00	1843
109.00	757	209.00	3379	310.00	285	436.00	3314
110.00	201856	210.00	5356	312.00	830	437.00	3325
111.00	32824	211.00	6763	313.00	787	438.00	3193
112.00	4859	212.00	1126	314.00	1633	439.00	3963
113.00	1838	213.00	643	315.00	4648	440.00	1712

Date : 06-JAN-2010 10:27

Client ID: Instrument: nt2.i

Sample Info: DFTPP

Operator: VTS

Column phase: ZB-5msi Column diameter: 0.25

Data File: df0106.d
Spectrum: Avg, Scans 469-471 (5,60), Background Scan 464
Location of Maximum: 198.00
Number of points: 378

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	1790	214.00	712	316.00	2608	441.00	50952
115.00	1072	215.00	3743	317.00	766	442.00	359808
116.00	6271	216.00	4248	318.00	240	443.00	71040
117.00	145088	217.00	49648	319.00	95	444.00	5272
118.00	7510	218.00	6937	320.00	284	449.00	72
119.00	1200	219.00	677	321.00	1735	453.00	138
120.00	731	220.00	1369	322.00	389	454.00	90
122.00	7403	221.00	18568	323.00	12259	455.00	120
123.00	13518	222.00	5068	324.00	1881	461.00	89
124.00	5395	223.00	9801	325.00	4	462.00	298
125.00	6668	224.00	98176	327.00	2416	464.00	123
127.00	364416	225.00	25088	328.00	387	467.00	286
128.00	31744	226.00	1264	329.00	625	474.00	86
129.00	156800	227.00	46376	331.00	485	475.00	74
130.00	13201	228.00	5011	332.00	932	476.00	338
131.00	2651	229.00	9598	333.00	1453	485.00	319
132.00	539	230.00	1126	334.00	10835	486.00	70
133.00	1292	231.00	3506	335.00	2584	489.00	148
134.00	4690	232.00	154	341.00	2071	491.00	467
135.00	10791	233.00	798	342.00	619	492.00	77
136.00	6004	234.00	3639	343.00	276	494.00	168
137.00	8005	235.00	3030	345.00	540	495.00	165
138.00	1454	236.00	2523	346.00	2638	498.00	107
140.00	1353	237.00	3171	347.00	347		
141.00	22128	238.00	779	349.00	531		

Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt2.i/20100106.b/ddt.b/df0106.d
Method: /chem3/nt2.i/20100106.b/ddt.b/sw846ddt.m
Analysis Date: 06-JAN-2010 10:27

ARI ID: DFTPP
Misc:
Instrument: nt2.i

COMPOUND	RT	AREA
Pentachlorophenol	5.192	930576
Benzidine	6.640	4040831
4,4'-DDE	6.854	27171
4,4'-DDD	7.190	120267
4,4'-DDT	7.490	2105498

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(\ 27171 + 120267) * 100}{(\ 27171 + 120267 + 2105498)}$$

DDT Percent Breakdown = 6.5 %

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Low Level SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MB-010510
METHOD BLANK

Lab Sample ID: MB-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/08/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/05/10
Date Analyzed: 01/06/10 14:39
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	< 0.010 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	77.7%
d14-Dibenzo(a,h)anthracene	78.0%

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010604.d
Lab Smp Id: QD71MBW1 Client Smp ID: QD71MBW1
Inj Date : 06-JAN-2010 14:39
Operator : VTS Inst ID: nt2.i
Smp Info : QD71MBW1
Misc Info : 10-14
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 06-Jan-2010 14:37 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 4 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	7.244	7.260	(1.000)	164571	200.000	
5 Naphthalene	128	Compound Not Detected.					
$ 6 2-Methylnaphthalene-d10	152	8.106	8.106	(1.119)	98858	233.224	233
7 2-Methylnaphthalene	142	Compound Not Detected.					
8 1-Methylnaphthalene	142	Compound Not Detected.					
10 Acenaphthylene	152	Compound Not Detected.					
* 11 Acenaphthene-d10	164	9.473	9.473	(1.000)	87861	200.000	
12 Acenaphthene	153	Compound Not Detected.					
14 Dibenzofuran	168	Compound Not Detected.					
15 Fluorene	166	Compound Not Detected.					
* 18 Phenanthrene-d10	188	11.301	11.301	(1.000)	121730	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)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	Compound Not Detected.					
*	29 Chrysene-d12	240	14.616	14.616	(1.000)	87493	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	16.575	16.568	(1.000)	81179	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	36 Dibenzo(a,h)anthracene-d14	292	18.536	18.523	(1.118)	57462	233.527	234
	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: 010604.d
Lab Smp Id: QD71MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: QD71MBW1
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	164571	-4.93
11 Acenaphthene-d10	96677	48338	193354	87861	-9.12
18 Phenanthrene-d10	147750	73875	295500	121730	-17.61
29 Chrysene-d12	135219	67610	270438	87493	-35.30
35 Perylene-d12	125815	62908	251630	81179	-35.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.24	-0.21
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	0.00
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.00
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.00
35 Perylene-d12	16.57	16.07	17.07	16.58	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QD71MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Client SDG: QD71
Fraction: SV
Client Smp ID: QD71MBW1
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

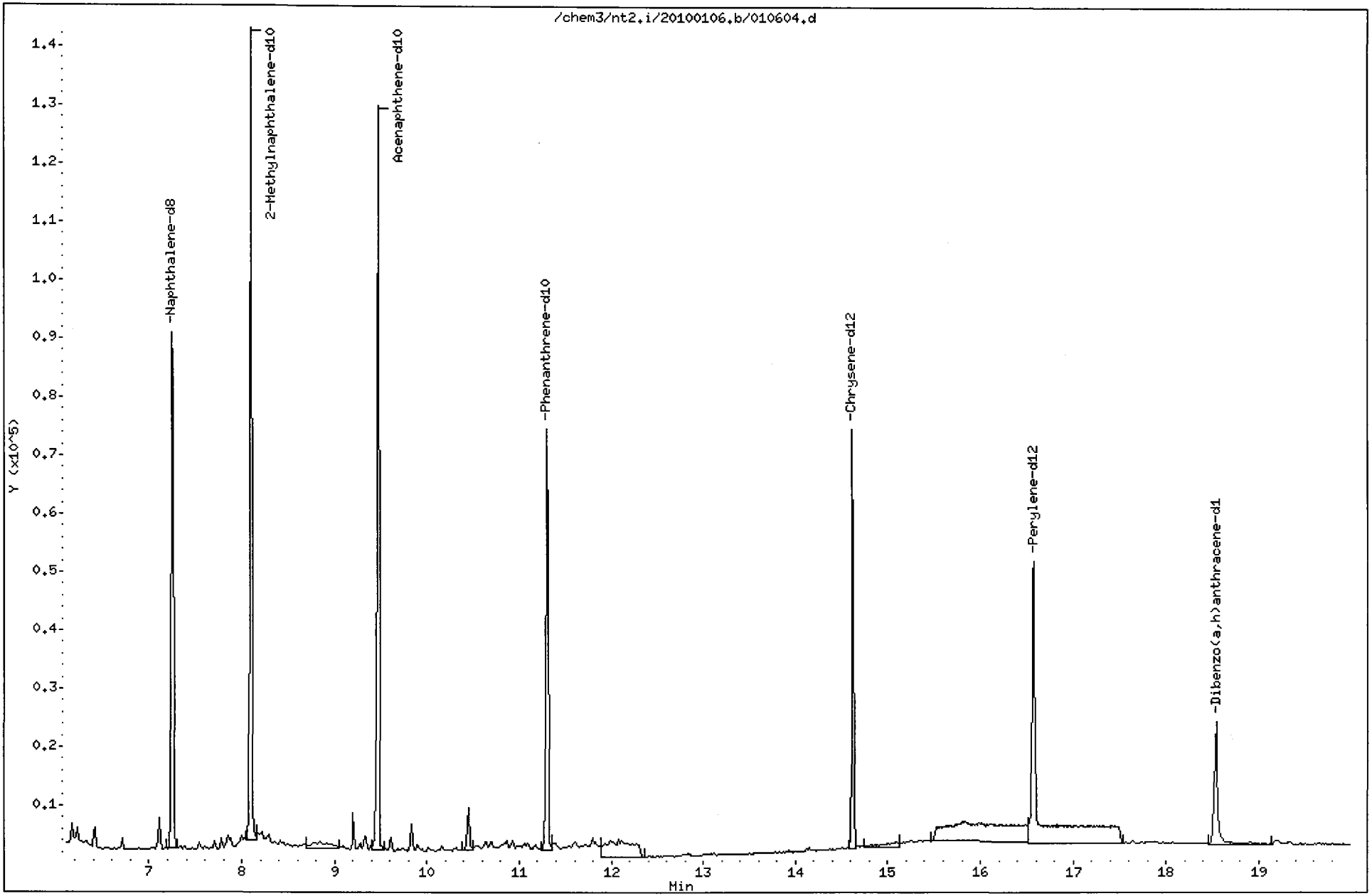
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	233	77.74	31-109
$ 36 Dibenzo(a,h)anthra	300	234	77.84	10-133

Data File: /chem3/nt2.i/20100106.b/010604.d
Date : 06-JAN-2010 14:39
Client ID: QD71MBW1
Sample Info: QD71MBW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25

QD71-09192



Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010605.d
Lab Smp Id: QD71LCSW1 Client Smp ID: QD71LCSW1
Inj Date : 06-JAN-2010 15:03
Operator : VTS Inst ID: nt2.i
Smp Info : QD71LCSW1
Misc Info : 10-14
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 08-Jan-2010 11:09 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 5 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)	CONCENTRATIONS FINAL (ug/L)
*	4 Naphthalene-d8	136	7.258	7.260	(1.000)	147690	200.000	
	5 Naphthalene	128	7.273	7.275	(1.002)	129274	181.776	182
$	6 2-Methylnaphthalene-d10	152	8.104	8.106	(1.117)	81184	213.419	213
	7 2-Methylnaphthalene	142	8.135	8.137	(1.121)	82630	199.237	199
	8 1-Methylnaphthalene	142	8.273	8.275	(1.140)	82322	190.711	191
	10 Acenaphthylene	152	9.278	9.280	(0.980)	113899	173.449	173
*	11 Acenaphthene-d10	164	9.471	9.473	(1.000)	82979	200.000	
	12 Acenaphthene	153	9.497	9.512	(1.003)	81139	199.116	199
	14 Dibenzofuran	168	9.703	9.705	(1.024)	124750	234.986	235
	15 Fluorene	166	10.132	10.131	(1.070)	97409	221.955	222
*	18 Phenanthrene-d10	188	11.301	11.301	(1.000)	118484	200.000	
	19 Phenanthrene	178	11.332	11.332	(1.003)	154445	262.253	262
	20 Anthracene	178	11.394	11.393	(1.008)	110744	184.027	184
	24 Fluoranthene	202	12.817	12.827	(1.134)	168002	261.916	262
	25 Pyrene	202	13.102	13.112	(1.159)	164267	252.285	252

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.595	14.594	(0.998)	119961	261.454	261
*	29 Chrysene-d12	240	14.617	14.616	(1.000)	91929	200.000	
	30 Chrysene	228	14.649	14.649	(1.002)	136008	300.449	300
	32 Benzo(b)fluoranthene	252	15.979	15.979	(0.964)	135467	278.212	278
	33 Benzo(k)fluoranthene	252	16.010	16.010	(0.966)	140811	266.348	266
	34 Benzo(a)pyrene	252	16.475	16.475	(0.994)	69641	182.537	183
*	35 Perylene-d12	264	16.568	16.568	(1.000)	84988	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	18.590	18.590	(1.122)	101116	228.711	229
$	36 Dibenzo(a,h)anthracene-d14	292	18.523	18.523	(1.118)	65892	255.785	256
	38 Dibenzo(a,h)anthracene	278	18.590	18.604	(1.122)	87341	252.568	253
	39 Benzo(g,h,i)perylene	276	19.184	19.197	(1.158)	82487	216.371	216

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 010605.d
Lab Smp Id: QD71LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: QD71LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	173109	86554	346218	147690	-14.68
11 Acenaphthene-d10	96677	48338	193354	82979	-14.17
18 Phenanthrene-d10	147750	73875	295500	118484	-19.81
29 Chrysene-d12	135219	67610	270438	91929	-32.01
35 Perylene-d12	125815	62908	251630	84988	-32.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.26	-0.03
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	-0.02
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.00
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.01
35 Perylene-d12	16.57	16.07	17.07	16.57	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: QD71LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Client SDG: QD71
Fraction: SV
Client Smp ID: QD71LCSW1
Operator: VTS
SampleType: LCS
Quant Type: ISTD

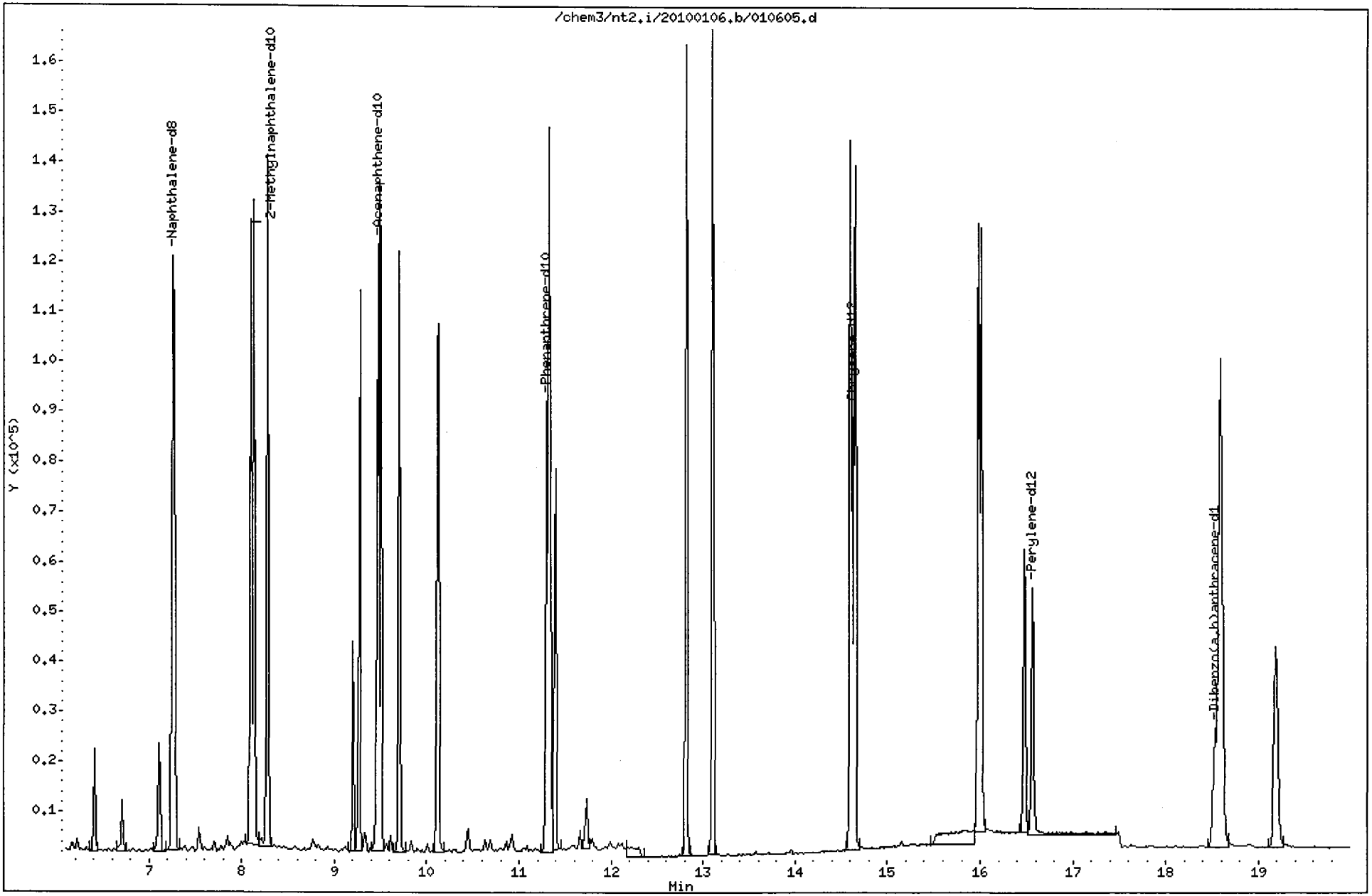
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	182	60.59	41-101
7 2-Methylnaphthalen	300	199	66.41	47-100
8 1-Methylnaphthalen	300	191	63.57	30-160
10 Acenaphthylene	300	173	57.82	35-100
12 Acenaphthene	300	199	66.37	43-104
14 Dibenzofuran	300	235	78.33	37-100
15 Fluorene	300	222	73.99	51-103
19 Phenanthrene	300	262	87.42	55-109
20 Anthracene	300	184	61.34	30-101
24 Fluoranthene	300	262	87.31	49-123
25 Pyrene	300	252	84.10	48-120
28 Benzo(a)anthracene	300	261	87.15	43-113
30 Chrysene	300	300	100.15	59-112
32 Benzo(b)fluoranthe	300	278	92.74	44-121
33 Benzo(k)fluoranthe	300	266	88.78	50-117
34 Benzo(a)pyrene	300	183	60.85	10-100
37 Indeno(1,2,3-cd)py	300	229	76.24	43-112
38 Dibenzo(a,h)anthra	300	253	84.19	42-114
39 Benzo(g,h,i)peryle	300	216	72.12	31-118

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	213	71.14	31-109
$ 36 Dibenzo(a,h)anthra	300	256	85.26	10-133

Data File: /chem3/nt2.i/20100106.b/010605.d
Date : 06-JAN-2010 15:03
Client ID: QD71LCSW1
Sample Info: QD71LCSW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25



QD71 : 00157

Analytical Resources, Inc.

LOW LEVEL PNAs BY SW8270D-SIM

Data file : /chem3/nt2.i/20100106.b/010606.d
Lab Smp Id: QD71LCSDW1 Client Smp ID: QD71LCSDW1
Inj Date : 06-JAN-2010 15:28
Operator : VTS Inst ID: nt2.i
Smp Info : QD71LCSDW1
Misc Info : 10-14
Comment :
Method : /chem3/nt2.i/20100106.b/lowsim.m
Meth Date : 08-Jan-2010 11:09 peter Quant Type: ISTD
Cal Date : 21-OCT-2009 13:30 Cal File: ic102106.d
Als bottle: 6 QC Sample: LCSD
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	7.245	7.260	(1.000)	142273	200.000	
5 Naphthalene	128	7.275	7.275	(1.004)	130923	191.104	191
$ 6 2-Methylnaphthalene-d10	152	8.106	8.106	(1.119)	77260	210.837	211
7 2-Methylnaphthalene	142	8.137	8.137	(1.123)	84783	212.212	212
8 1-Methylnaphthalene	142	8.276	8.275	(1.142)	82158	197.578	198
10 Acenaphthylene	152	9.278	9.280	(0.980)	105784	167.816	168
* 11 Acenaphthene-d10	164	9.472	9.473	(1.000)	79654	200.000	
12 Acenaphthene	153	9.497	9.512	(1.003)	77745	198.751	199
14 Dibenzofuran	168	9.704	9.705	(1.024)	118449	232.431	232
15 Fluorene	166	10.131	10.131	(1.070)	92438	219.420	219
* 18 Phenanthrene-d10	188	11.300	11.301	(1.000)	112612	200.000	
19 Phenanthrene	178	11.331	11.332	(1.003)	143662	256.664	257
20 Anthracene	178	11.393	11.393	(1.008)	104058	181.933	182
24 Fluoranthene	202	12.815	12.827	(1.134)	149584	245.363	245
25 Pyrene	202	13.101	13.112	(1.159)	147987	239.133	239

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/mL)	CONCENTRATIONS FINAL (ug/L)
	28 Benzo(a)anthracene	228	14.593	14.594	(0.998)	113031	260.526	261
*	29 Chrysene-d12	240	14.615	14.616	(1.000)	86927	200.000	
	30 Chrysene	228	14.648	14.649	(1.002)	120670	281.905	282
	32 Benzo(b)fluoranthene	252	15.980	15.979	(0.964)	121799	257.738	258
	33 Benzo(k)fluoranthene	252	16.011	16.010	(0.966)	123181	240.077	240
	34 Benzo(a)pyrene	252	16.475	16.475	(0.994)	73545	198.624	199
*	35 Perylene-d12	264	16.568	16.568	(1.000)	82483	200.000	
	37 Indeno(1,2,3-cd)pyrene	276	18.589	18.590	(1.122)	92763	216.190	216
$	36 Dibenzo(a,h)anthracene-d14	292	18.521	18.523	(1.118)	59298	237.178	237
	38 Dibenzo(a,h)anthracene	278	18.589	18.604	(1.122)	79994	238.348	238
	39 Benzo(g,h,i)perylene	276	19.182	19.197	(1.158)	76041	205.520	206

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt2.i
Lab File ID: 010606.d
Lab Smp Id: QD71LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Calibration Date: 06-JAN-2010
Calibration Time: 10:47
Client Smp ID: QD71LCSDW1
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	142273	-17.81
11 Acenaphthene-d10	96677	48338	193354	79654	-17.61
18 Phenanthrene-d10	147750	73875	295500	112612	-23.78
29 Chrysene-d12	135219	67610	270438	86927	-35.71
35 Perylene-d12	125815	62908	251630	82483	-34.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
4 Naphthalene-d8	7.26	6.76	7.76	7.24	-0.20
11 Acenaphthene-d10	9.47	8.97	9.97	9.47	-0.02
18 Phenanthrene-d10	11.30	10.80	11.80	11.30	0.00
29 Chrysene-d12	14.62	14.12	15.12	14.62	0.00
35 Perylene-d12	16.57	16.07	17.07	16.57	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: QD71LCSDW1
Level: LOW
Data Type: MS DATA
SpikeList File: waterlcs.spk
Sublist File: pna1mn.sub
Method File: /chem3/nt2.i/20100106.b/lowsim.m
Misc Info: 10-14

Client SDG: QD71
Fraction: SV
Client Smp ID: QD71LCSDW1
Operator: VTS
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
5 Naphthalene	300	191	63.70	41-101
7 2-Methylnaphthalen	300	212	70.74	47-100
8 1-Methylnaphthalen	300	198	65.86	30-160
10 Acenaphthylene	300	168	55.94	35-100
12 Acenaphthene	300	199	66.25	43-104
14 Dibenzofuran	300	232	77.48	37-100
15 Fluorene	300	219	73.14	51-103
19 Phenanthrene	300	257	85.55	55-109
20 Anthracene	300	182	60.64	30-101
24 Fluoranthene	300	245	81.79	49-123
25 Pyrene	300	239	79.71	48-120
28 Benzo(a)anthracene	300	261	86.84	43-113
30 Chrysene	300	282	93.97	59-112
32 Benzo(b)fluoranthe	300	258	85.91	44-121
33 Benzo(k)fluoranthe	300	240	80.03	50-117
34 Benzo(a)pyrene	300	199	66.21	10-100
37 Indeno(1,2,3-cd)py	300	216	72.06	43-112
38 Dibenzo(a,h)anthra	300	238	79.45	42-114
39 Benzo(g,h,i)peryle	300	206	68.51	31-118

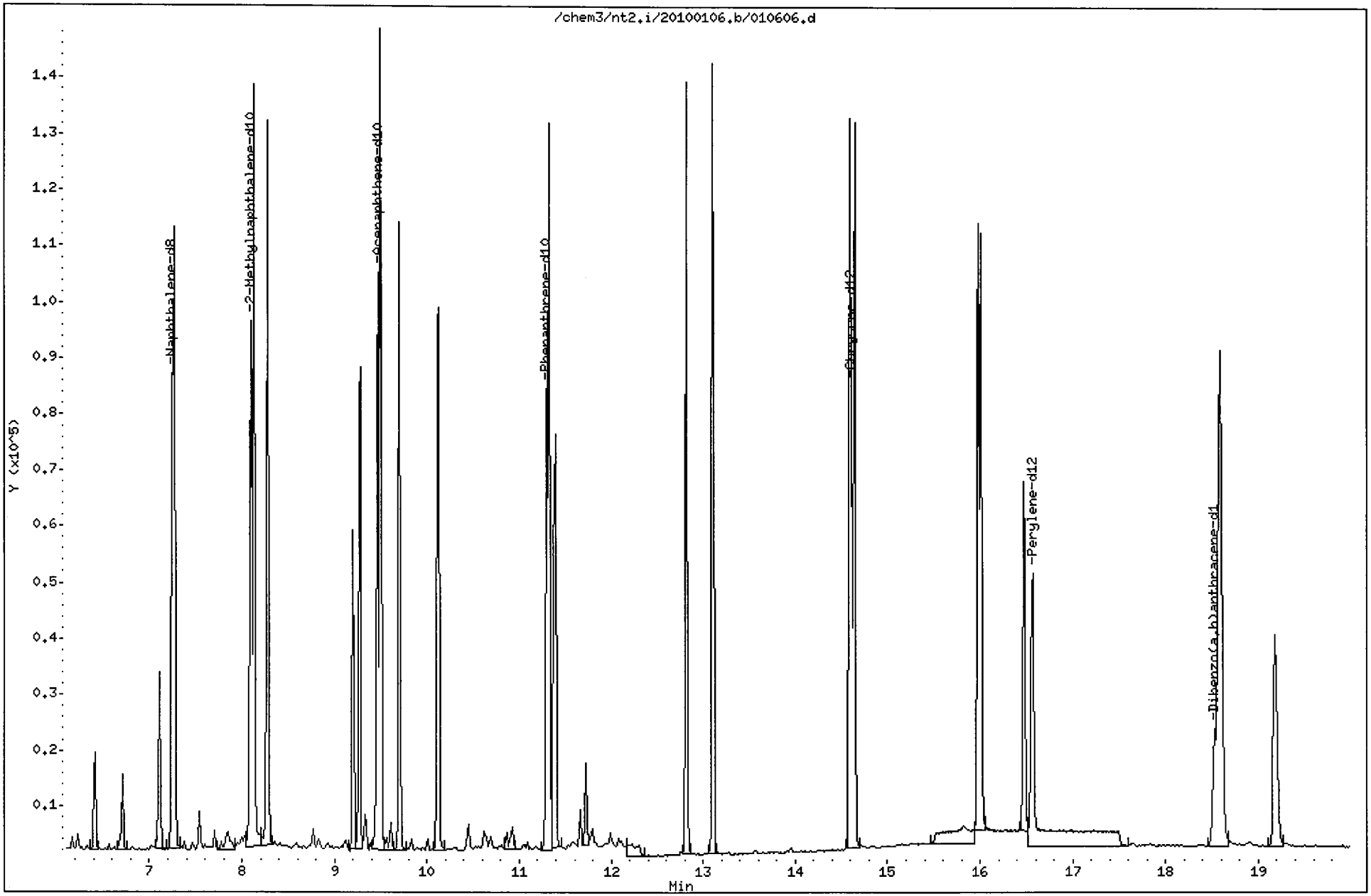
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 6 2-Methylnaphthalen	300	211	70.28	31-109
$ 36 Dibenzo(a,h)anthra	300	237	79.06	10-133

Data File: /chem3/nt2.i/20100106.b/010606.d
Date : 06-JAN-2010 15:28
Client ID: QD71LCSDW1
Sample Info: QD71LCSDW1
Volume Injected (uL): 2.0
Column phase: ZB-5

Instrument: nt2.i

Operator: VTS
Column diameter: 0.25

QD71 : 66202



SIM Semivolatile Analysis
Extraction Bench Sheets/Run Logs

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Liquid/Liquid (3520C) (SOP # 341S)

Preparation Test SIM PNA # 4 — Low Level (0.01ppb)

ARI Job No(s) QD71 — Batch set up by: SP

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted	Disassemble Liq/Liq	KD	TurboVap 1 2 3	(REQ) Silica Gel Clean (1:1)	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	QD71 MBW	Date 01/05/10	500mL						0.5mL	0.5mL	
	SBW	↓	↓						↓	↓	
	SBW Dup.	↓	↓						↓	↓	
2	A	checked	500mL								
2	B										
4	C										
								CJZ			
Analyst/Date:	AR 01/05/10 →			MM 1-6-10	RR 1/6/10	HD 01/06/10	HD 01/06/10	1/6/10 →			

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	I	100µL	8/12/10		WW
Spike	18 B	100µL	8/28/10		WW
Extraction Time: 14:20		Liq/Liq Start: 14:30		Liq/Liq Stop: 0600	

SPECIAL INSTRUCTIONS: 1. Rinse all glassware with Low Level DCM. 2. Add 20-25mL Low Level Hexane.
3. Add ~200mL Low Level DCM to Liq/Liq. 4. Add surr/spike. 5. Extract minimum 8 hrs.
6. KD (no drying column) to ~8mL at 80°. 7. Exchange (2 X with 10mL) to Low Level Hexane at 100°. 8. TurboVap.
9. Silica Clean-up=REQUIRED. 10. TurboVap. 11. Vial in Low Level DCM.
12. Post Screen extracts with any color prior to Silica Gel Clean-up.
A. Archive Y / (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: QD71 Client ID: Floyd-Snider

Parameter: low level Sim pNA Client Project: Long Lakes Apts.

SOP Number(s): 3415 No Anomalies:

List problems, concerns, corrective actions and any other pertinent information

Analyst Initials:		Date:	

056F

Revision 006
1/12/07

QD71:00205

Analytical Resources Inc.: Organics Instrument Log

NT-2 Serial No.: 82321977

Date: 10/21/09 Analysis: LOWSIM PNA Analyst: MK

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.

Form 7042F
NT2 Daily Run Log

MK 10/21/09 New liner, clip col IC 102101

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): NPL 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: 1/6/10 Analysis: LowSIM PNA Analyst: [signature]

GC Program: LowSIM Column No: 171137 Column Type: 25m msi

Instrument Tune (.U or .CT.): 090928.U EM Voltage: 2694

Calibration File: df0106 Curve Date: 10/21/09

IS/SS	Ical/Ccal	LCS/ICV
1584-1	1665-3	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt2.i/20100106.b

	Time	Filename	LabID	ClientId	DF									
1	1027	df0106.d	DFTPP		1	NO ISTDS FOUND								
2	1047	cc0106.d	PNA 250		1	7.26	176475	9.47	96387	11.30	144535	14.62	111668	16.57	105827
3	1137	010601.d	QD01MBW1	QD01MBW1	1	7.26	169677	9.47	93789	11.30	130597	14.61	98154	16.57	89574
4	1201	010602.d	QD01LCSW1	QD01LCSW1	1	7.26	158093	9.47	88112	11.30	123876	14.61	93826	16.57	87897
5	1226	010603.d	QD01A	ID#ITTL-LE01	1	7.26	152605	9.47	85268	11.30	124212	14.62	92172	16.57	87055
6	1439	010604.d	QD71MBW1	QD71MBW1	1	7.24	164571	9.47	87861	11.30	121730	14.62	87493	16.58	81179
7	1503	010605.d	QD71LCSW1	QD71LCSW1	1	7.26	147690	9.47	82979	11.30	118484	14.62	91929	16.57	84988
8	1528	010606.d	QD71LCSDW1	QD71LCSDW1	1	7.24	142273	9.47	79654	11.30	112612	14.62	86927	16.57	82483
9	1553	010607.d	QD71A	CB31A123109C	1	7.24	142763	9.47	79977	11.30	114059	14.61	93856	16.57	86846
10	1617	010608.d	QD71B	CB4857123109	1	7.26	144398	9.47	79839	11.30	115276	14.62	92980	16.57	87153
11	1642	010609.d	QD71C	CB1123109COM	1	7.26	140626	9.47	79881	11.30	115741	14.62	85042	16.57	84037

[signature] 1/8/10

Maintenance / Comments

New liner, clip col.

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): CC0106

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: QD71 Client ID: Floyd-Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): Low Sim PNA

Instrument: NT-1 (NT-2) NT-4 NT-6 NT-8

Curve Date: 10/21/09 Analysis Start Date: 1/6/10

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: [signature] **Date:** 1/8/10

Reviewer's Signature: [signature] **Date:** 1/8/10

PCP/Chlorophenols ANALYSIS
QC Summary Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client ID	TBP	TOT OUT
MB-010510	61.6%	0
LCS-010510	62.6%	0
LCSD-010510	73.2%	0
CB31A123109COMP	84.4%	0
CB4857123109COMP	79.2%	0
CB1123109COMP	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(40-130)	(11-156)

Prep Method: SW3510C
Log Number Range: 10-14 to 10-16

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: LCS-010510
LCS/LCSD

Lab Sample ID: LCS-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized: DB
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted LCS/LCSD: 01/05/10

Date Analyzed LCS: 01/08/10 22:44
LCSD: 01/08/10 23:03
Instrument/Analyst LCS: ECD1/AAR
LCSD: ECD1/AAR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 50 mL
LCSD: 50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	1.97	2.50	78.8%	1.87	2.50	74.8%	5.2%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	62.6%	73.2%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QD71MBW1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD-SNIDER

ARI Job No.: QD71 — Project: LORA LAKES APTS

Lab Sample ID: QD71MBW1 — Lab File ID: 0108A017

Matrix (soil/water) LIQUID — Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y — Date Extracted: 01/05/10

Date Analyzed (1): 01/08/10 — Date Analyzed (2): 01/08/10

Time Analyzed (1): 2224 — Time Analyzed (2): 2224

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	QD71LCSW1	QD71LCSW1	01/08/10	01/08/10
02	QD71LCSDW1	QD71LCSDW1	01/08/10	01/08/10
03	CB31A123109C	QD71A	01/08/10	01/08/10
04	CB4857123109	QD71B	01/09/10	01/09/10
05	CB1123109COM	QD71C	01/09/10	01/09/10

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 10/21/09 10/21/09

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.05

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	10/21/09	1633	10.05
02		PCP A	10/21/09	1653	10.06
03		PCP B	10/21/09	1713	10.05
04		PCP C	10/21/09	1733	10.05
05		PCP E	10/21/09	1753	10.04
06		PCP F	10/21/09	1812	10.04
07		PCPCCAL	01/08/10	2204	10.05
08	QD71MBW1	QD71MBW1	01/08/10	2224	10.07
09	QD71LCSW1	QD71LCSW1	01/08/10	2244	10.06
10	QD71LCSDW1	QD71LCSDW1	01/08/10	2303	10.06
11	CB31A123109C	QD71A	01/08/10	2323	10.05
12	CB4857123109	QD71B	01/09/10	0003	10.05
13	CB1123109COM	QD71C	01/09/10	0042	10.06
14		PCPCCAL	01/09/10	0142	10.05

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.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 10/21/09 10/21/09

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.68

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	10/21/09	1633	10.68
02		PCP A	10/21/09	1653	10.69
03		PCP B	10/21/09	1713	10.68
04		PCP C	10/21/09	1733	10.68
05		PCP E	10/21/09	1753	10.68
06		PCP F	10/21/09	1812	10.67
07		PCPCCAL	01/08/10	2204	10.68
08	QD71MBW1	QD71MBW1	01/08/10	2224	10.70
09	QD71LCSW1	QD71LCSW1	01/08/10	2244	10.69
10	QD71LCSDW1	QD71LCSDW1	01/08/10	2303	10.69
11	CB31A123109C	QD71A	01/08/10	2323	10.68
12	CB4857123109	QD71B	01/09/10	0003	10.69
13	CB1123109COM	QD71C	01/09/10	0042	10.69
14		PCPCCAL	01/09/10	0142	10.69

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.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 10/21/09 10/21/09

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.05

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	ZZZZZ	ZZZZZ	10/21/09	1832	10.03

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.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 10/21/09 10/21/09

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.68

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	ZZZZZ	ZZZZZ	10/21/09	1832	10.67

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 Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/08/10 23:23
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**	**0.41**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	84.4%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

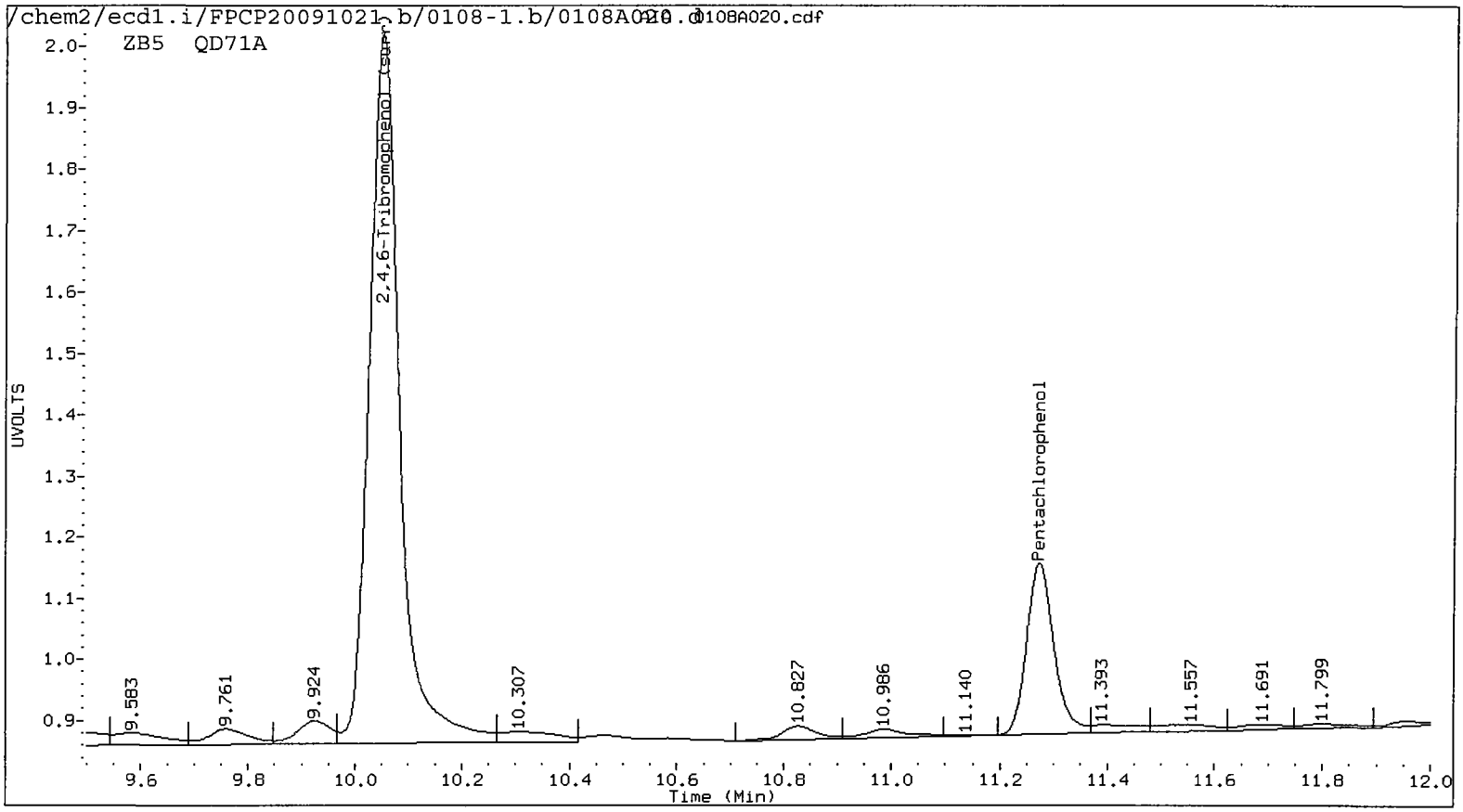
AR 1/11/2010

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A020.d ARI ID: QD71A
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A020.d Client ID: CB31A123109COMP
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 08-JAN-2010 23:23
Compound Sublist: all Report Date: 01/11/2010 13:09
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
11.273	0.002	49763	11.697	0.003	66961	3.2024	4.1324	25.4	Pentachlorophenol
7.263	-0.030	16848	7.390	0.038	951	2.2172	0.0999	182.8*	2,4,6-Trichlorophenol
7.708	0.059	5489	----			0.6255	0.0000	---	2,3,6-Trichlorophenol
----			8.656	0.036	1583	0.0000	0.2654	---	2,4,5-Trichlorophenol
8.777	-0.049	3452	----			0.5682	0.0000	---	2,3,4-Trichlorophenol
8.990	-0.048	2346	9.319	0.024	2413	0.1777	0.1803	1.5	2,3,5,6-Tetrachlorophenol
----			11.149	-0.010	3296	0.0000	0.3202	---	2,3,4,5-Tetrachlorophenol
6.940	0.022	5114	7.178	0.002	1150	9.2327	2.1166	125.4*	2,4-Dichlorophenol
10.050	0.000	228840	10.683	0.003	272247	19.0	21.1	10.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	75.8	84.4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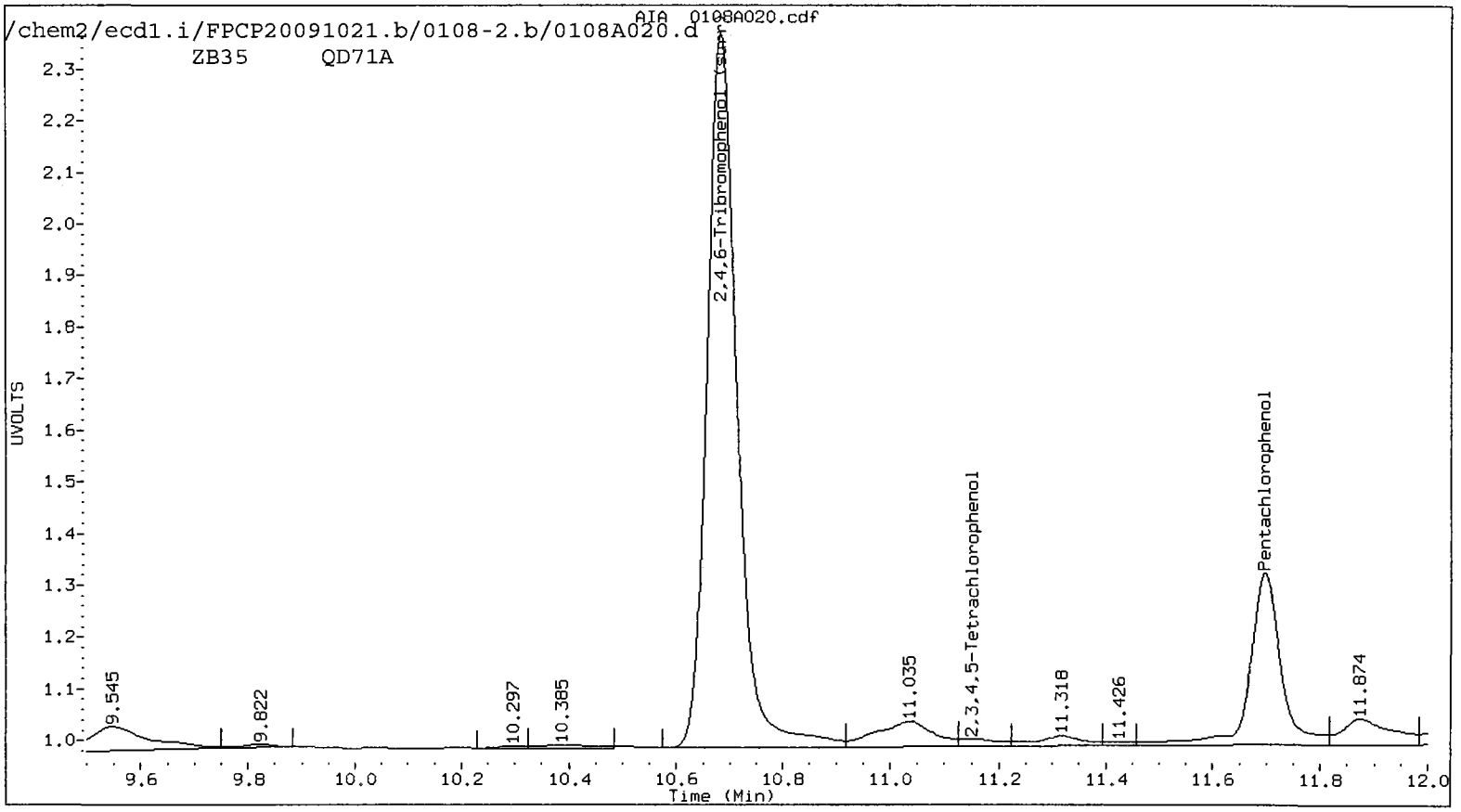
AIA 0108A020.cdf
ZB5 QD71A
UVOLTS
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.583
9.761
9.924
10.307
10.827
10.986
11.140
11.393
11.557
11.691
11.799
Time (Min)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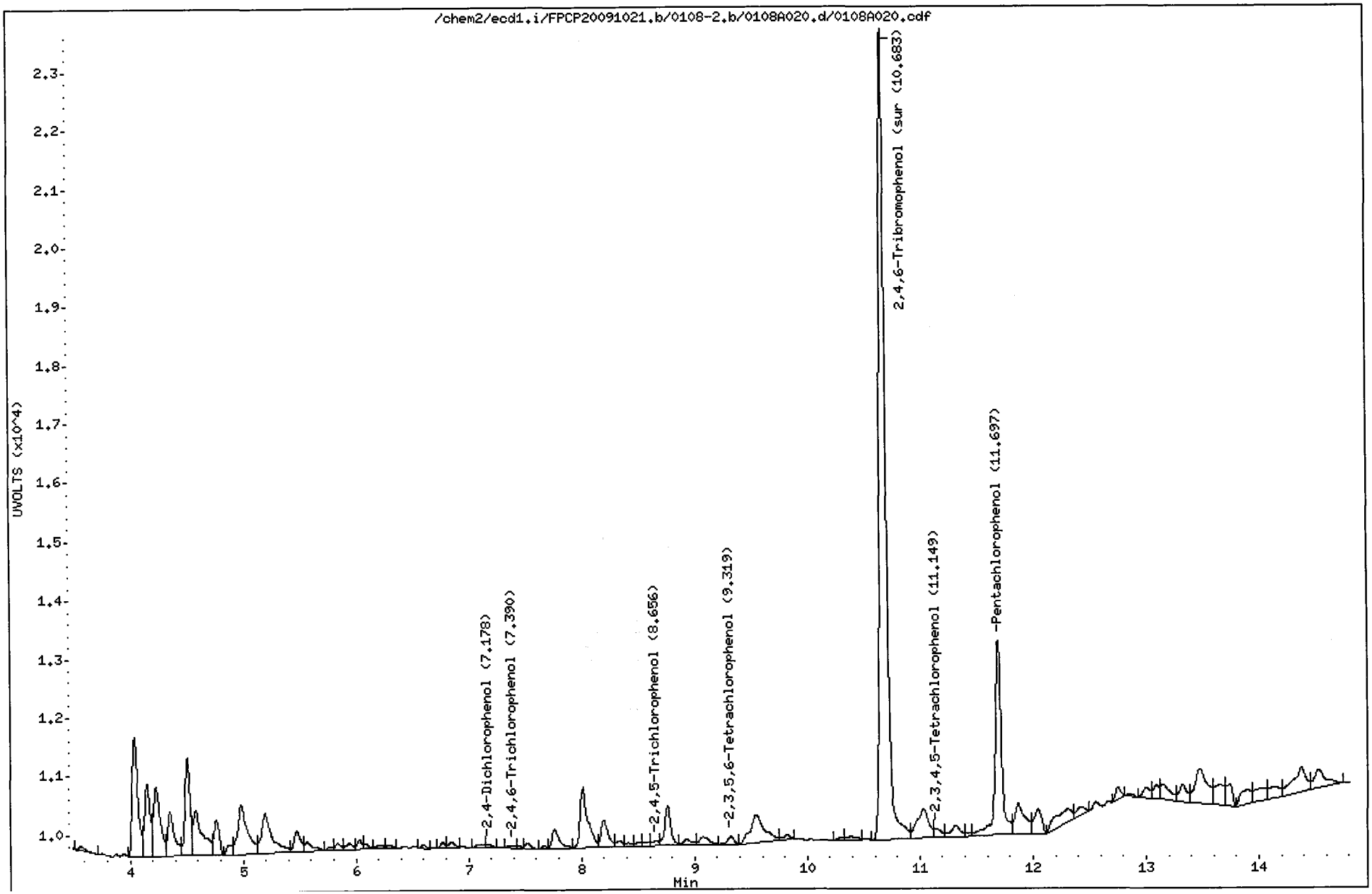
AIA 0108A020.cdf
ZB35 QD71A
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.545
9.822
10.297
10.385
11.035
11.318
11.426
11.874
Time (Min)

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A020.d
Date : 08-JAN-2010 23:23
Client ID: CB31A123109COMP
Sample Info: QD71A
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/09/10 00:03
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	79.2%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

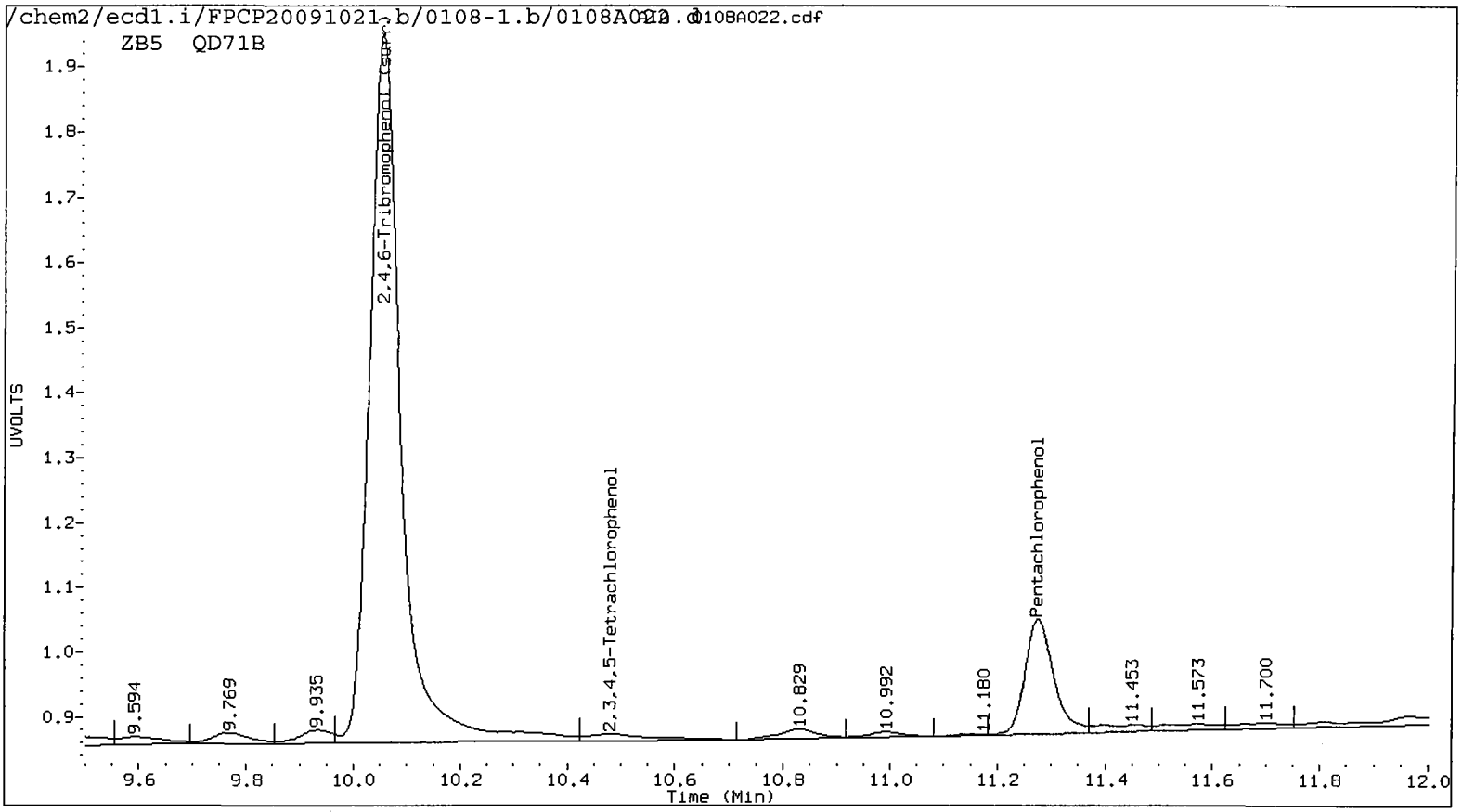
AR 1/11/2010

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A022.d ARI ID: QD71B
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A022.d Client ID: CB4857123109COMP
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 09-JAN-2010 00:03
Compound Sublist: all Report Date: 01/11/2010 13:09
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
11.277	0.005	32638	11.699	0.004	36190	2.1004	2.2334	6.1	Pentachlorophenol
7.278	-0.016	11793	7.387	0.035	692	1.5520	0.0726	182.1*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
----			8.658	0.038	1064	0.0000	0.1783	---	2,4,5-Trichlorophenol
8.790	-0.036	5028	----			0.8275	0.0000	---	2,3,4-Trichlorophenol
----			9.316	0.020	2198	0.0000	0.1642	---	2,3,5,6-Tetrachlorophenol
10.479	0.017	4259	11.149	-0.010	655	0.4151	0.0637	146.8*	2,3,4,5-Tetrachlorophenol
6.941	0.024	3295	7.179	0.003	941	5.9305	1.7307	109.6*	2,4-Dichlorophenol
10.054	0.004	224463	10.686	0.006	255789	18.6	19.8	6.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	74.4	79.3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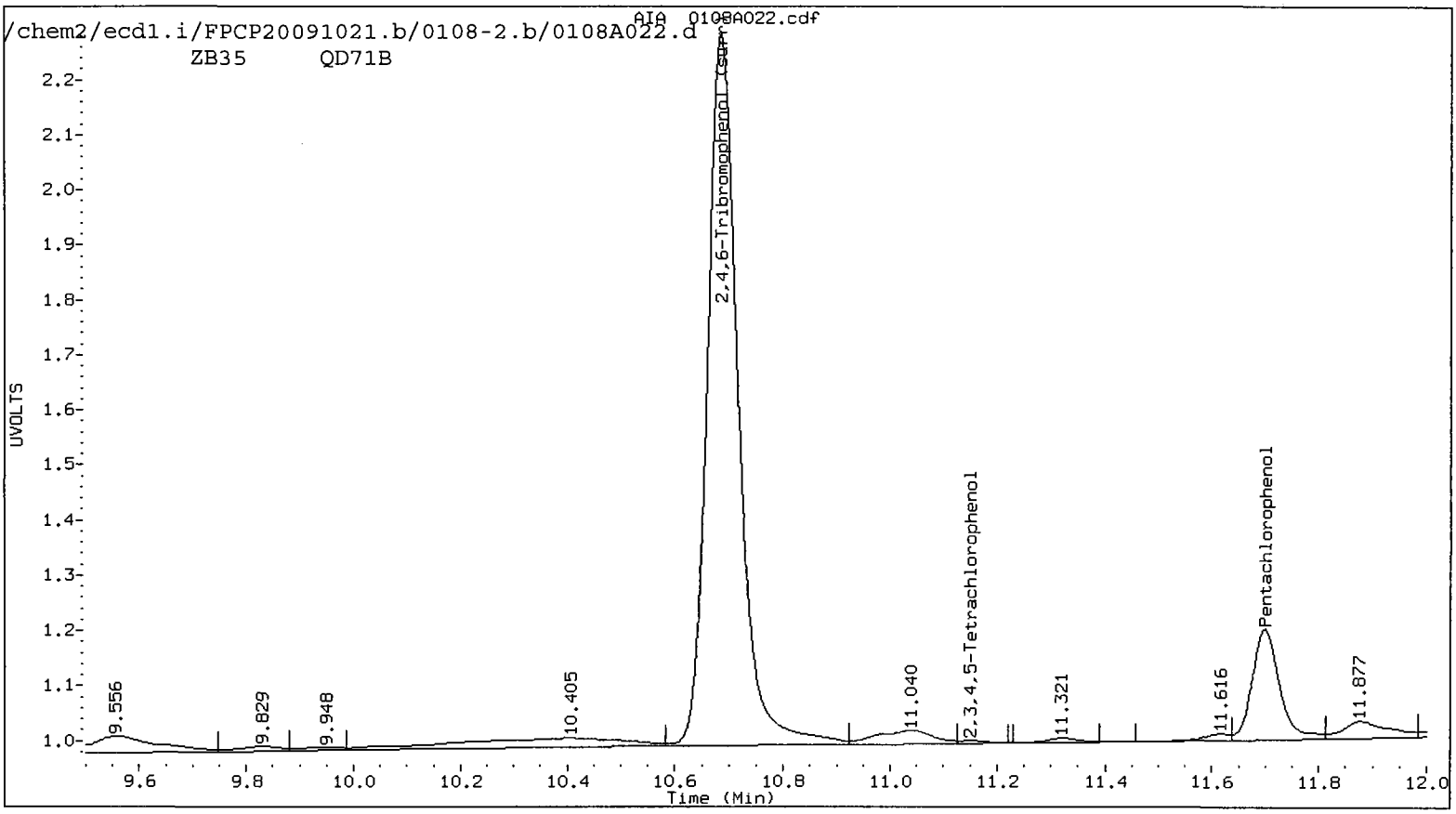
AIA 0108A022.cdf
ZB5 QD71B
UVOLTS
Time (Min)
2,4,6-Tribromophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.594
9.769
9.935
10.829
10.992
11.180
11.453
11.573
11.700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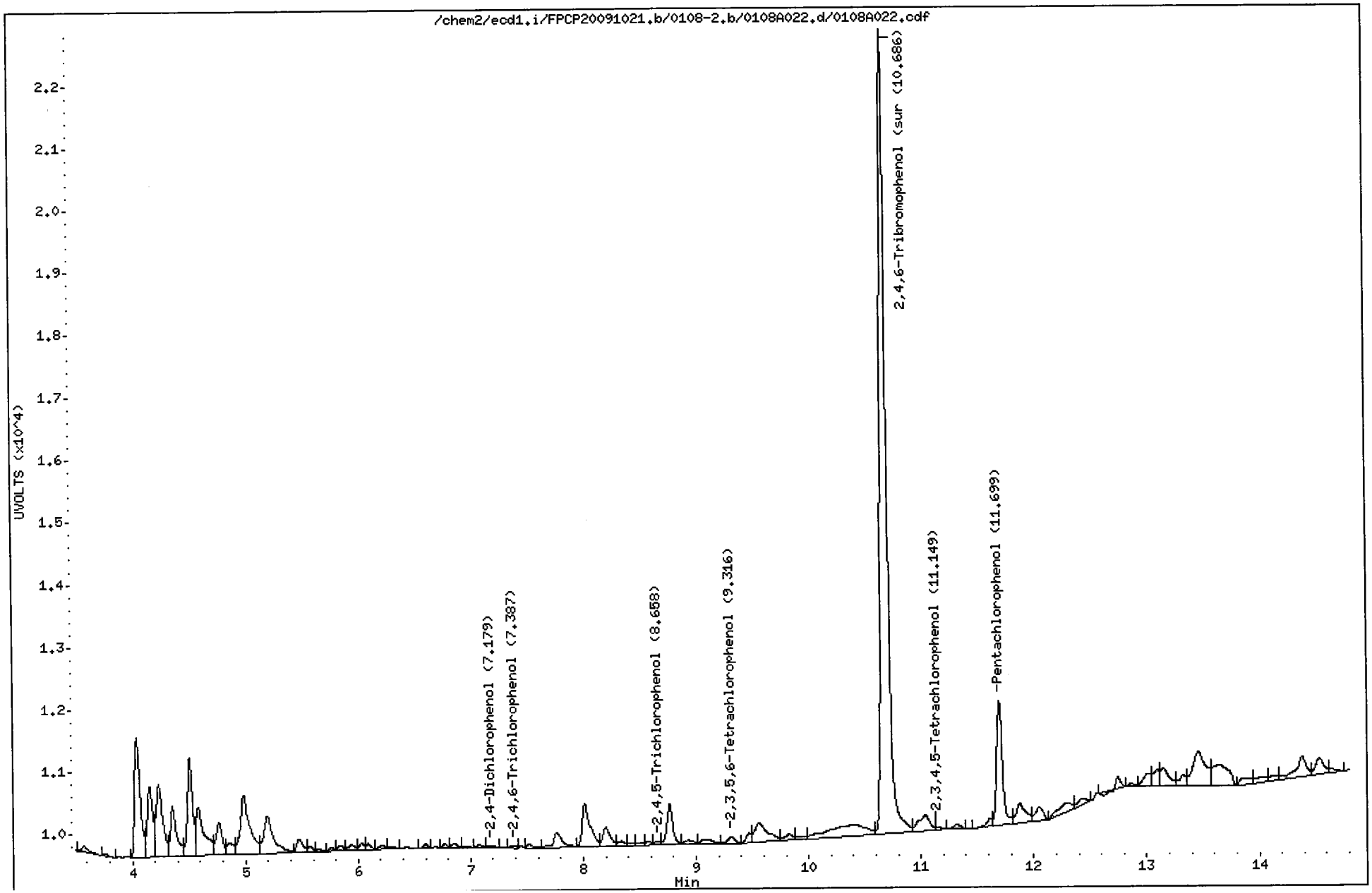
AIA 0108A022.cdf
ZB35 QD71B
UVOLTS
Time (Min)
2,4,6-Tribromophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.556
9.829
9.948
10.405
11.040
11.321
11.616
11.877

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A022.d
Date : 09-JAN-2010 00:03
Client ID: CB4857123109COMP
Sample Info: QD71B
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB1123109COMP
SAMPLE

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Date Extracted: 01/05/10
Date Analyzed: 01/09/10 00:42
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	78.0%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

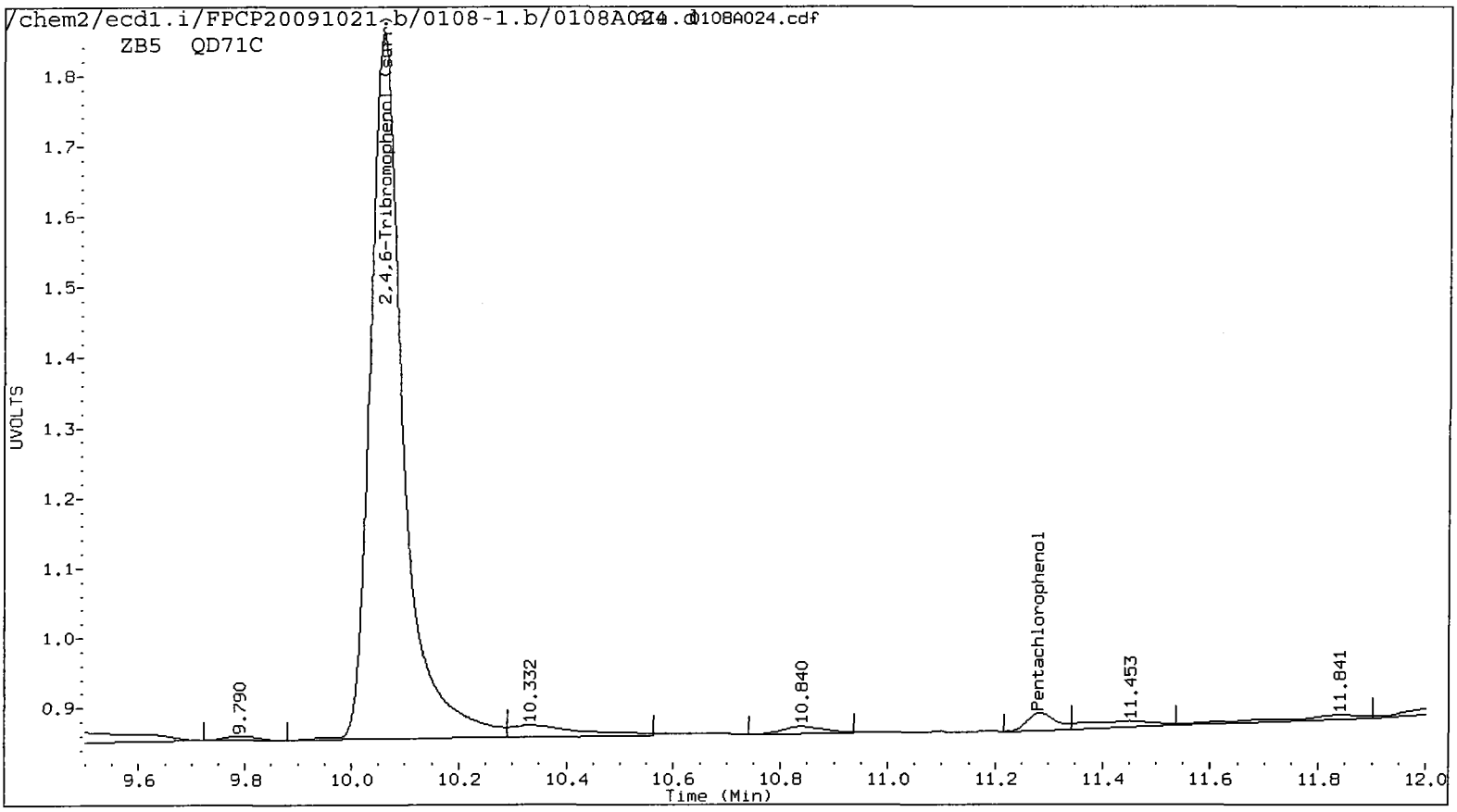
AR 1/12/2010

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A024.d ARI ID: QD71C
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A024.d Client ID: CB1123109COMP
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 09-JAN-2010 00:42
Compound Sublist: all Report Date: 01/11/2010 13:09
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
11.283	0.012	4676	11.703	0.008	5672	0.3009	0.3501 LRC	15.1	Pentachlorophenol
7.294	0.000	6243	----			0.8216	0.0000	---	2,4,6-Trichlorophenol
7.586	-0.063	2065	----			0.2353	0.0000	---	2,3,6-Trichlorophenol
8.305	0.046	2211	8.659	0.039	671	0.4074	0.1125	113.5*	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
----			9.327	0.032	873	0.0000	0.0652	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
6.940	0.022	3215	7.175	-0.002	563	5.7864	1.0353	139.3*	2,4-Dichlorophenol
10.060	0.010	214950	10.690	0.010	251923	17.8	19.5	9.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	71.2	78.1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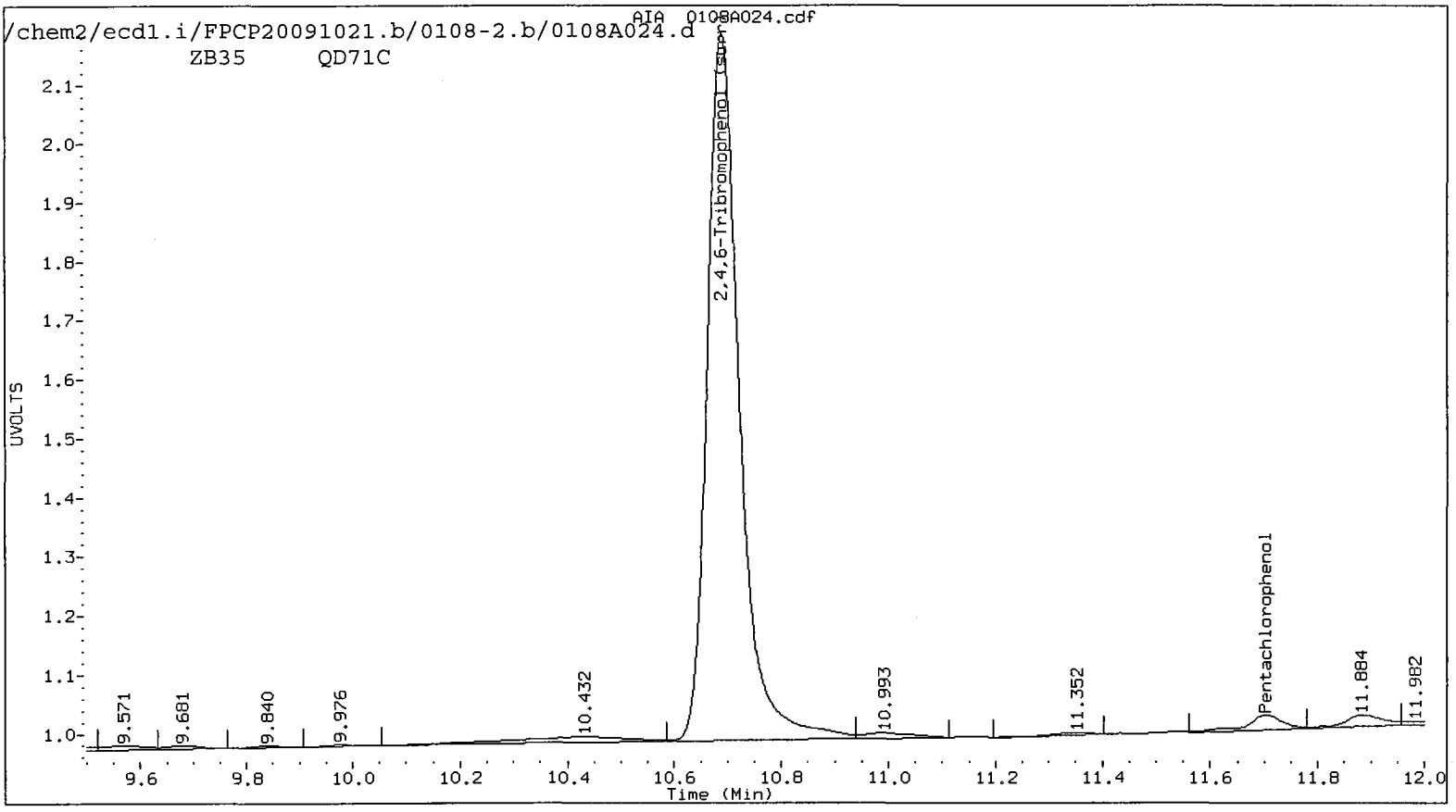
0108A024.cdf
ZB5 QD71C
UVOLTS
2,4,6-Tribromophenol (surr)
9.790
10.332
10.840
Pentachlorophenol
11.453
11.841
Time (Min)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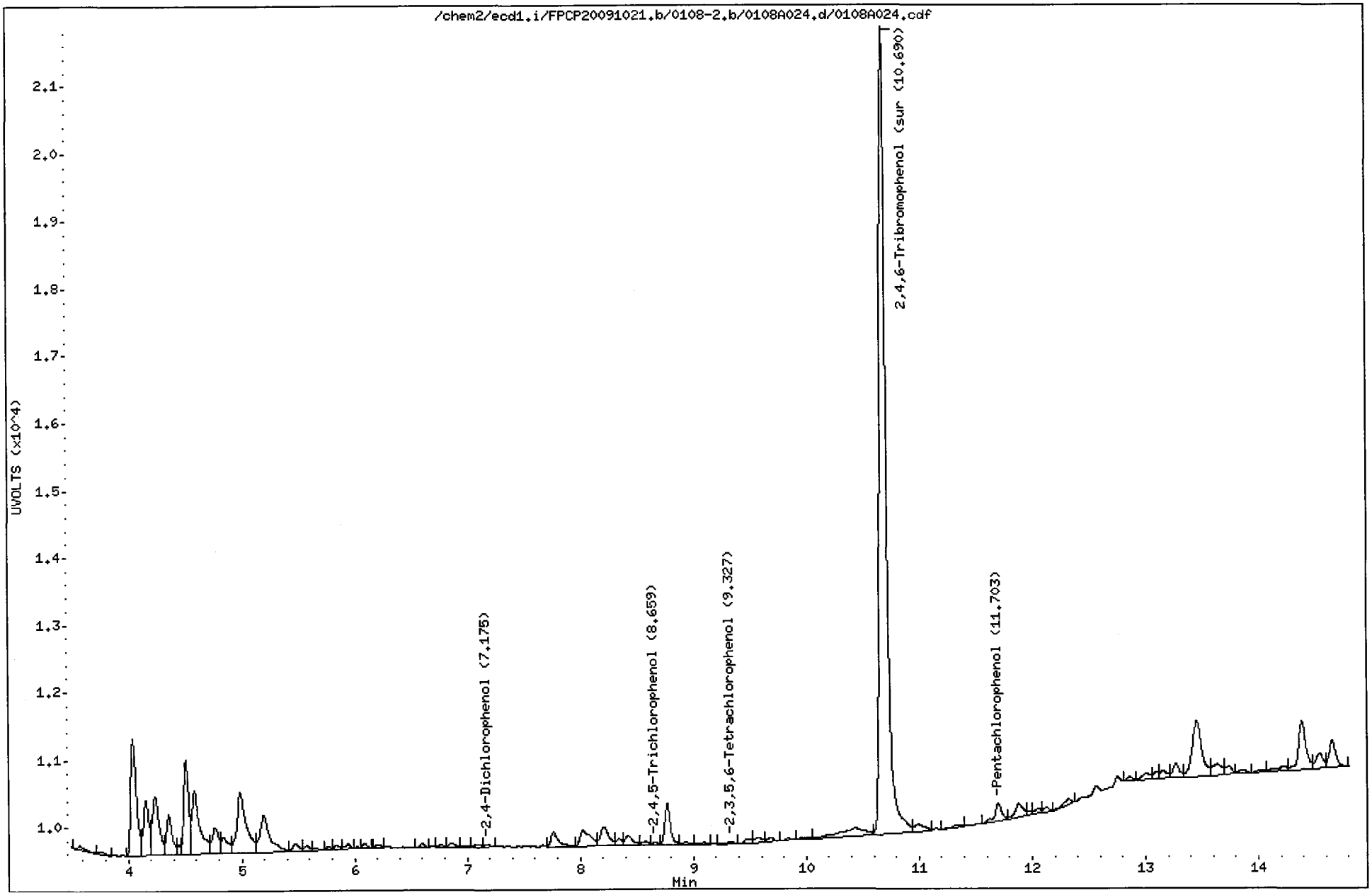
AIA 0108A024.cdf
ZB35 QD71C
UVOLTS
2,4,6-Tribromophenol (surr)
9.571
9.681
9.840
9.976
10.432
10.993
11.352
Pentachlorophenol
11.884
11.982
Time (Min)

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A024.d
Date : 09-JAN-2010 00:42
Client ID: CB1123109COMP
Sample Info: QD71C
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



PCP/Chlorophenols ANALYSIS
Standard Raw Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 10/21/09

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol	11.28	11.28	11.27	11.27	11.27	11.27	11.20	11.34
2,4,6-Trichloropheno	7.29	7.29	7.29	7.29	7.29	7.29	7.22	7.36
2,3,6-Trichloropheno	7.65	7.65	7.64	7.65	7.64	7.64	7.58	7.72
2,4,5-Trichloropheno	8.27	8.26	8.26	8.26	8.25	8.26	8.19	8.33
2,3,4-Trichloropheno	8.85	8.84	8.83	8.83	8.81	8.83	8.76	8.90
2,3,5,6-Tetrachlorop	9.04	9.04	9.04	9.04	9.03	9.04	8.97	9.11
2,3,4,5-Tetrachlorop	10.48	10.47	10.46	10.46	10.45	10.46	10.39	10.53
2,4-Dichlorophenol	6.92	6.91	6.91	6.92	6.91	6.91	6.85	6.99
2,4,6-Tribromophenol	10.06	10.05	10.05	10.05	10.04	10.05	9.98	10.12

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 10/21/09

COMPOUND	RT OF STANDARDS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	MEAN RT	RT WINDOW FROM	TO
Pentachlorophenol	11.70	11.70	11.70	11.69	11.69	11.70	11.62	11.76
2,4,6-Trichloropheno	7.35	7.35	7.35	7.35	7.35	7.35	7.28	7.42
2,3,6-Trichloropheno	7.88	7.88	7.88	7.88	7.88	7.88	7.81	7.95
2,4,5-Trichloropheno	8.63	8.62	8.62	8.62	8.62	8.62	8.55	8.69
2,3,4-Trichloropheno	9.41	9.40	9.40	9.40	9.39	9.40	9.33	9.47
2,3,5,6-Tetrachlorop	9.30	9.30	9.30	9.30	9.29	9.30	9.23	9.37
2,3,4,5-Tetrachlorop	11.17	11.16	11.16	11.16	11.16	11.16	11.09	11.23
2,4-Dichlorophenol	7.18	7.18	7.18	7.18	7.17	7.18	7.11	7.25
2,4,6-Tribromophenol	10.69	10.68	10.68	10.68	10.68	10.68	10.61	10.75

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 10/21/09

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	18833	17561	16239	14693	13334	12576	15.7	A
2,4,6-Trichlorophenol	12707	11050	9817	8689	7872	7374	0.9929	L
2,3,6-Trichlorophenol	10819	9966	9097	8235	7478	7061	16.6	A
2,4,5-Trichlorophenol	6561	5514	5743	4686	4241	3750	0.9994	Q
2,3,4-Trichlorophenol	7272	7064	6411	5689	5172	4851	16.4	A
2,3,5,6-Tetrachloroph	15518	14554	13607	12505	11993	11056	12.6	A
2,3,4,5-Tetrachloroph	12818	11723	10909	9693	8548	7877	18.5	A
2,4-Dichlorophenol	673	644	558	469	404	353	0.9991	Q
2,4,6-Tribromophenol	13920	13228	12506	11556	10717	10527	11.4	A
						AVE RSD	17.6	

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/FPCP20091021.b/ical-1.b/1021A010.d
LVL 2: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A011.d
LVL 3: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A012.d
LVL 4: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A009.d
LVL 5: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A013.d
LVL 6: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A014.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 10/21/09

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	19304	17945	16707	15360	14237	13672	13.5	A
2,4,6-Trichlorophenol	11798	10771	9830	8893	8177	7715	16.4	A
2,3,6-Trichlorophenol	10911	10097	9331	9228	8210	7752	12.6	A
2,4,5-Trichlorophenol	7804	6975	6158	5032	4549	4003	0.9992	Q
2,3,4-Trichlorophenol	9692	9054	8149	7049	6270	5605	0.9995	Q
2,3,5,6-Tetrachloroph	15877	14658	13700	12697	11907	11504	12.6	A
2,3,4,5-Tetrachloroph	12083	11690	10825	9751	8980	8440	14.3	A
2,4-Dichlorophenol	708	628	548	468	404	358	0.9992	Q
2,4,6-Tribromophenol	14709	13981	13233	12347	11640	11484	10.1	A
						AVE RSD	16.9	

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/FPCP20091021.b/ical-2.b/1021A010.d
LVL 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A011.d
LVL 3: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A012.d
LVL 4: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A009.d
LVL 5: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A013.d
LVL 6: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A014.d

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091022.b/FPCPB.m
Cal Date : 22-Oct-2009 10:50 aron
Curve Type : Average

Rename batch 10/21

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A010.d
Level 2: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A011.d
Level 3: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A012.d
Level 4: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A009.d
Level 5: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A013.d
Level 6: /chem2/ecd1.i/FPCP20091022.b/ical-2.b/1021A014.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	708	628	548	468	405	358	519	25.855	<-
2	2,4,6-Trichlorophenol	11798	10771	9830	8893	8177	7715	9531	16.459	
3	2,3,6-Trichlorophenol	10911	10097	9331	9228	8210	7752	9255	12.610	
4	2,4,5-Trichlorophenol	7804	6975	6158	5032	4549	4003	5754	25.652	<-
5	2,3,5,6-Tetrachlorophenol	15877	14658	13700	12697	11907	11504	13390	12.553	
6	2,3,4-Trichlorophenol	9692	9054	8149	7049	6270	5605	7637	20.983	<-
8	2,3,4,5-Tetrachlorophenol	12083	11690	10825	9751	8980	8440	10295	14.335	
9	Pentachlorophenol	19304	17945	16707	15360	14237	13672	16204	13.488	
$ 7	2,4,6-Tribromophenol (surr)	14709	13981	13233	12347	11640	11484	12899	10.079	

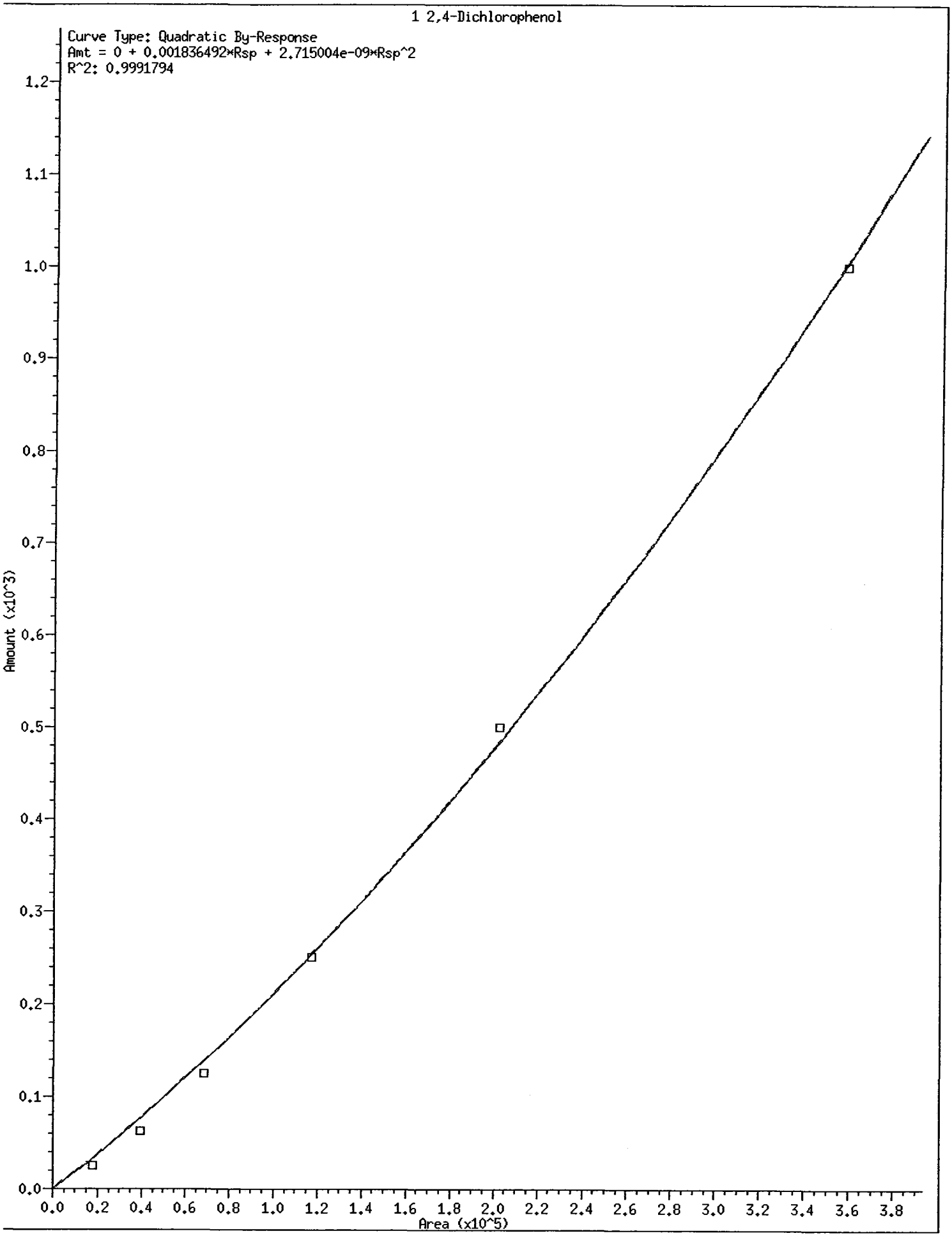
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

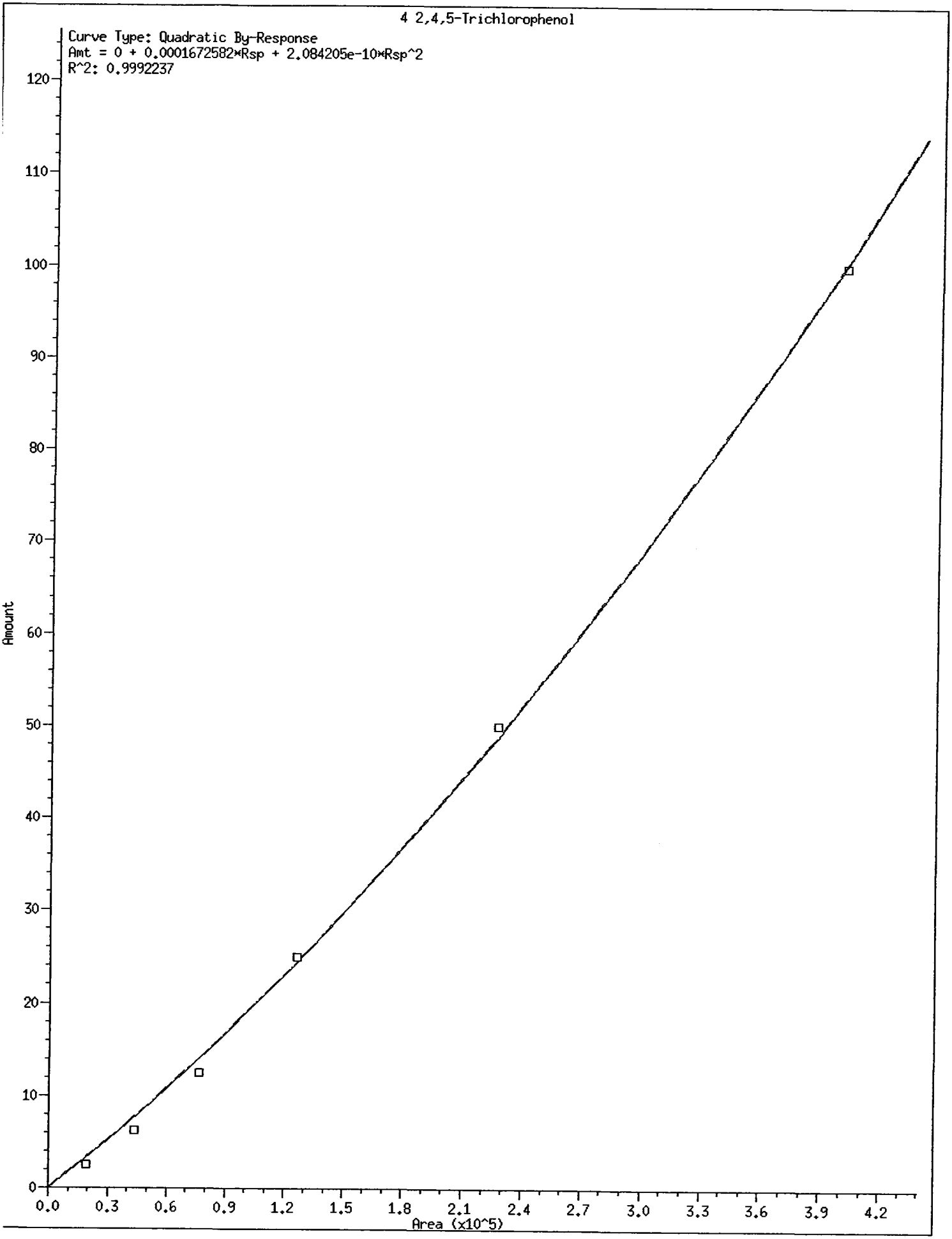
Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091022.b/FPCPB.m
Cal Date : 22-Oct-2009 10:50 aron
Curve Type : Average

Average %RSD Results.

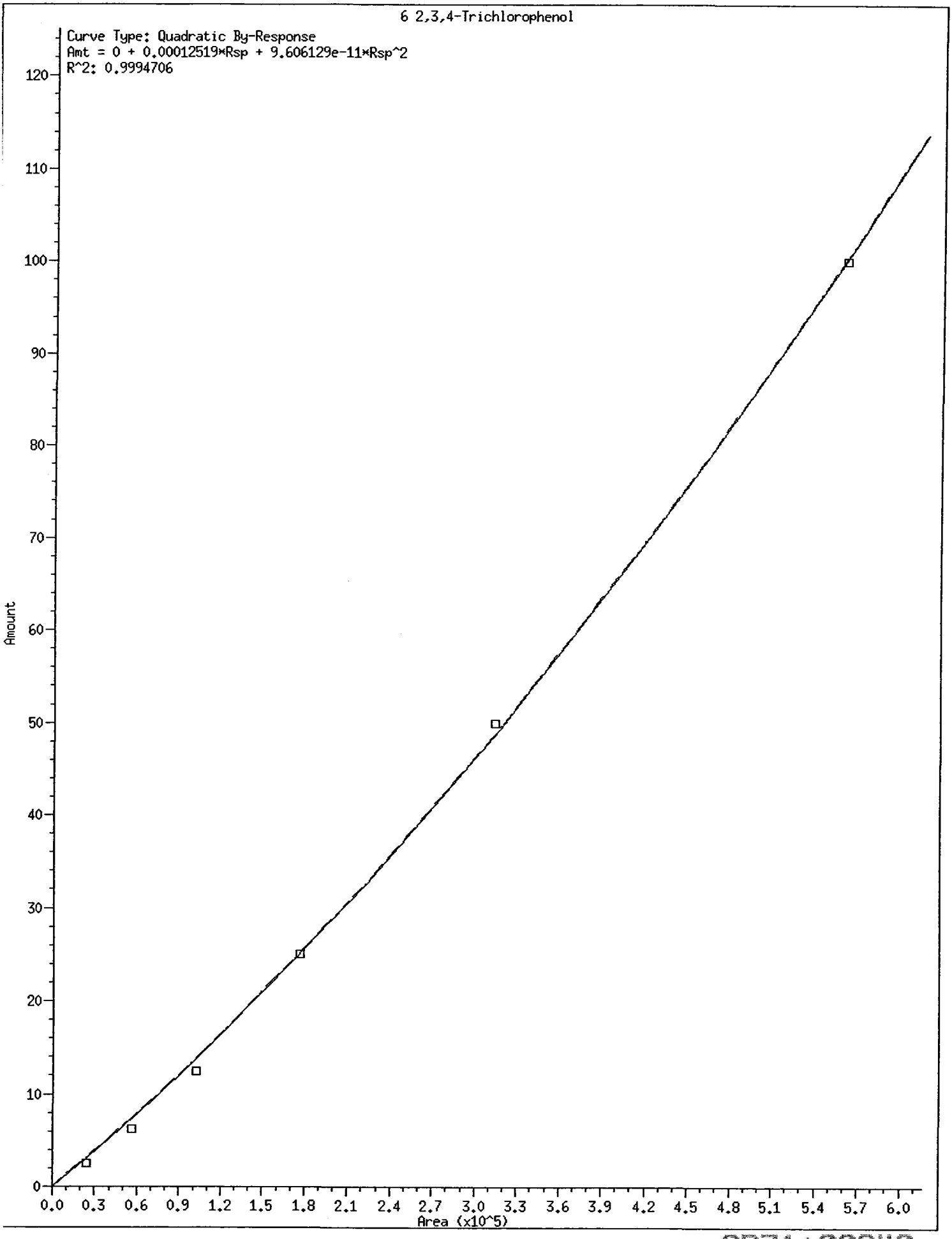
Calculated Average %RSD = 16.89042
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.


1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.001836492*Rsp + 2.715004e-09*Rsp^2
R^2: 0.9991794
Amount (x10^3)
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

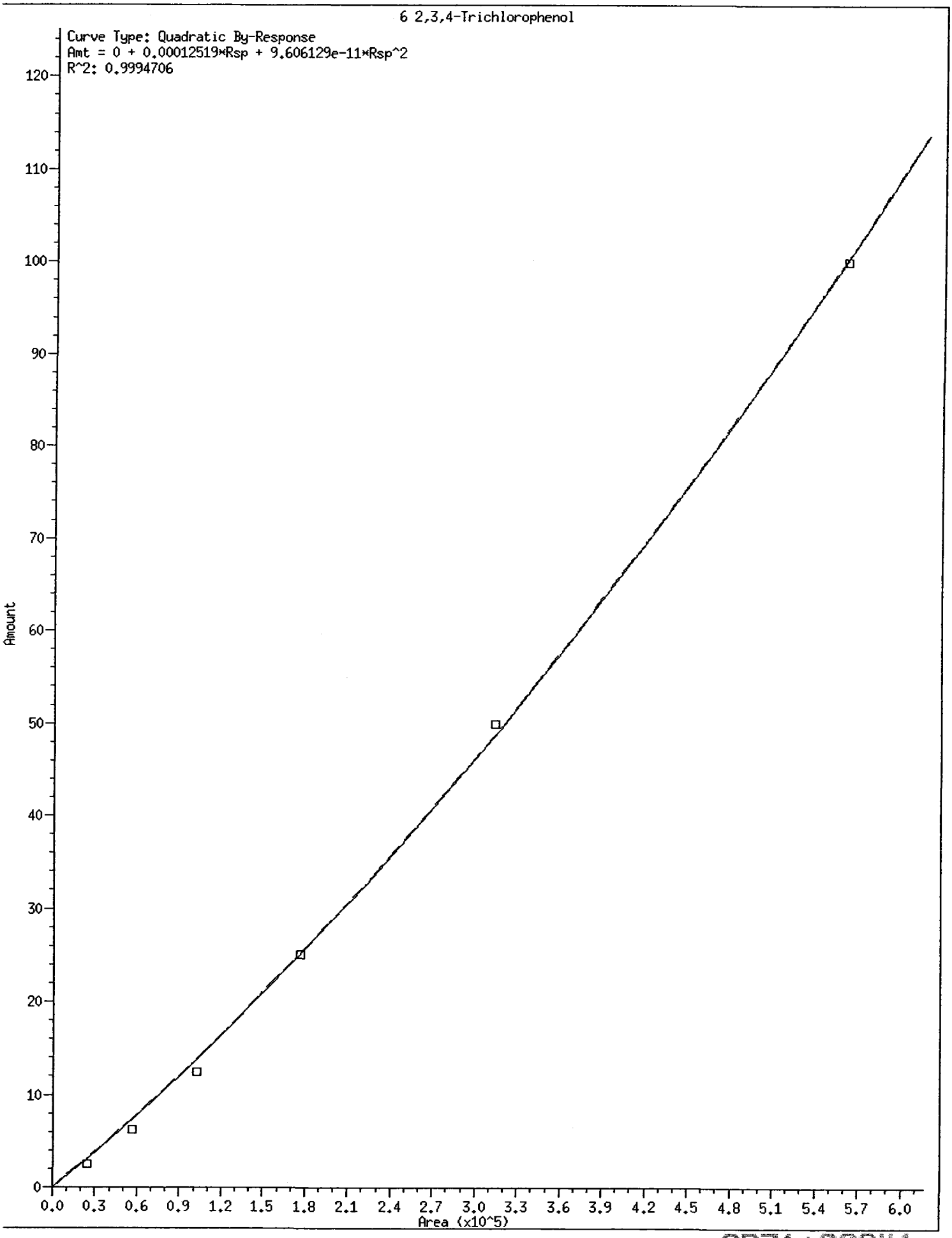
QD71 : 00238


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001672582*Rsp + 2.084205e-10*Rsp^2
R^2: 0.9992237
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
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

QD71 : 00239


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00012519*Rsp + 9.606129e-11*Rsp^2
R^2: 0.9994706
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
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

QD71 : 00240


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00012519*Rsp + 9.606129e-11*Rsp^2
R^2: 0.9994706
Amount
0
10
20
30
40
50
60
70
80
90
100
110
120
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)

QD71 : 00241

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091021.b/FPCPB.m
Cal Date : 23-Oct-2009 11:17 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A010.d
Level 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A011.d
Level 3: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A012.d
Level 4: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A009.d
Level 5: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A013.d
Level 6: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A014.d

Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 2,4-Dichlorophenol	17700	39225	68497	117023	202273	357799	QUAD	0.000e+00	0.00184	2.715e-09	0.99918
2 2,4,6-Trichlorophenol	11798	10771	9830	8893	8177	7715	AVRG		9531		16.45945
3 2,3,6-Trichlorophenol	10911	10097	9331	9228	8210	7752	AVRG		9255		12.60997
4 2,4,5-Trichlorophenol	19509	43595	76979	125809	227473	400339	QUAD	0.000e+00	0.00017	2.084e-10	0.99922
5 2,3,5,6-Tetrachlorophenol	15877	14658	13700	12697	11907	11504	AVRG		13390		12.55347
6 2,3,4-Trichlorophenol	24231	56589	101861	176218	313504	560518	QUAD	0.000e+00	0.00013	9.606e-11	0.99947
8 2,3,4,5-Tetrachlorophenol	12083	11690	10825	9751	8980	8440	AVRG		10295		14.33482
9 Pentachlorophenol	19304	17945	16707	15360	14237	13672	AVRG		16204		13.48754
S 7 2,4,6-Tribromophenol (surr)	14709	13981	13233	12347	11640	11484	AVRG		12899		10.07874

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091021.b/FPCPB.m
Cal Date : 23-Oct-2009 11:17 aron

Average %RSD Results.

Calculated Average %RSD = 13.25400
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091022.b/FPCP.m
Cal Date : 22-Oct-2009 11:10 aron
Curve Type : Average

Rename Batch 10121

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A010.d
Level 2: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A011.d
Level 3: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A012.d
Level 4: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A009.d
Level 5: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A013.d
Level 6: /chem2/ecd1.i/FPCP20091022.b/ical-1.b/1021A014.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	673	644	558	469	404	353	517	25.095	<-
2	2,4,6-Trichlorophenol	12707	11051	9817	8689	7872	7374	9585	21.163	<-
3	2,3,6-Trichlorophenol	10819	9966	9097	8235	7478	7061	8776	16.599	
4	2,4,5-Trichlorophenol	6561	5514	5743	4686	4241	3751	5082	20.536	<-
5	2,3,4-Trichlorophenol	7272	7064	6411	5689	5172	4851	6077	16.433	
6	2,3,5,6-Tetrachlorophenol	15518	14554	13607	12505	11993	11056	13206	12.631	
8	2,3,4,5-Tetrachlorophenol	12818	11723	10909	9693	8548	7877	10261	18.508	
9	Pentachlorophenol	18833	17561	16239	14693	13334	12576	15539	15.706	
$ 7	2,4,6-Tribromophenol (surr)	13920	13228	12507	11556	10717	10527	12076	11.373	

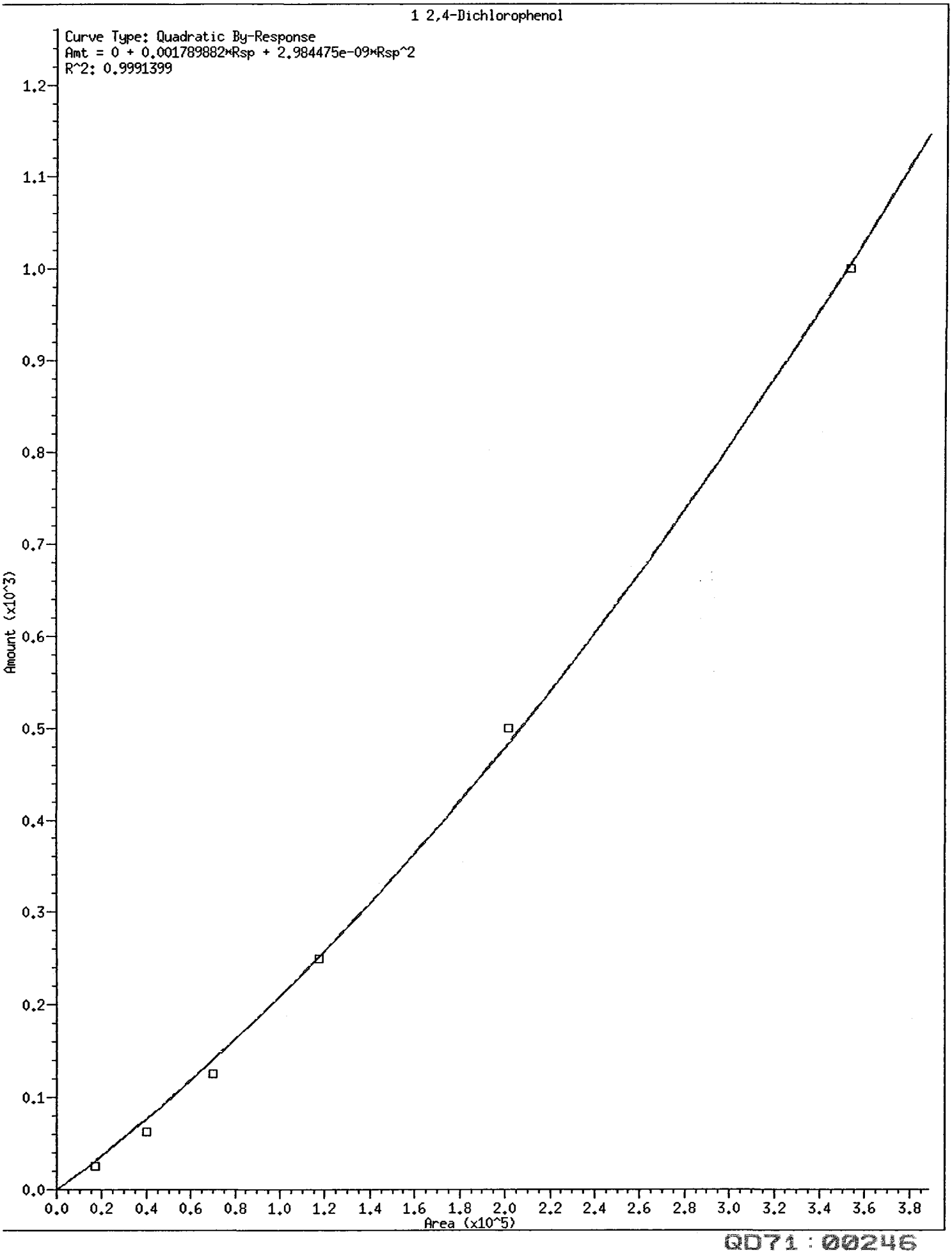
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

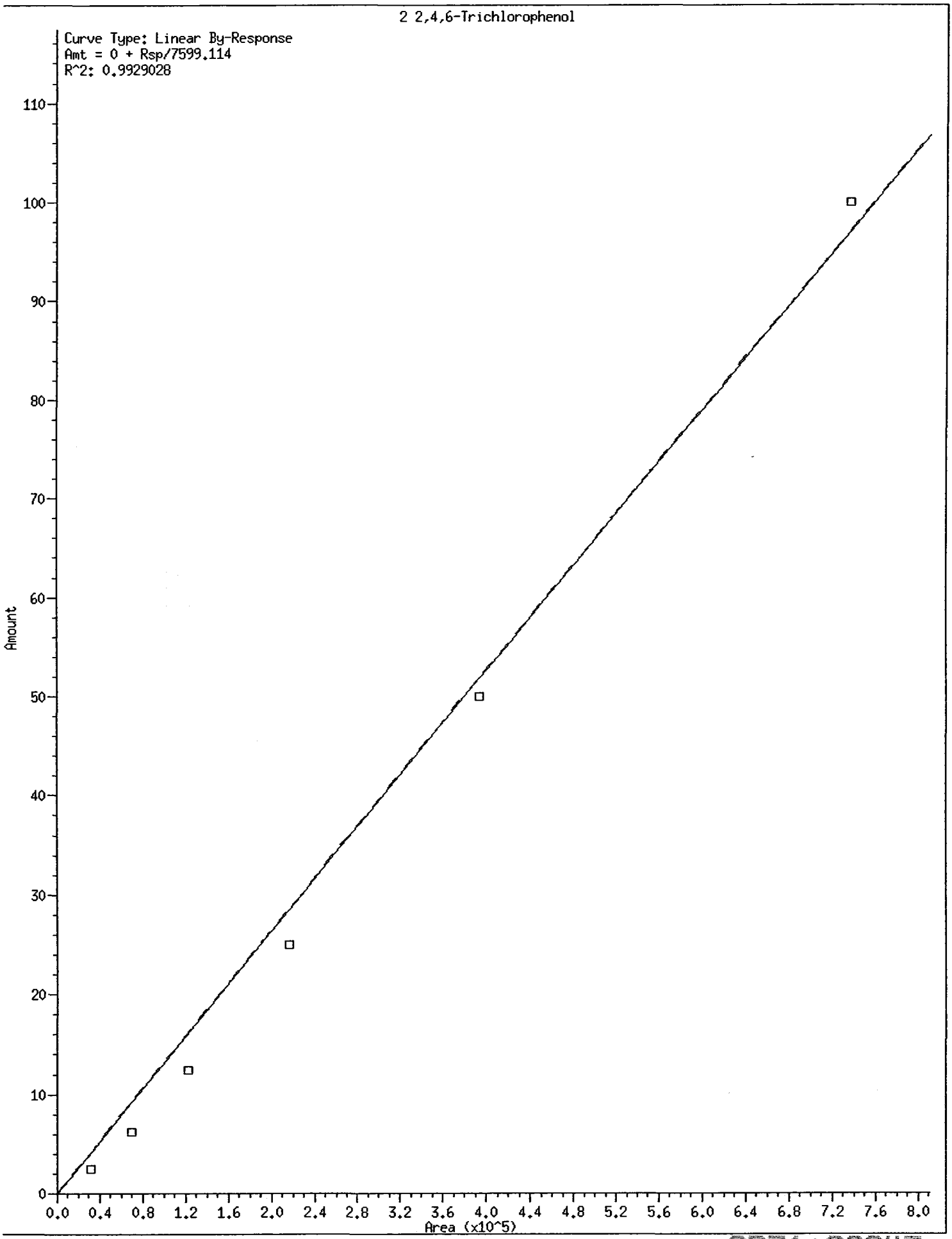
Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091022.b/FPCP.m
Cal Date : 22-Oct-2009 11:10 aron
Curve Type : Average

Average %RSD Results.

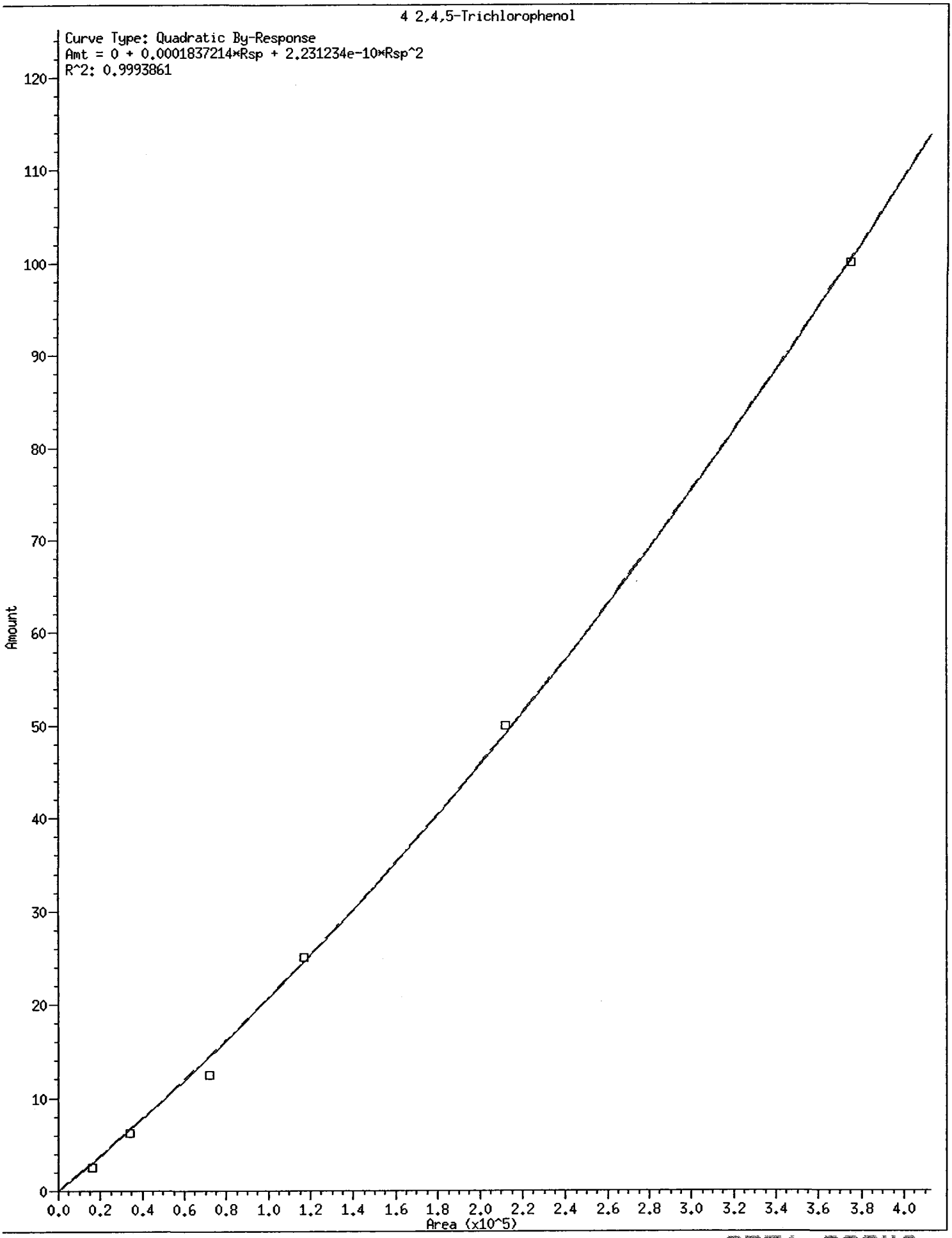
Calculated Average %RSD = 17.56055
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.


1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.001789882*Rsp + 2.984475e-09*Rsp^2
R^2: 0.9991399
Amount (x10^3)
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

QD71 : 00246


2 2,4,6-Trichlorophenol
Curve Type: Linear By-Response
Amt = 0 + Rsp/7599.114
R^2: 0.9929028
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
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
7.6
8.0

QD71 : 00247


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0001837214*Rsp + 2.231234e-10*Rsp^2
R^2: 0.9993861
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
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

QD71 : 00248

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091021.b/FPCP.m
Cal Date : 23-Oct-2009 11:18 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A010.d
Level 2: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A011.d
Level 3: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A012.d
Level 4: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A009.d
Level 5: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A013.d
Level 6: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A014.d

Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1 2,4-Dichlorophenol	16819	40263	69803	117243	201819	353265	QUAD	0.000e+00	0.00179	2.984e-09	0.99914
2 2,4,6-Trichlorophenol	31767	69066	122711	217230	393586	737425	LINR	0.000e+00	7599		0.99290
3 2,3,6-Trichlorophenol	10819	9966	9097	8235	7478	7061	AVRG		8776		16.59946
4 2,4,5-Trichlorophenol	16402	34462	71784	117139	212054	375055	QUAD	0.000e+00	0.00018	2.231e-10	0.99939
5 2,3,4-Trichlorophenol	7272	7064	6411	5689	5172	4851	AVRG		6077		16.43273
6 2,3,5,6-Tetrachlorophenol	15518	14554	13607	12505	11993	11056	AVRG		13206		12.63104
8 2,3,4,5-Tetrachlorophenol	12818	11723	10909	9693	8548	7877	AVRG		10261		18.50805
9 Pentachlorophenol	18833	17561	16239	14693	13334	12576	AVRG		15539		15.70600
$ 7 2,4,6-Tribromophenol (surr)	13920	13228	12507	11556	10717	10527	AVRG		12076		11.37346

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-OCT-2009 16:33
End Cal Date : 21-OCT-2009 18:12
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20091021.b/FPCP.m
Cal Date : 23-Oct-2009 11:18 aron

Average %RSD Results.

Calculated Average %RSD = 15.20846
Maximun Average %RSD = 20.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

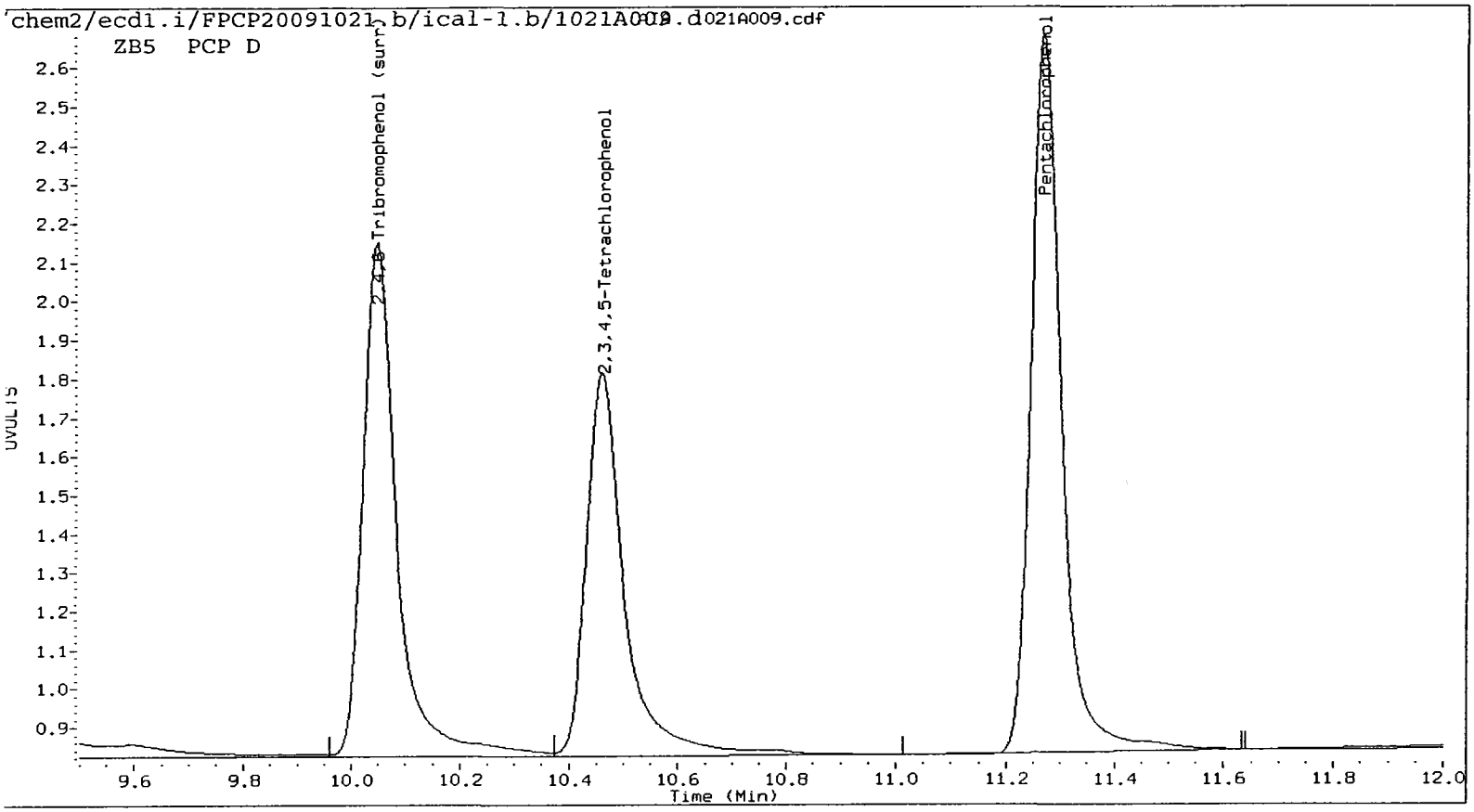
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A009.d ARI ID: PCP D
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A009.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 16:33
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.271	0.000	367330	11.695	0.000	383997	23.6387	23.6974	0.2	Pentachlorophenol
7.293	0.000	217230	7.352	0.000	222315	28.5862	23.3266	20.3	2,4,6-Trichlorophenol
7.648	0.000	205876	7.883	0.000	230697	23.4592	24.9272	6.1	2,3,6-Trichlorophenol
8.258	0.000	117139	8.620	0.000	125809	24.5825	24.3414	1.0	2,4,5-Trichlorophenol
8.826	0.000	142230	9.398	0.000	176218	23.4058	25.0437	6.8	2,3,4-Trichlorophenol
9.038	0.000	312635	9.295	0.000	317417	23.6744	23.7047	0.1	2,3,5,6-Tetrachlorophenol
10.462	0.000	242318	11.159	0.000	243787	23.6148	23.6808	0.3	2,3,4,5-Tetrachlorophenol
6.917	0.000	117243	7.177	0.000	117023	250.8755	252.0921	0.5	2,4-Dichlorophenol
10.050	0.000	288892	10.680	0.000	308677	23.9	23.9	0.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	95.7	95.7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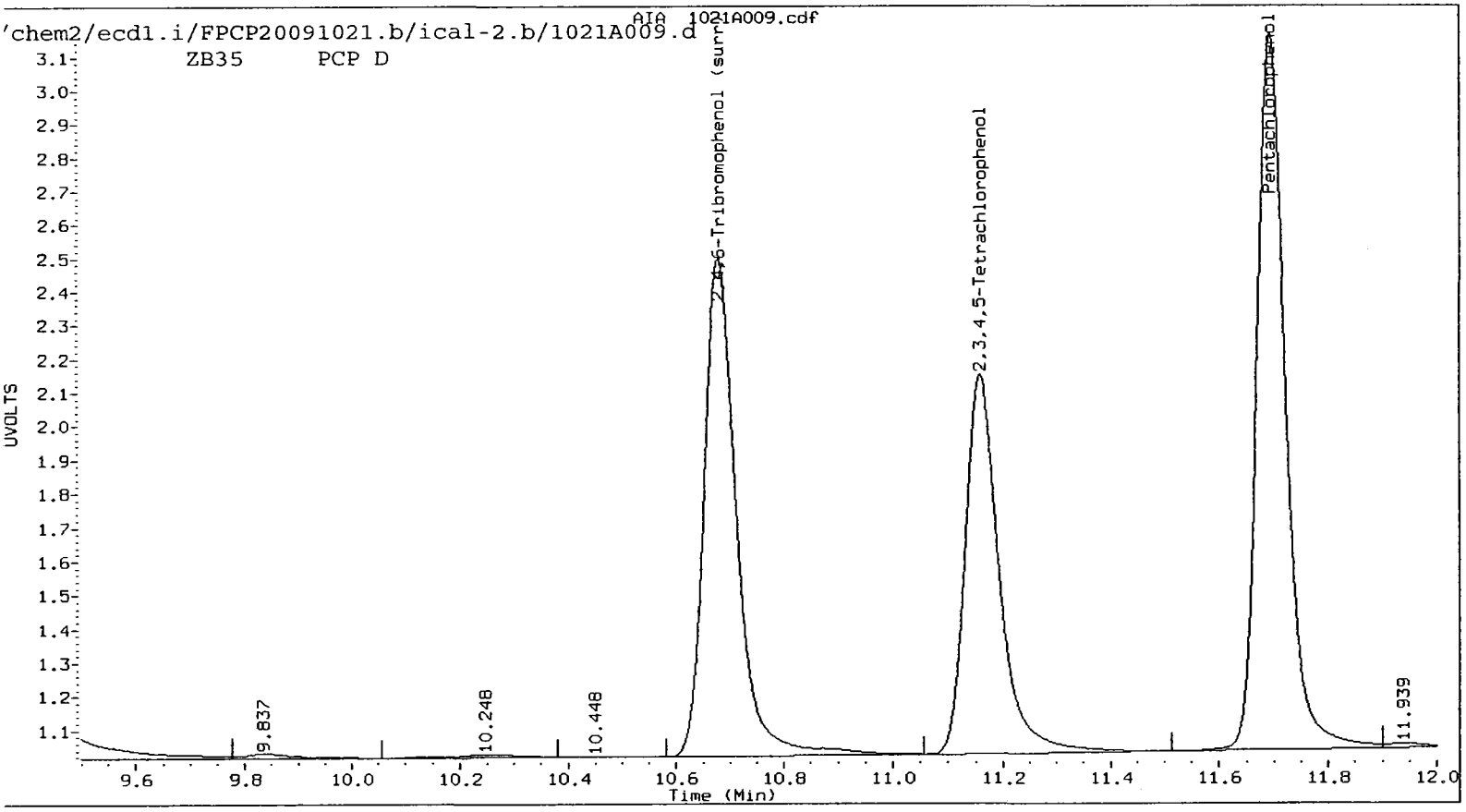
1021A009.cdf
ZB5 PCP D
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)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AIA 1021A009.cdf
ZB35 PCP D
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.837
10.248
10.448
11.939
UVOLTS
Time (Min)

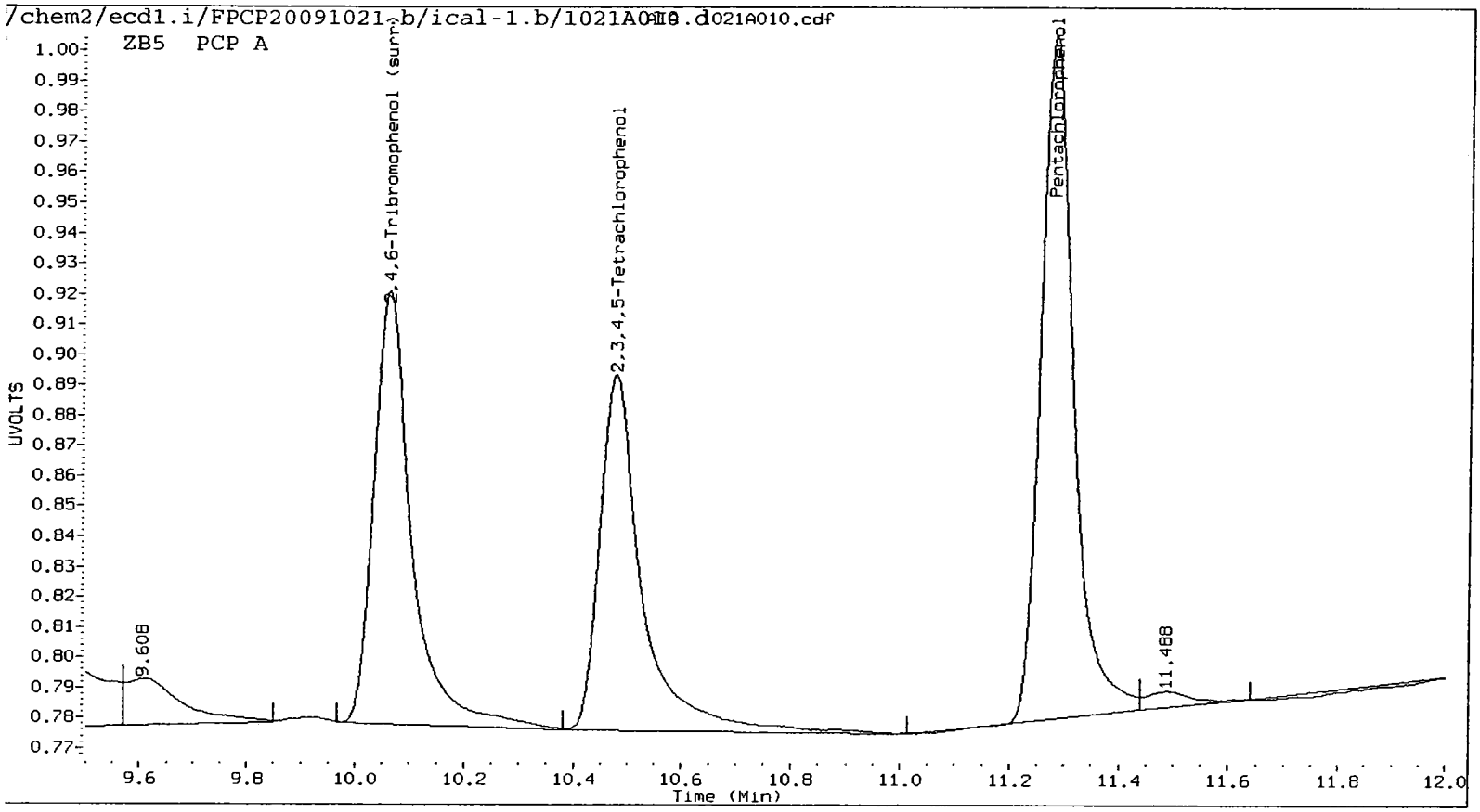
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A010.d ARI ID: PCP A
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A010.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 16:53
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.279	0.008	47083	11.699	0.004	48259	2.8087	2.7844	0.9	Pentachlorophenol
7.292	-0.001	31767	7.351	-0.001	29494	3.6317	2.8510	24.1	2,4,6-Trichlorophenol
7.647	-0.002	27047	7.882	-0.001	27277	2.8390	2.7089	4.7	2,3,6-Trichlorophenol
8.270	0.012	16402	8.626	0.006	19509	3.4813	3.8444	9.9	2,4,5-Trichlorophenol
8.845	0.020	18180	9.410	0.011	24231	2.8053	3.4202	19.8	2,3,4-Trichlorophenol
9.041	0.002	38795	9.296	0.001	39693	2.7688	2.7783	0.3	2,3,5,6-Tetrachlorophenol
10.478	0.015	32044	11.168	0.009	30207	2.8470	2.7669	2.9	2,3,4,5-Tetrachlorophenol
6.917	-0.001	16819	7.177	0.000	17700	35.6445	37.5265	5.1	2,4-Dichlorophenol
10.061	0.011	34800	10.686	0.006	36772	2.7	2.7	0.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	10.9	10.9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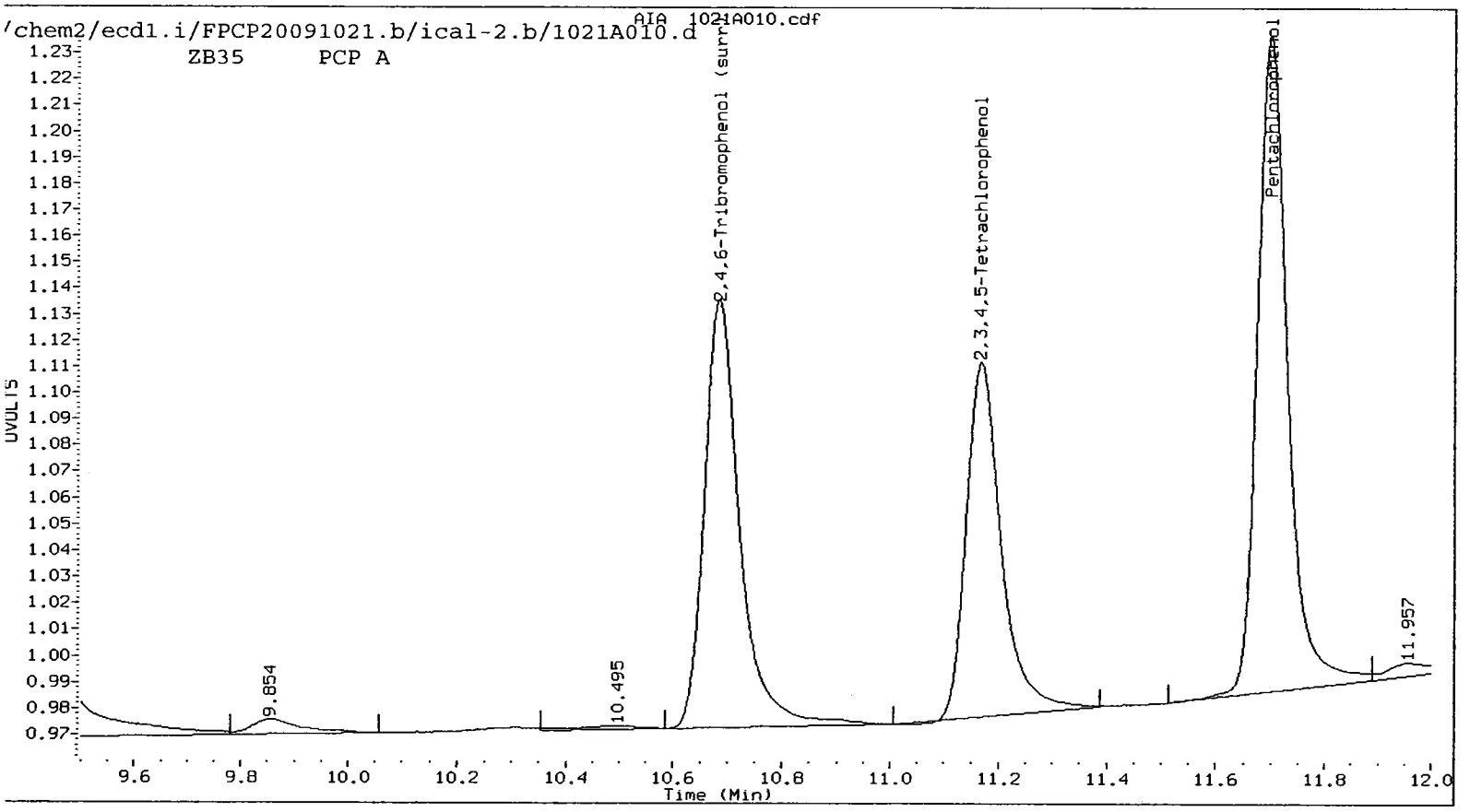
AIA 1021A010.cdf
ZB5 PCP A
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.608
11.488
UVOLTS
Time (Min)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AIA 1021A010.cdf
ZB35 PCP A
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.854
10.495
11.957
UVOLTS
Time (Min)

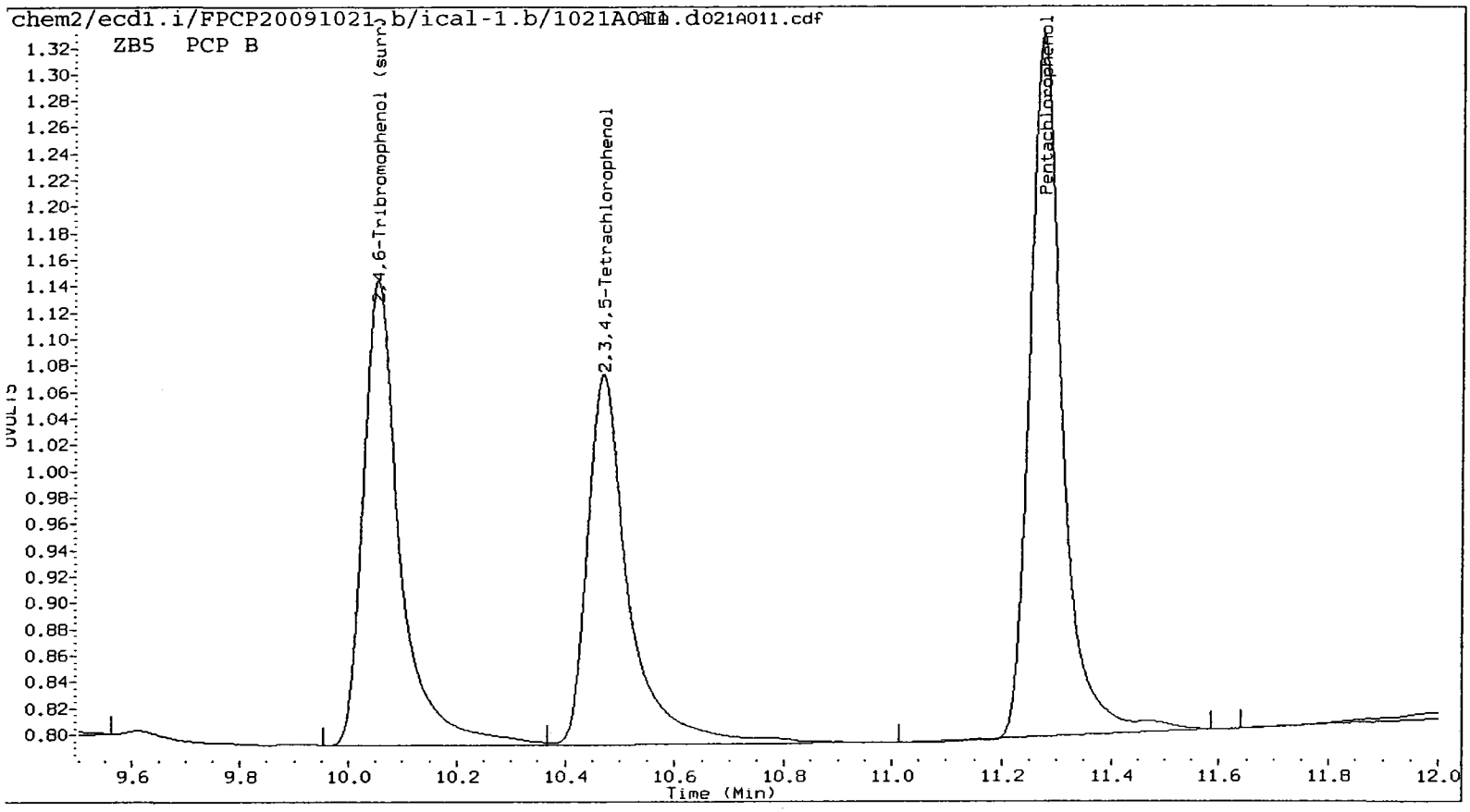
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A011.d ARI ID: PCP B
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A011.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 17:13
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.275	0.004	109754	11.696	0.001	112156	6.4451	6.3957	0.8	Pentachlorophenol
7.291	-0.002	69066	7.350	-0.002	67317	7.7476	6.4191	18.8	2,4,6-Trichlorophenol
7.645	-0.003	62285	7.881	-0.002	63108	6.4390	6.2616	2.8	2,3,6-Trichlorophenol
8.262	0.004	34462	8.623	0.003	43595	6.0940	6.2584	2.7	2,4,5-Trichlorophenol
8.837	0.012	44152	9.404	0.006	56589	6.6144	6.2625	5.5	2,3,4-Trichlorophenol
9.038	-0.001	90965	9.295	0.000	91612	6.4093	6.3573	0.8	2,3,5,6-Tetrachlorophenol
10.470	0.007	73270	11.164	0.005	73060	6.4209	6.5380	1.8	2,3,4,5-Tetrachlorophenol
6.915	-0.002	40263	7.176	-0.001	39225	63.2816	62.2651	1.6	2,4-Dichlorophenol
10.054	0.005	82674	10.682	0.002	87382	6.4	6.4	0.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	25.6	25.6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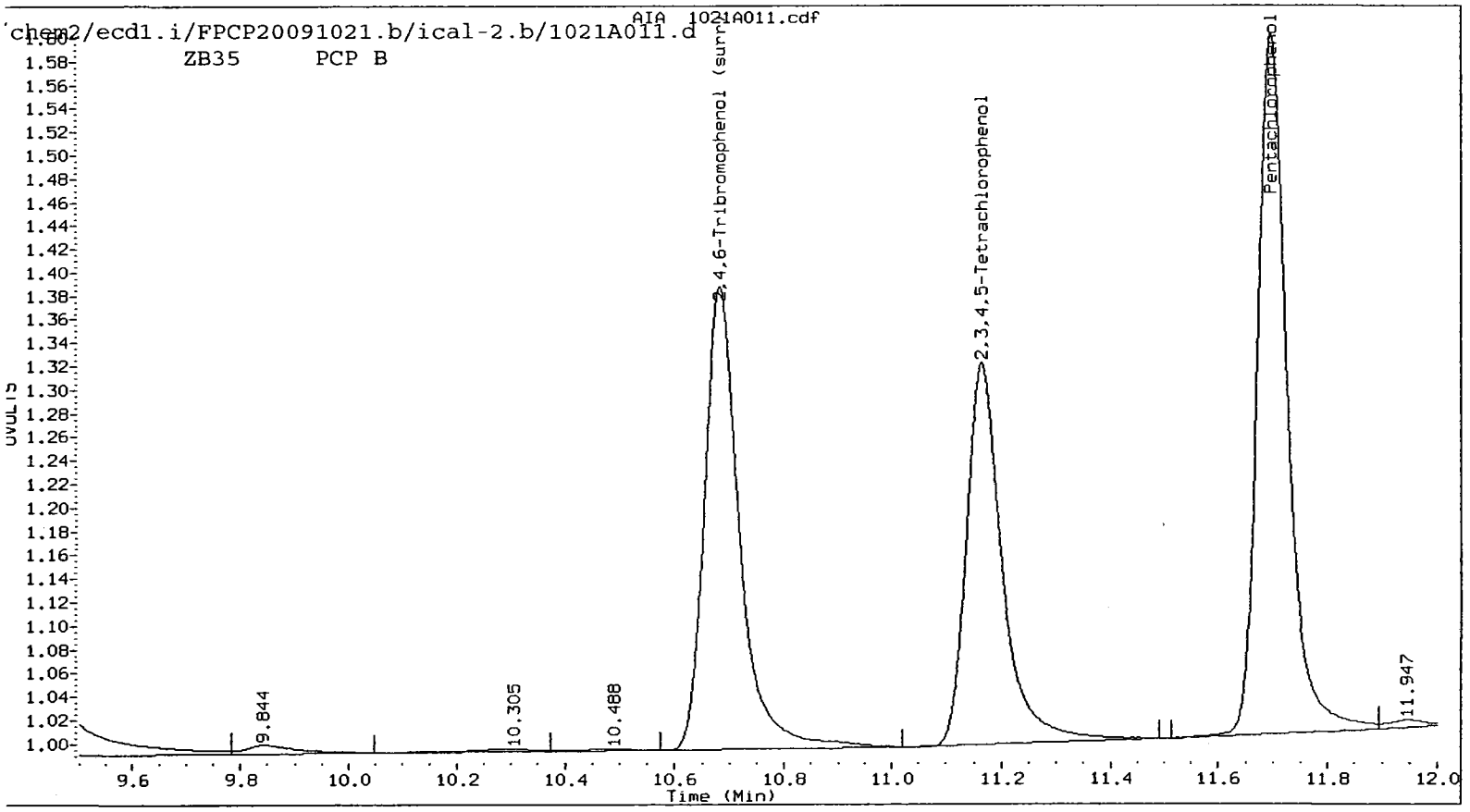
1021A011.cdf
ZB5 PCP B
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)


chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A011.d
AIA 1021A011.cdf
ZB35 PCP B
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.844
10.305
10.488
11.947
UVOLTS
Time (Min)

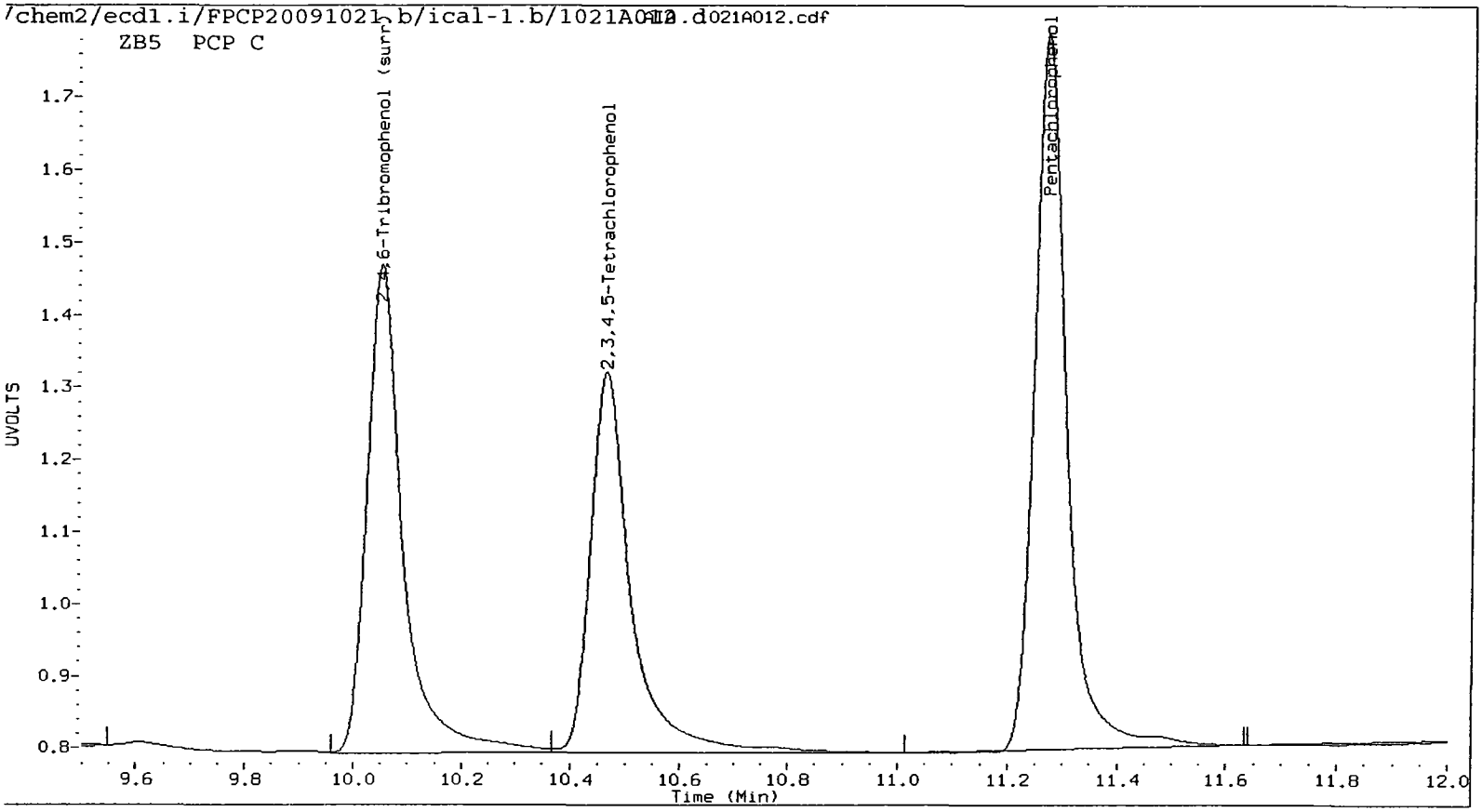
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A012.d ARI ID: PCP C
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A012.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 17:33
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.272	0.001	202983	11.696	0.001	208842	12.0598	12.0516	0.1	Pentachlorophenol
7.290	-0.003	122711	7.351	-0.001	122881	13.4853	11.9038	12.5	2,4,6-Trichlorophenol
7.645	-0.003	113716	7.882	-0.001	116643	11.9335	11.7918	1.2	2,3,6-Trichlorophenol
8.258	-0.001	71784	8.622	0.002	76979	13.1700	12.6449	4.1	2,4,5-Trichlorophenol
8.830	0.004	80139	9.401	0.003	101861	12.1254	12.4877	2.9	2,3,4-Trichlorophenol
9.037	-0.002	170093	9.295	0.000	171254	12.1094	12.0322	0.6	2,3,5,6-Tetrachlorophenol
10.465	0.002	136364	11.163	0.003	135310	12.0829	12.2042	1.0	2,3,4,5-Tetrachlorophenol
6.914	-0.004	69803	7.176	-0.001	68497	124.8517	123.9132	0.8	2,4-Dichlorophenol
10.051	0.001	156332	10.682	0.002	165413	12.2	12.2	0.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	48.8	48.8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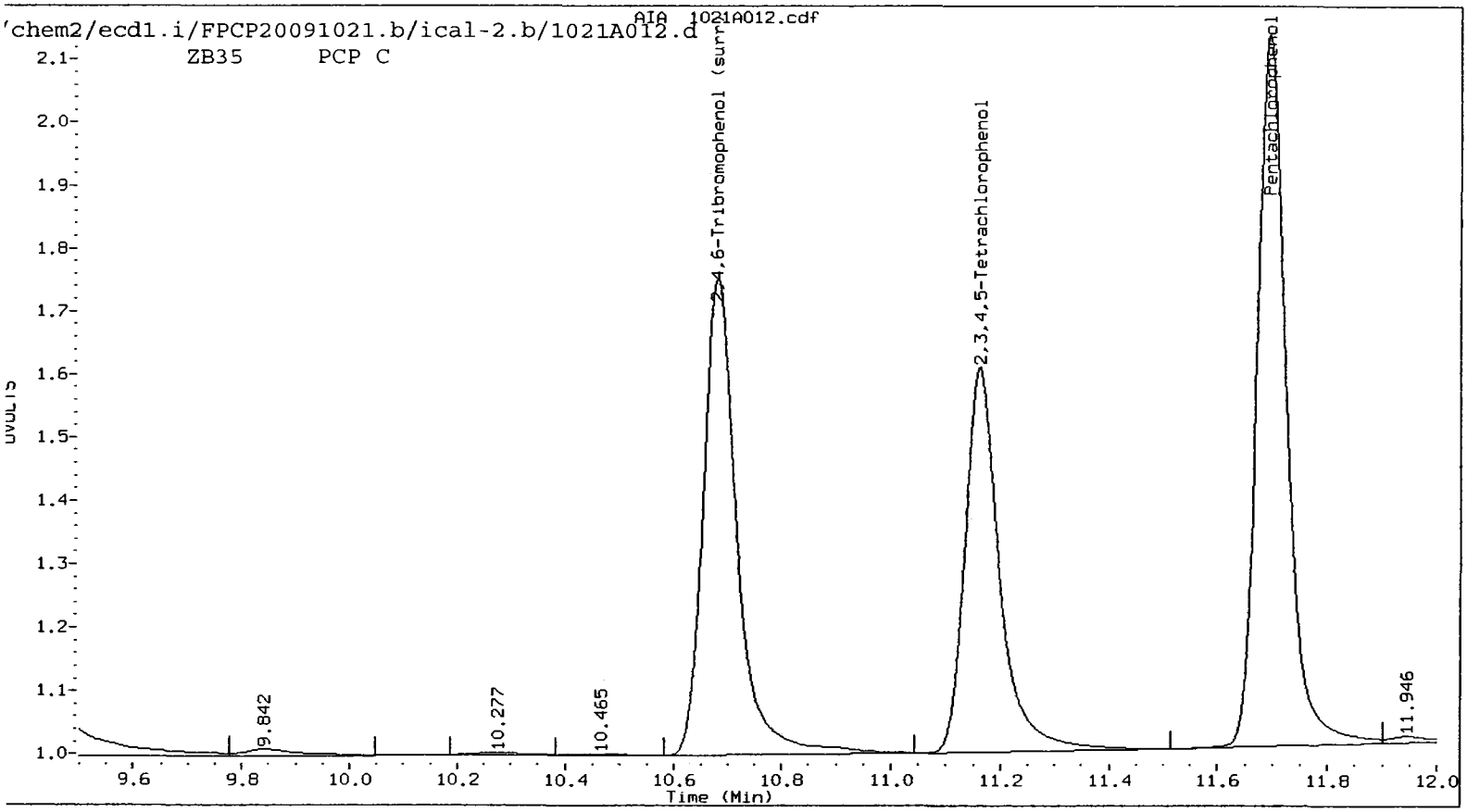
AIA 1021A012.cdf
ZB5 PCP C
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)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AIA 1021A012.cdf
ZB35 PCP C
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.842
10.277
10.465
11.946
Time (Min)

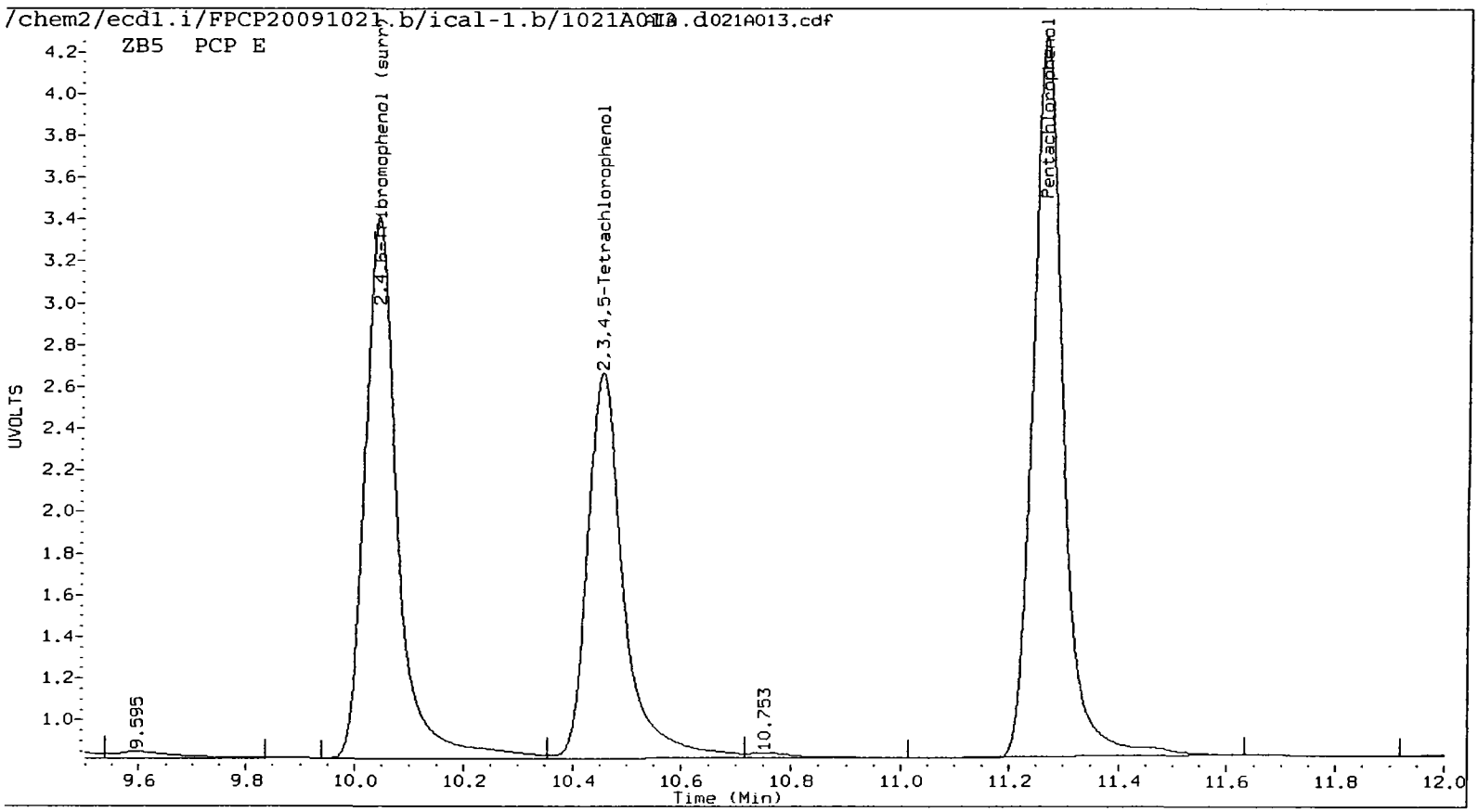
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A013.d ARI ID: PCP E
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A013.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 17:53
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.266	-0.005	666704	11.691	-0.003	711873	41.3282	42.6000	3.0	Pentachlorophenol
7.290	-0.003	393586	7.350	-0.002	408854	47.9413	41.3247	14.8	2,4,6-Trichlorophenol
7.645	-0.004	373912	7.881	-0.002	410494	41.0037	42.9591	4.7	2,3,6-Trichlorophenol
8.251	-0.008	212054	8.617	-0.003	227473	50.1833	50.2897	0.2	2,4,5-Trichlorophenol
8.814	-0.012	258615	9.393	-0.005	313504	40.9085	50.1589	20.3	2,3,4-Trichlorophenol
9.034	-0.004	599646	9.293	-0.002	595350	43.9764	43.2421	1.7	2,3,5,6-Tetrachlorophenol
10.454	-0.008	427389	11.156	-0.004	448986	39.8012	42.0963	5.6	2,3,4,5-Tetrachlorophenol
6.913	-0.005	201819	7.174	-0.003	202273	501.8098	501.6570	0.0	2,4-Dichlorophenol
10.042	-0.008	535832	10.676	-0.004	581984	43.3	44.2	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	173.1	176.6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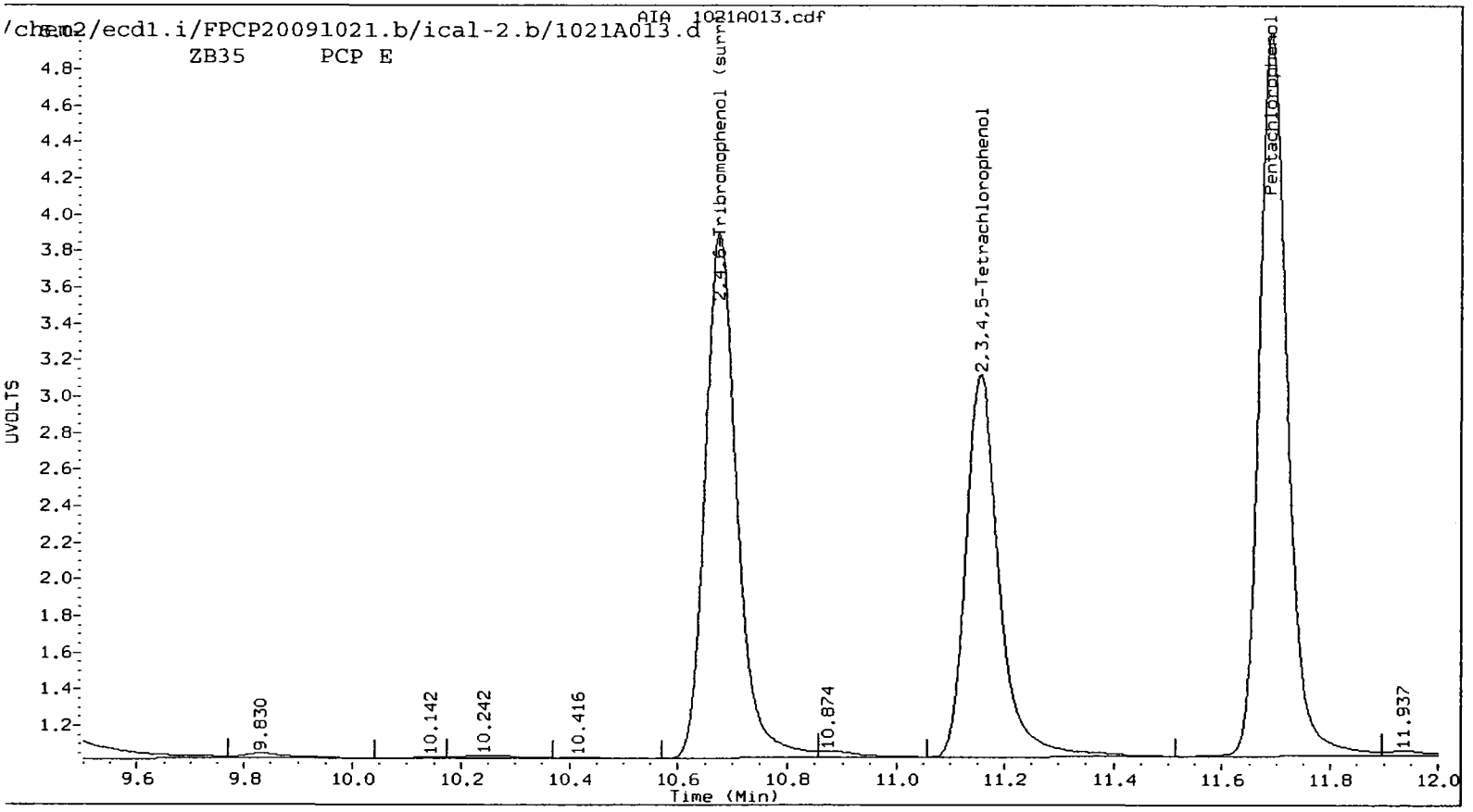
AIA 1021A013.cdf
ZB5 PCP E
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.595
10.753
UVOLTS
Time (Min)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AIA 1021A013.cdf
ZB35 PCP E
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.830
10.142
10.242
10.416
10.874
11.937
UVOLTS
Time (Min)

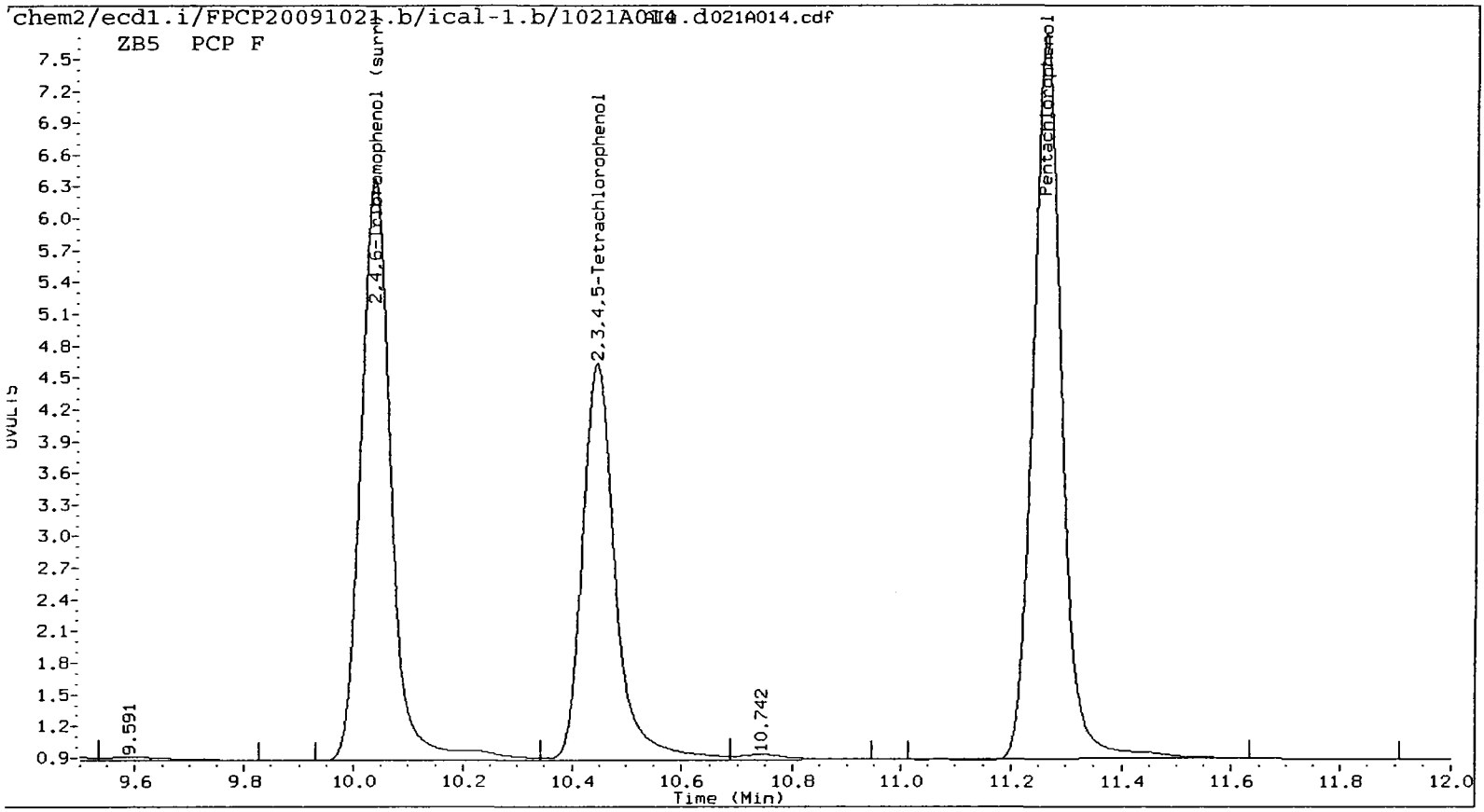
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A014.d ARI ID: PCP F
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A014.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 18:12
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.261	-0.010	1257631	11.688	-0.007	1367192	80.9320	84.3727	4.2	Pentachlorophenol
7.289	-0.004	737425	7.349	-0.003	771470	97.0409	80.9472	18.1	2,4,6-Trichlorophenol
7.643	-0.005	706063	7.880	-0.003	775172	80.4545	83.7586	4.0	2,3,6-Trichlorophenol
8.246	-0.013	375055	8.613	-0.007	400339	100.2916	100.3638	0.1	2,4,5-Trichlorophenol
8.803	-0.022	485129	9.386	-0.012	560518	79.8342	100.3518	22.8	2,3,4-Trichlorophenol
9.031	-0.007	1105561	9.291	-0.004	1150368	83.7189	85.9095	2.6	2,3,5,6-Tetrachloropheno
10.444	-0.018	787735	11.149	-0.010	843983	76.7676	81.9822	6.6	2,3,4,5-Tetrachlorophenol
6.911	-0.007	353265	7.172	-0.004	357799	1004.7537	1004.6702	0.0	2,4-Dichlorophenol
10.036	-0.013	1052673	10.672	-0.008	1148400	87.2	89.0	2.1	2,4,6-Tribromophenol (sur

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	348.7	356.1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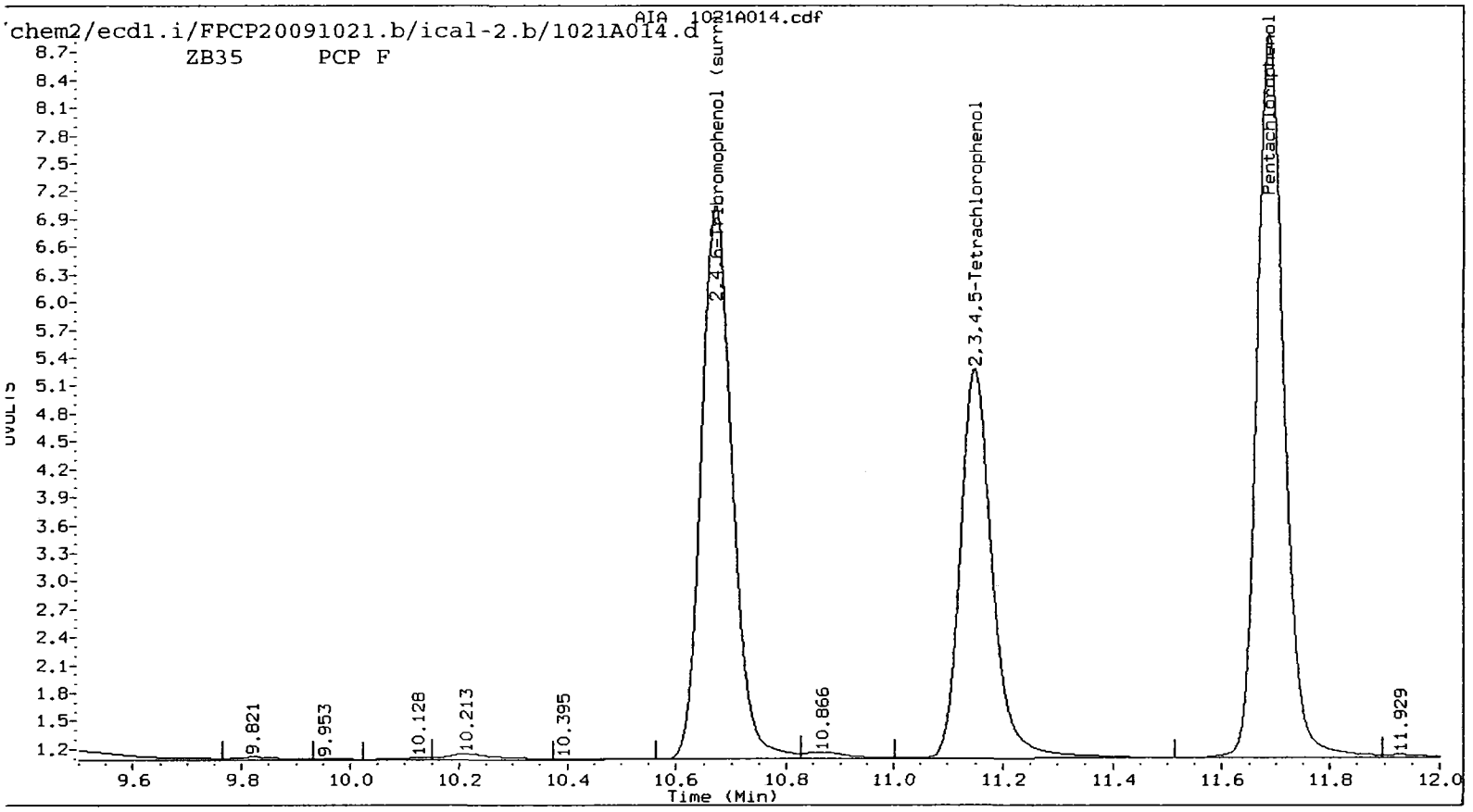
AIA 1021A014.cdf
ZB5 PCP F
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.591
10.742
UVUL 1 5
Time (Min)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AIA 1021A014.cdf
ZB35 PCP F
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.821
9.953
10.128
10.213
10.395
10.866
11.929
UVUL 1 5
Time (Min)

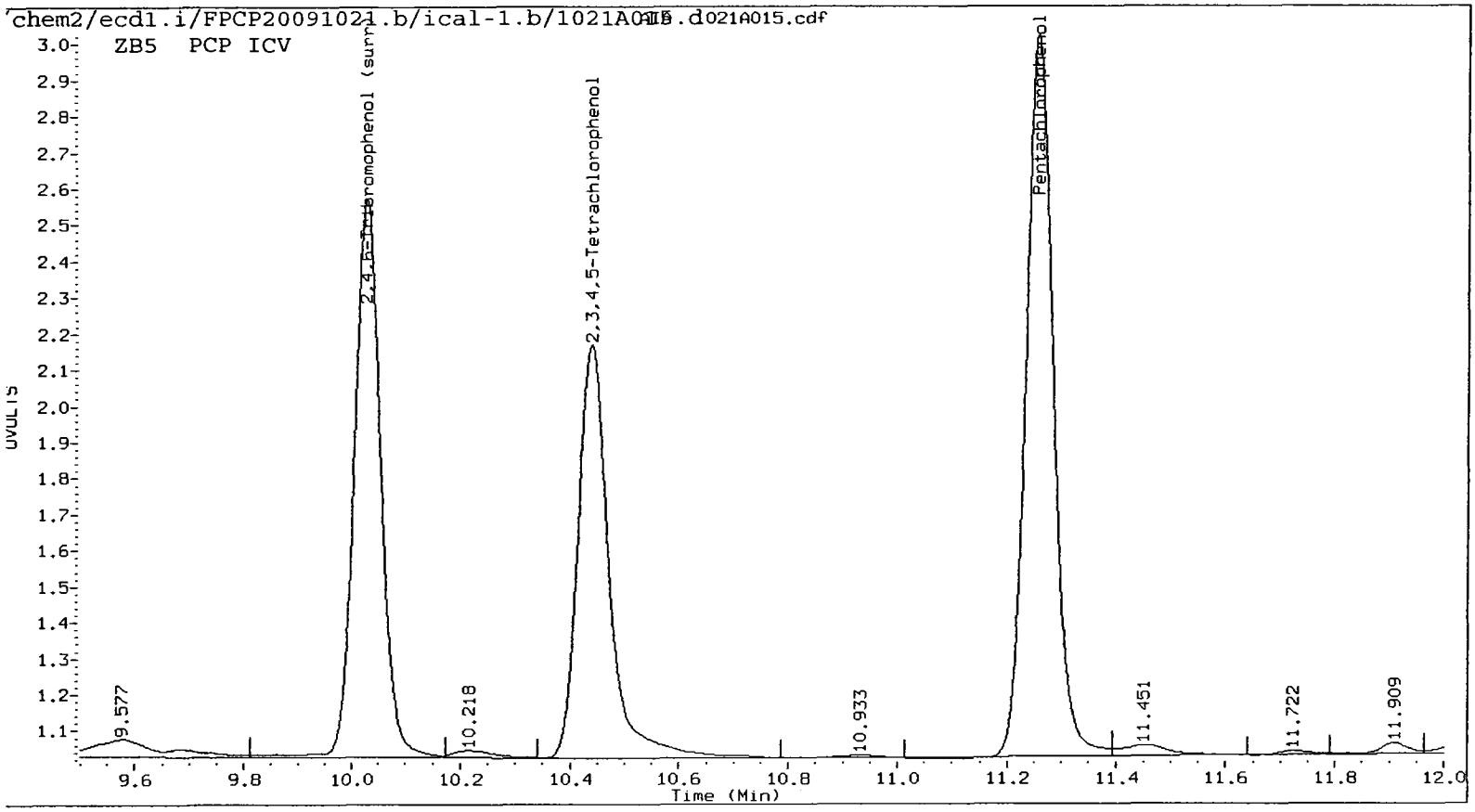
Analytical Resources Inc.
Dual Column Pentachlorophenol Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/ical-1.b/1021A015.d ARI ID: PCP ICV
Data file 2: /chem2/ecd1.i/FPCP20091021.b/ical-2.b/1021A015.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 21-OCT-2009 18:32
Compound Sublist: all Report Date: 10/23/2009 11:19
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
11.257	-0.015	352965	11.686	-0.009	385654	22.7143	23.7996	4.7	Pentachlorophenol
7.287	-0.007	214813	7.348	-0.003	229189	28.2682	24.0479	16.1	2,4,6-Trichlorophenol
7.640	-0.008	205185	7.879	-0.004	209509	23.3804	22.6378	3.2	2,3,6-Trichlorophenol
8.241	-0.018	118561	8.611	-0.009	121192	24.9186	23.3315	6.6	2,4,5-Trichlorophenol
8.795	-0.030	136414	9.382	-0.016	145492	22.4487	20.2476	10.3	2,3,4-Trichlorophenol
9.027	-0.011	286061	9.289	-0.006	314482	21.6621	23.4855	8.1	2,3,5,6-Tetrachlorophenol
10.439	-0.023	229183	11.146	-0.014	236673	22.3347	22.9898	2.9	2,3,4,5-Tetrachlorophenol
6.909	-0.009	111314	7.172	-0.005	109143	236.2190	232.7819	1.5	2,4-Dichlorophenol
10.028	-0.022	264698	10.667	-0.012	309286	21.9	24.0	9.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	90.9	95.2
2,4,6-Trichlorophenol	113.1	96.2
2,3,6-Trichlorophenol	93.5	90.6
2,4,5-Trichlorophenol	99.7	93.3
2,3,4-Trichlorophenol	89.8	81.0
2,3,5,6-Tetrachlorophenol	86.6	93.9
2,3,4,5-Tetrachlorophenol	89.3	92.0
2,4-Dichlorophenol	94.5	93.1
2,4,6-TBP (surr)	43.8	48.0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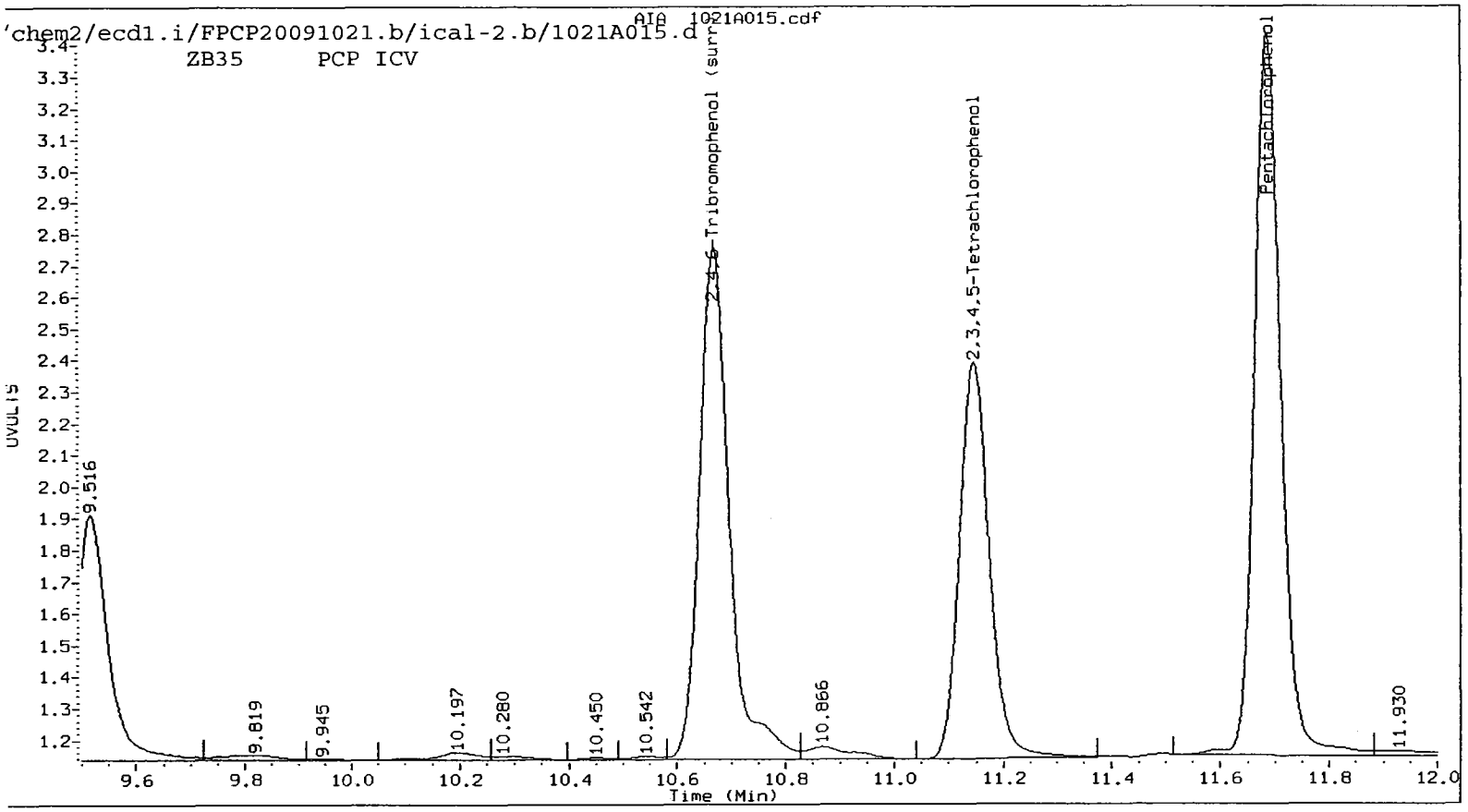
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.577
10.218
10.933
11.451
11.722
11.909
UVUL1'S
Time (Min)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ZB35 PCP ICV
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.516
9.819
9.945
10.197
10.280
10.450
10.542
10.866
11.930
UVUL1'S
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 10/21/09 10/21/09

Client Sample No.(PCP): Date Analyzed :01/08/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2204

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.27	11.20	11.34	23.5	25.0	-6.0
2,4,6-Trichlorophenol	7.29	7.22	7.36	27.3	25.0	9.2
2,3,6-Trichlorophenol	7.65	7.58	7.72	22.5	25.0	-10.0
2,4,5-Trichlorophenol	8.26	8.19	8.33	22.7	25.0	-9.2
2,3,4-Trichlorophenol	8.82	8.76	8.90	22.7	25.0	-9.2
2,3,5,6-Tetrachlorophenol	9.04	8.97	9.11	24.6	25.0	-1.6
2,3,4,5-Tetrachlorophenol	10.46	10.39	10.53	23.7	25.0	-5.2
2,4-Dichlorophenol	6.92	6.85	6.99	255	250	2.0
2,4,6-Tribromophenol (surr	10.05	9.98	10.12	23.8	25.0	-4.8

AVERAGE %D = 6.4

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 10/21/09 10/21/09

Client Sample No.(PCP): Date Analyzed :01/08/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2204

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.70	11.62	11.76	26.2	25.0	4.8
2,4,6-Trichlorophenol	7.35	7.28	7.42	23.9	25.0	-4.4
2,3,6-Trichlorophenol	7.88	7.81	7.95	24.7	25.0	-1.2
2,4,5-Trichlorophenol	8.62	8.55	8.69	23.0	25.0	-8.0
2,3,4-Trichlorophenol	9.40	9.33	9.47	22.7	25.0	-9.2
2,3,5,6-Tetrachlorophenol	9.30	9.23	9.37	25.2	25.0	0.8
2,3,4,5-Tetrachlorophenol	11.16	11.09	11.23	25.8	25.0	3.2
2,4-Dichlorophenol	7.18	7.11	7.25	255	250	2.0
2,4,6-Tribromophenol (surr	10.68	10.61	10.75	26.3	25.0	5.2

AVERAGE %D = 4.3

FORM VII PCP

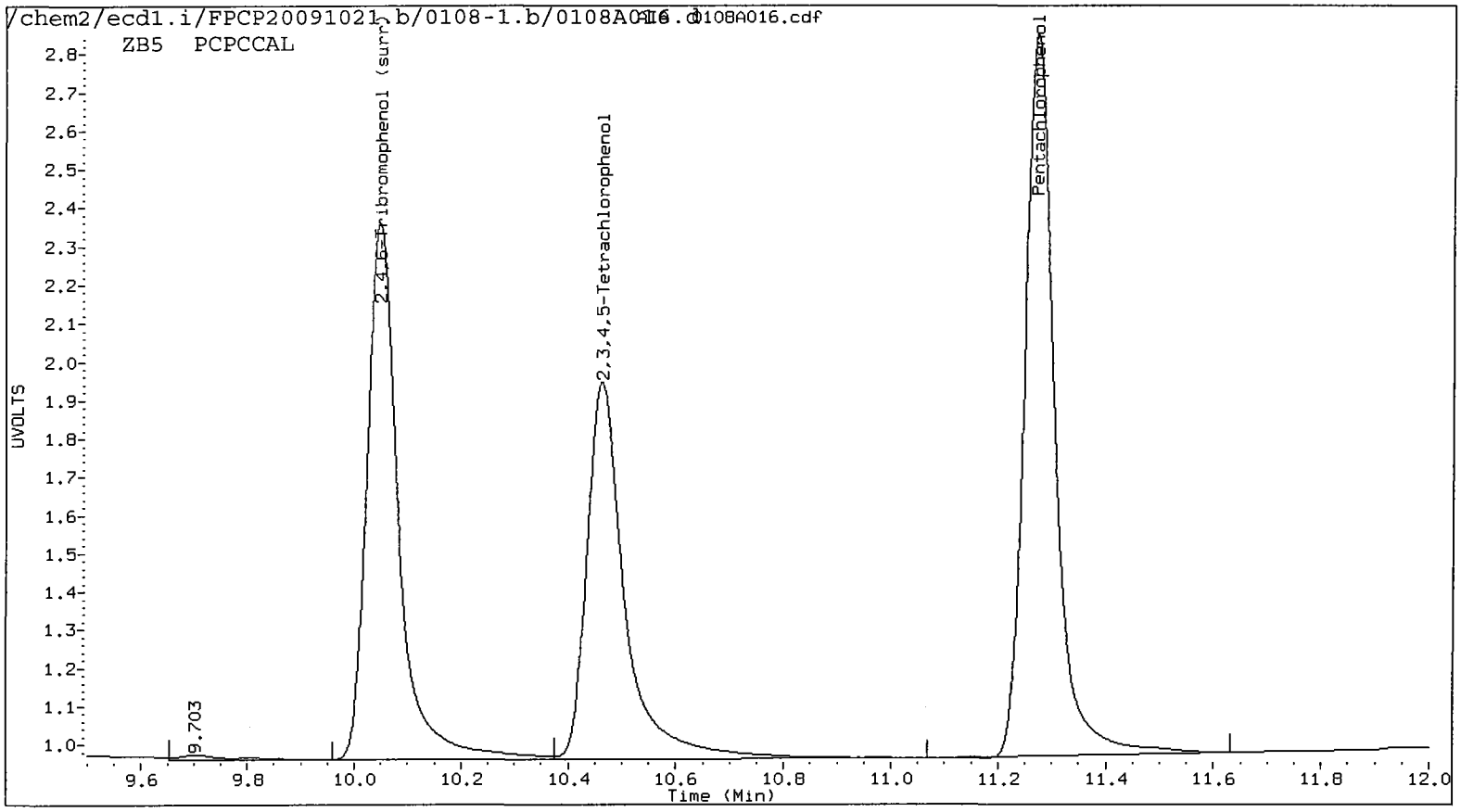
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A016.d ARI ID: PCPCCAL
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A016.d Client ID:
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 08-JAN-2010 22:04
Compound Sublist: all Report Date: 01/11/2010 13:09
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
11.273	0.002	365331	11.696	0.001	424329	23.5101	26.1864	10.8	Pentachlorophenol
7.295	0.001	207549	7.353	0.002	227506	27.3123	23.8713	13.4	2,4,6-Trichlorophenol
7.650	0.002	197310	7.885	0.002	228502	22.4832	24.6901	9.4	2,3,6-Trichlorophenol
8.258	0.000	109174	8.623	0.003	119885	22.7171	23.0474	1.4	2,4,5-Trichlorophenol
8.822	-0.004	137817	9.399	0.001	161102	22.6797	22.6615	0.1	2,3,4-Trichlorophenol
9.040	0.002	324708	9.298	0.003	337701	24.5887	25.2195	2.5	2,3,5,6-Tetrachlorophenol
10.463	0.001	243240	11.162	0.002	265179	23.7046	25.7588	8.3	2,3,4,5-Tetrachlorophenol
6.918	0.001	118876	7.179	0.002	118176	254.9501	254.9481	0.0	2,4-Dichlorophenol
10.049	-0.001	287306	10.681	0.001	339316	23.8	26.3	10.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	94.0	104.7
2,4,6-Trichlorophenol	109.2	95.5
2,3,6-Trichlorophenol	89.9	98.8
2,4,5-Trichlorophenol	90.9	92.2
2,3,4-Trichlorophenol	90.7	90.6
2,3,5,6-Tetrachlorophenol	98.4	100.9
2,3,4,5-Tetrachlorophenol	94.8	103.0
2,4-Dichlorophenol	102.0	102.0
2,4,6-TBP (surr)	95.2	105.2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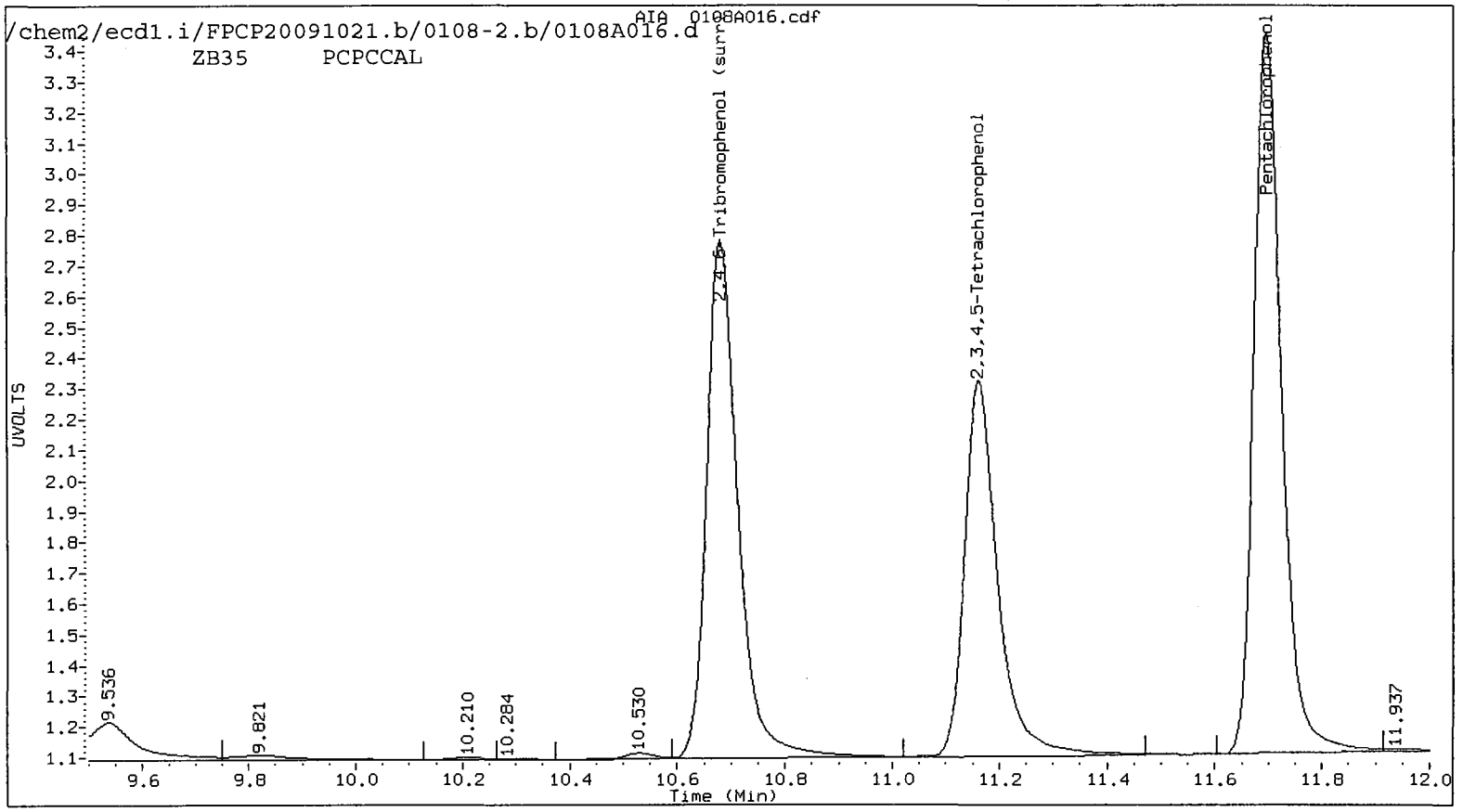
ZB5 PCPCCAL
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.703
UVOLTS
Time (Min)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ZB35 PCPCCAL
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.536
9.821
10.210
10.284
10.530
11.937
UVOLTS
Time (Min)

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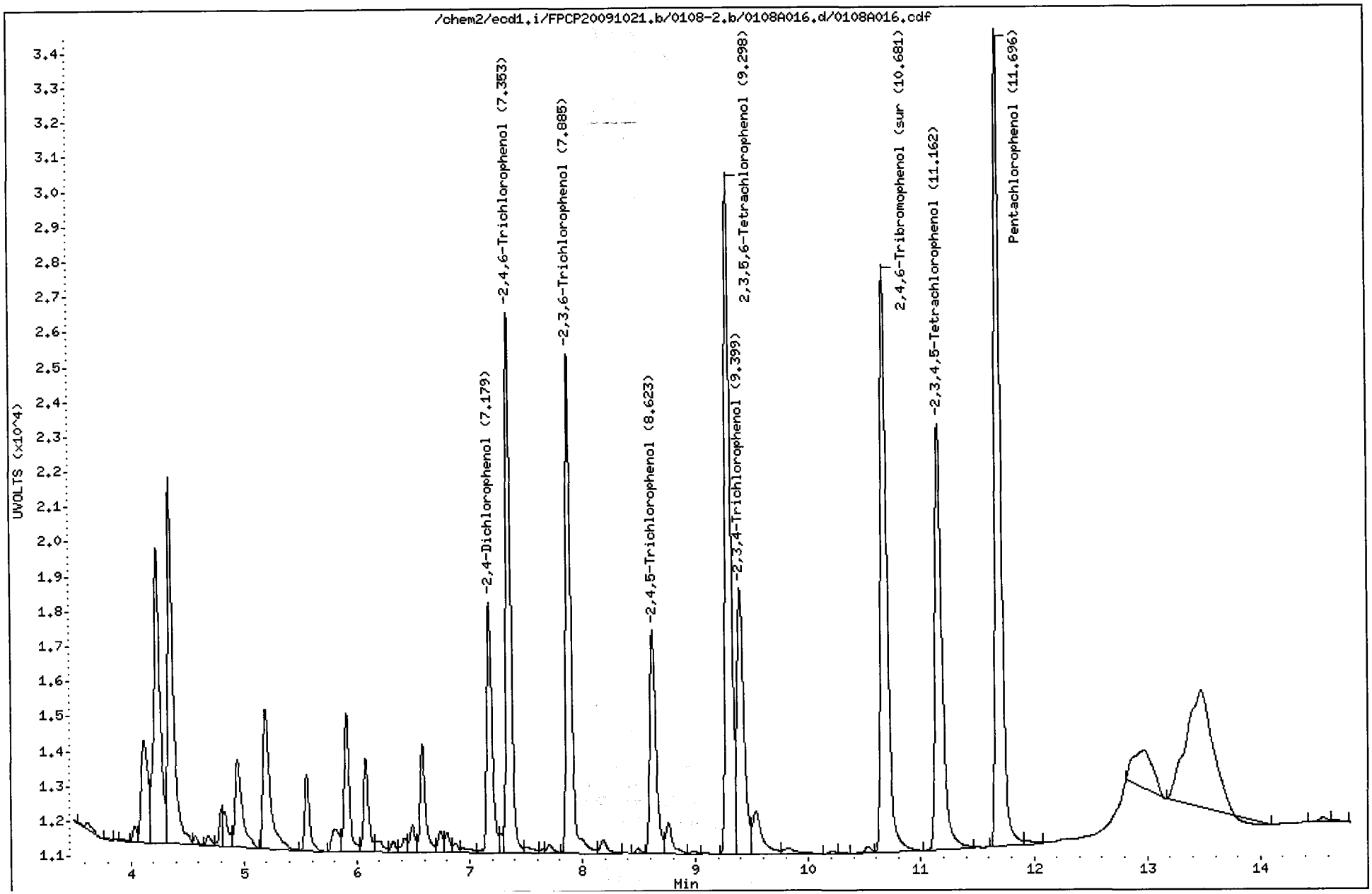
Date : 08-JAN-2010 22:04
Client ID:
Sample Info: PCPCCAL

Column phase: ZB35

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 10/21/09 10/21/09

Client Sample No.(PCP): Date Analyzed :01/09/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0142

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.28	11.20	11.34	24.6	25.0	-1.6
2,4,6-Trichlorophenol	7.30	7.22	7.36	28.4	25.0	13.6
2,3,6-Trichlorophenol	7.65	7.58	7.72	23.4	25.0	-6.4
2,4,5-Trichlorophenol	8.26	8.19	8.33	23.6	25.0	-5.6
2,3,4-Trichlorophenol	8.82	8.76	8.90	23.4	25.0	-6.4
2,3,5,6-Tetrachlorophenol	9.04	8.97	9.11	24.8	25.0	-0.8
2,3,4,5-Tetrachlorophenol	10.47	10.39	10.53	24.6	25.0	-1.6
2,4-Dichlorophenol	6.92	6.85	6.99	261	250	4.4
2,4,6-Tribromophenol (surr	10.05	9.98	10.12	24.7	25.0	-1.2

AVERAGE %D = 4.6

FORM VII PCP

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QD71 Project: LORA LAKES APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 10/21/09 10/21/09

Client Sample No.(PCP): Date Analyzed :01/09/10

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0142

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.70	11.62	11.76	27.2	25.0	8.8
2,4,6-Trichlorophenol	7.36	7.28	7.42	25.5	25.0	2.0
2,3,6-Trichlorophenol	7.89	7.81	7.95	25.7	25.0	2.8
2,4,5-Trichlorophenol	8.63	8.55	8.69	24.0	25.0	-4.0
2,3,4-Trichlorophenol	9.40	9.33	9.47	23.5	25.0	-6.0
2,3,5,6-Tetrachlorophenol	9.30	9.23	9.37	26.2	25.0	4.8
2,3,4,5-Tetrachlorophenol	11.17	11.09	11.23	26.7	25.0	6.8
2,4-Dichlorophenol	7.18	7.11	7.25	264	250	5.6
2,4,6-Tribromophenol (surr	10.69	10.61	10.75	27.3	25.0	9.2

AVERAGE %D = 5.6

FORM VII PCP

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A027.d ARI ID: PCPCCAL
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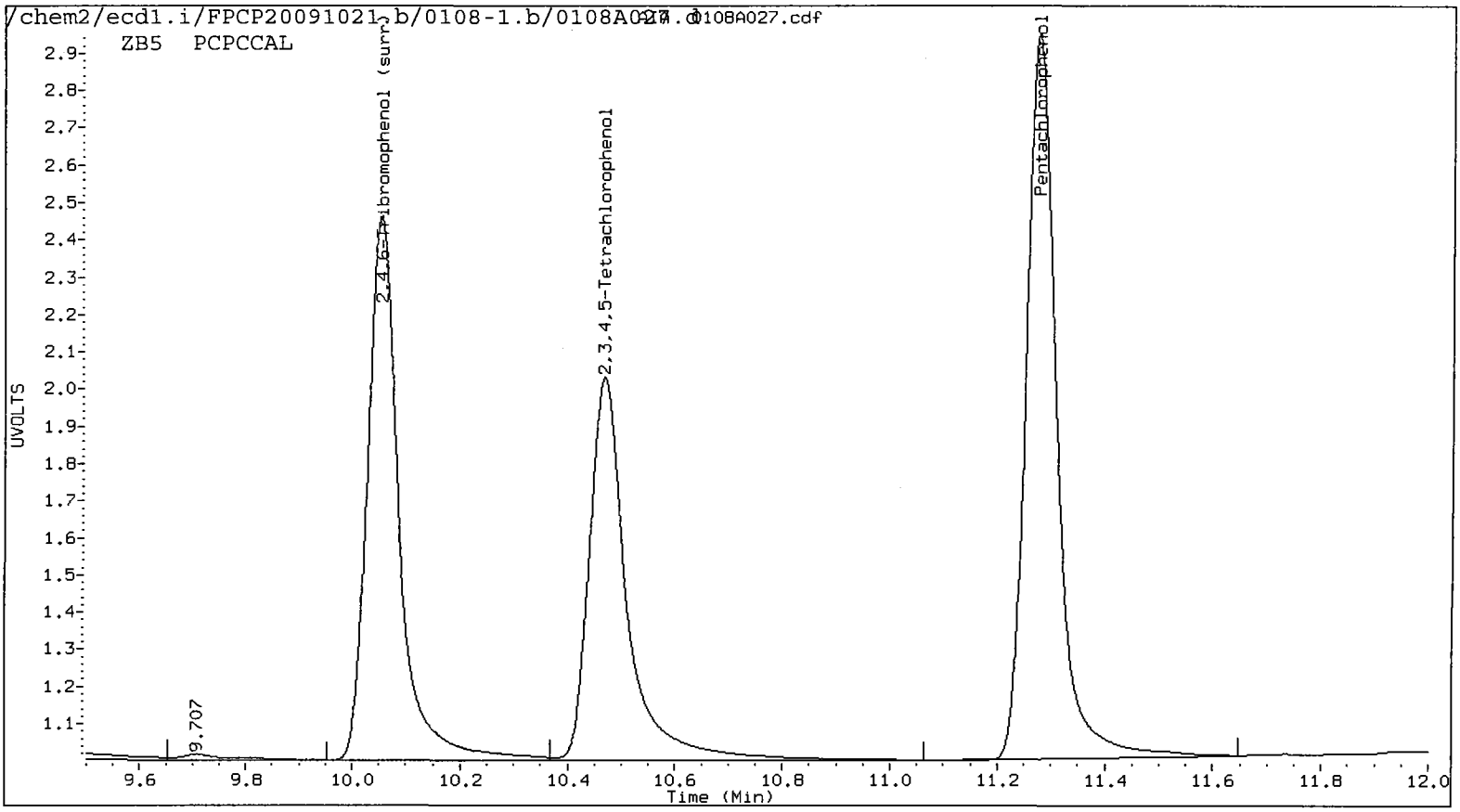
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 09-JAN-2010 01:42
Compound Sublist: all Report Date: 01/11/2010 13:09
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.277	0.005	382291	11.700	0.005	441517	24.6015	27.2471	10.2	Pentachlorophenol
7.298	0.004	216017	7.357	0.005	243011	28.4267	25.4982	10.9	2,4,6-Trichlorophenol
7.653	0.004	205346	7.888	0.005	237532	23.3989	25.6657	9.2	2,3,6-Trichlorophenol
8.262	0.004	113078	8.626	0.006	124059	23.6279	23.9577	1.4	2,4,5-Trichlorophenol
8.825	-0.001	142477	9.403	0.005	166746	23.4465	23.5459	0.4	2,3,4-Trichlorophenol
9.044	0.005	327254	9.302	0.007	350445	24.7815	26.1713	5.5	2,3,5,6-Tetrachlorophenol
10.468	0.005	252712	11.166	0.006	275277	24.6278	26.7398	8.2	2,3,4,5-Tetrachlorophenol
6.921	0.003	121425	7.182	0.005	121861	261.3407	264.1160	1.1	2,4-Dichlorophenol
10.053	0.003	298197	10.686	0.006	352409	24.7	27.3	10.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	98.4	109.0
2,4,6-Trichlorophenol	113.7	102.0
2,3,6-Trichlorophenol	93.6	102.7
2,4,5-Trichlorophenol	94.5	95.8
2,3,4-Trichlorophenol	93.8	94.2
2,3,5,6-Tetrachlorophenol	99.1	104.7
2,3,4,5-Tetrachlorophenol	98.5	107.0
2,4-Dichlorophenol	104.5	105.6
2,4,6-TBP (surr)	98.8	109.3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UVOLTS
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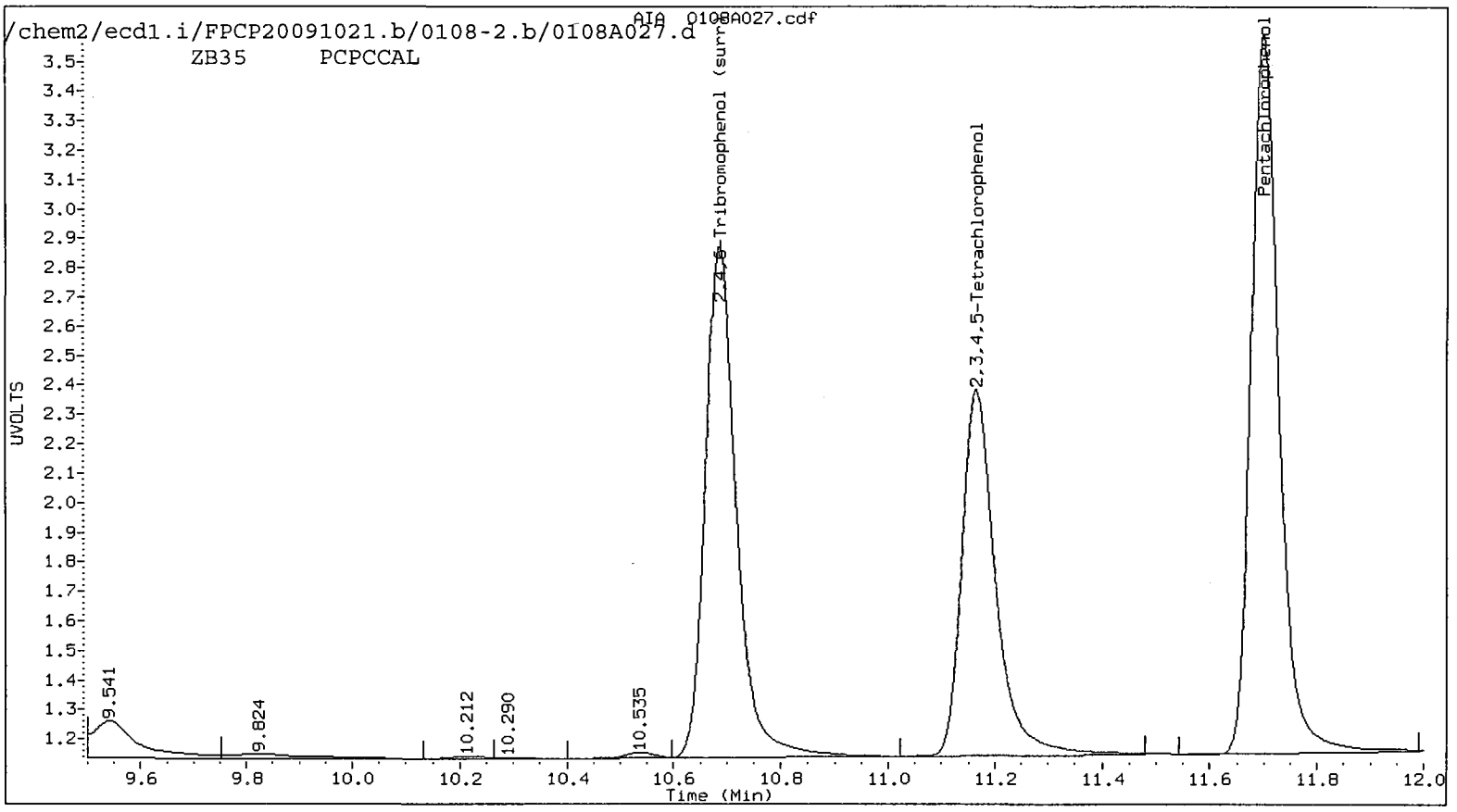
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)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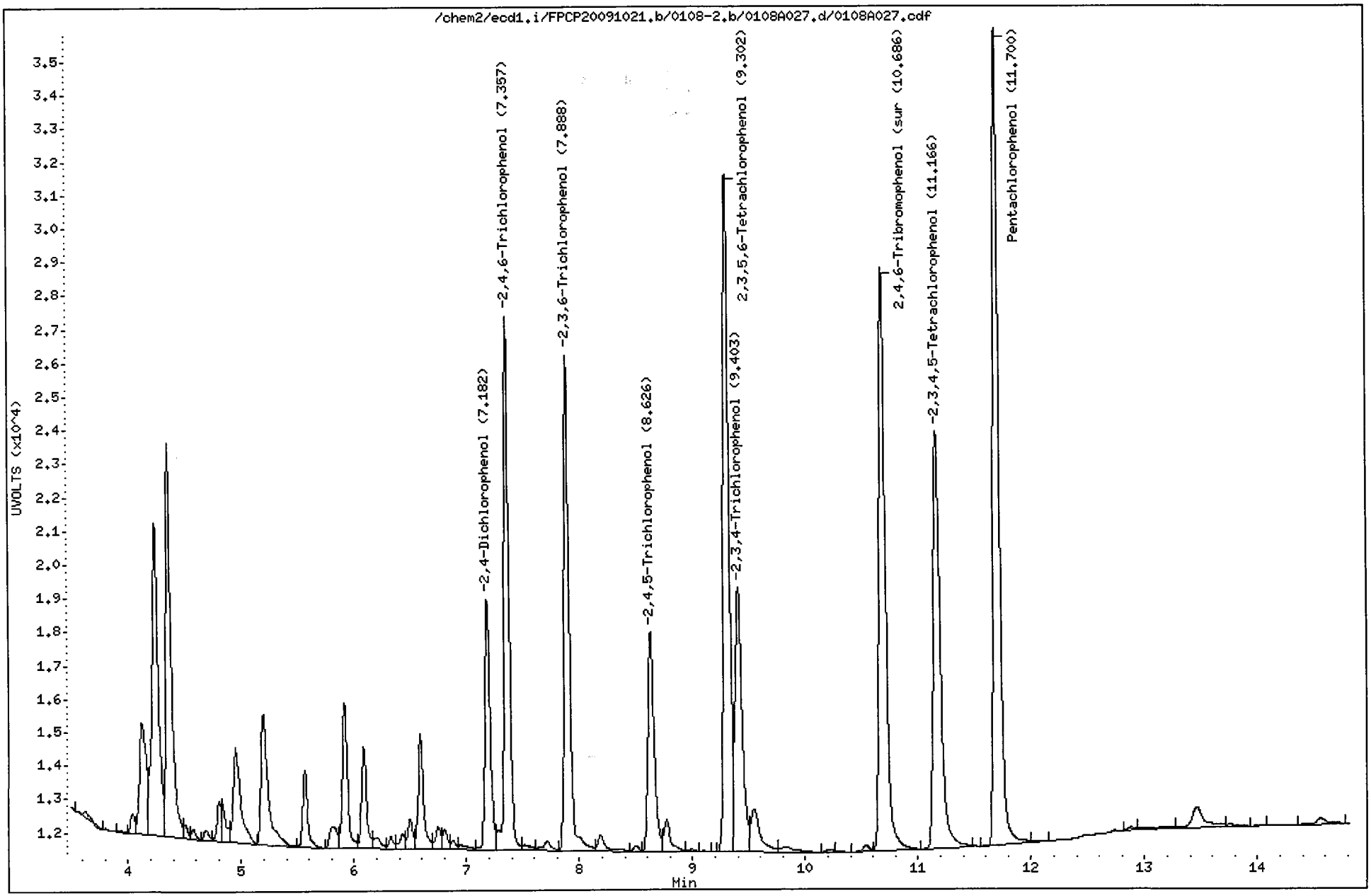
ZB35 PCPCCAL
UVOLTS
9.541
9.824
10.212
10.290
10.535
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
Time (Min)

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A027.d
Date : 09-JAN-2010 01:42
Client ID:
Sample Info: PCPCCAL

Column phase: ZB35

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



PCP/Chlorophenols ANALYSIS
QC Raw Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: MB-010510
METHOD BLANK

Lab Sample ID: MB-010510
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/11/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/05/10
Date Analyzed: 01/08/10 22:24
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	61.6%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

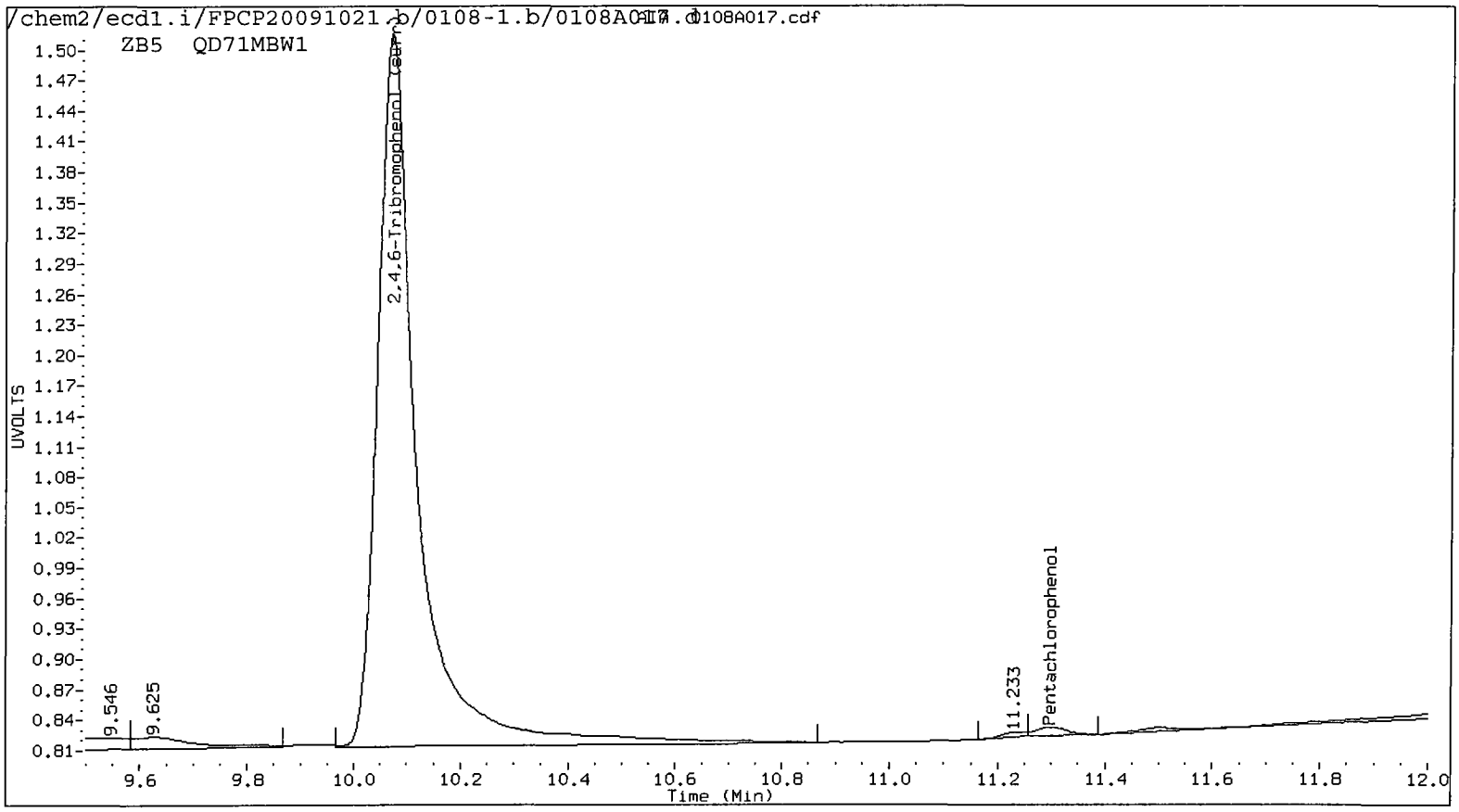
AR 1/11/2010

Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A017.d ARI ID: QD71MBW1
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A017.d Client ID: QD71MBW1
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 08-JAN-2010 22:24
Compound Sublist: all Report Date: 01/11/2010 13:09
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
11.300	0.029	1706	11.731	0.036	892	0.1098	0.0551 LR	66.3*	Pentachlorophenol
7.323	0.029	4474	7.361	0.009	1948	0.5888	0.2044	96.9*	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
----			9.301	0.006	4261	0.0000	0.3182	---	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,4-Dichlorophenol
10.072	0.022	182605	10.696	0.016	198803	15.1	15.4	1.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	60.5	61.6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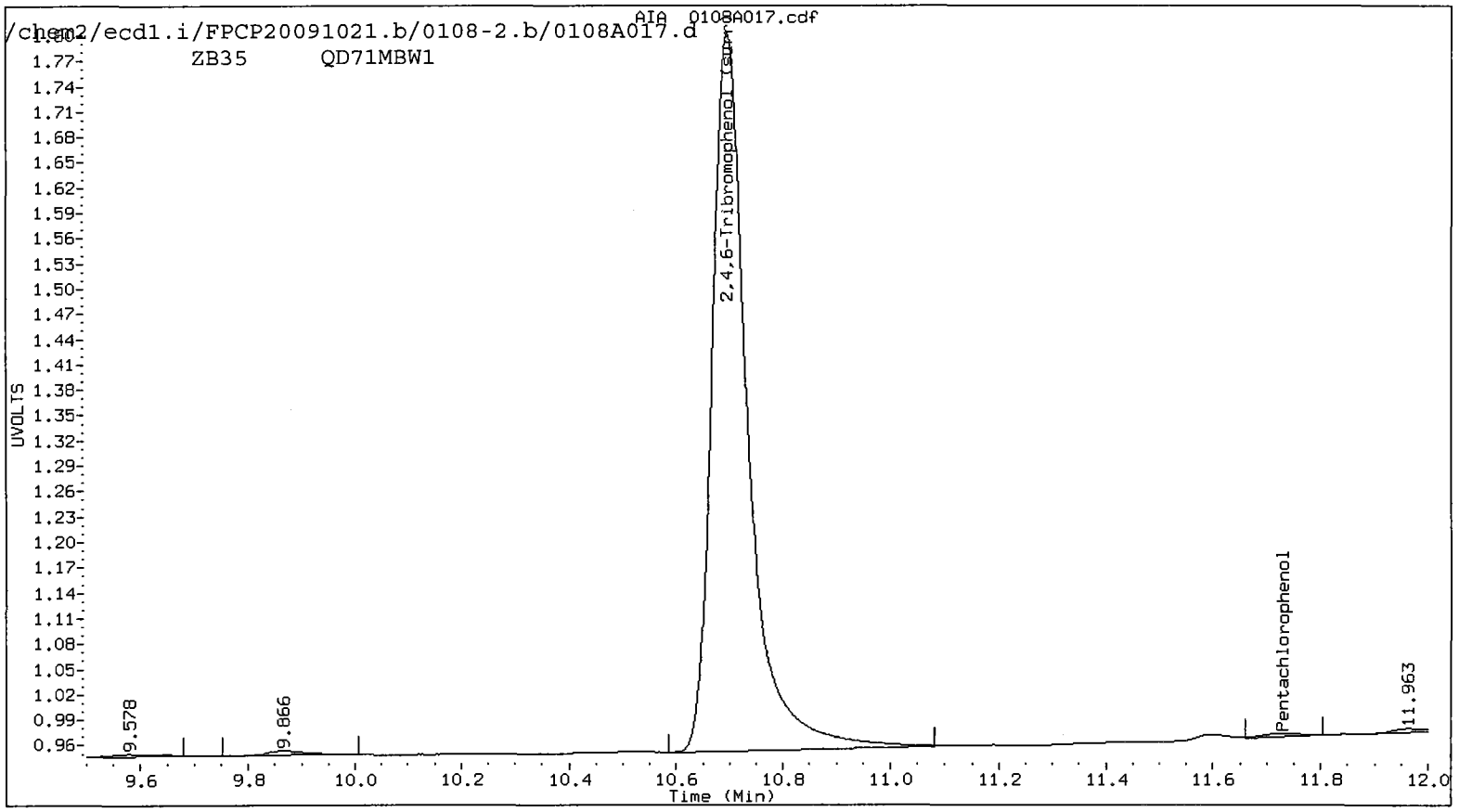
2,4,6-Tribromophenol (surr
9.546
9.625
11.233
Pentachlorophenol
UVOLTS
Time (Min)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ZB35 QD71MBW1
2,4,6-Tribromophenol (surr
9.578
9.866
Pentachlorophenol
11.963
UVOLTS
Time (Min)

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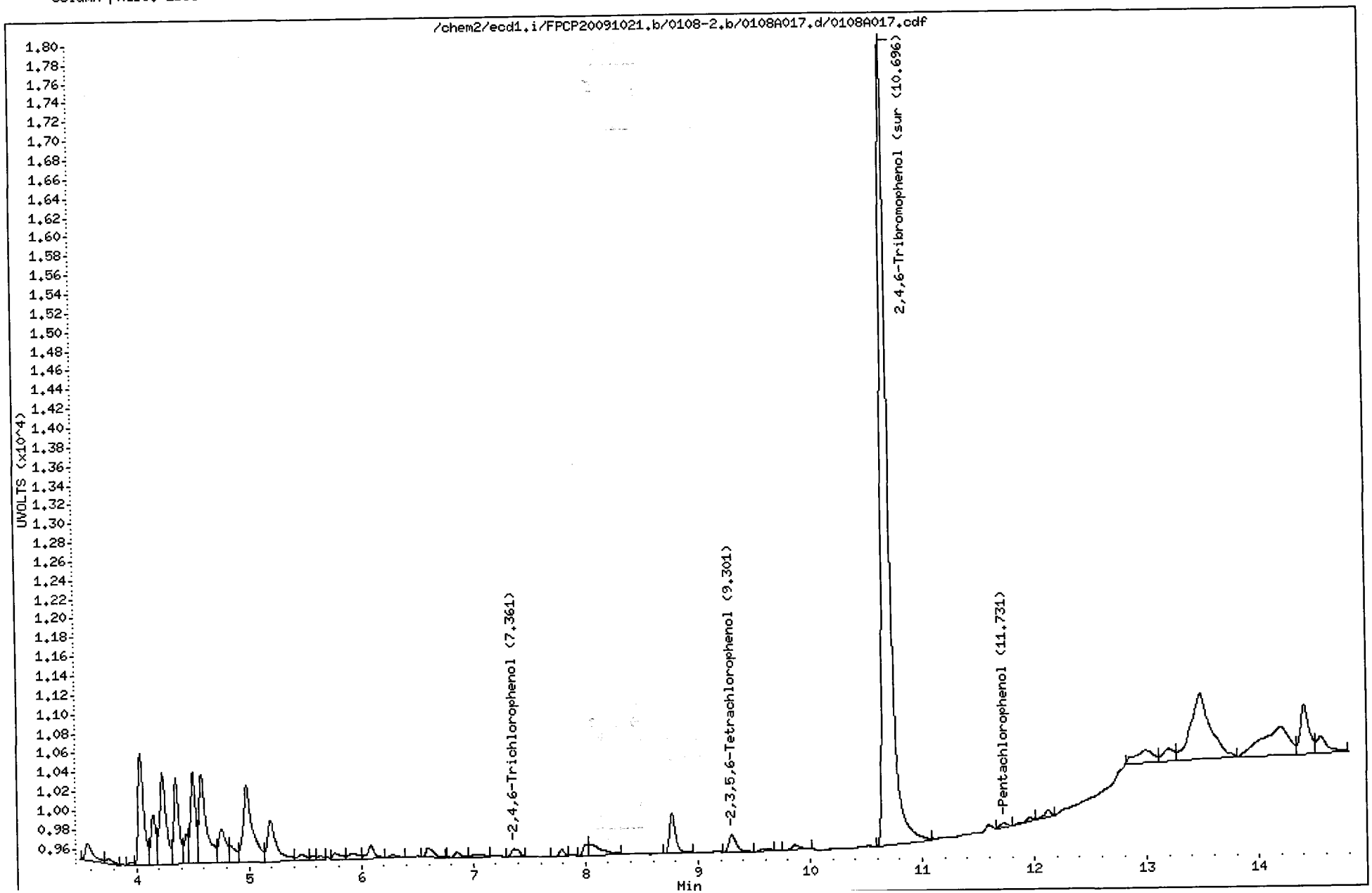
Date : 08-JAN-2010 22:24
Client ID: QD71MBW1
Sample Info: QD71MBW1
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 1/11/2010

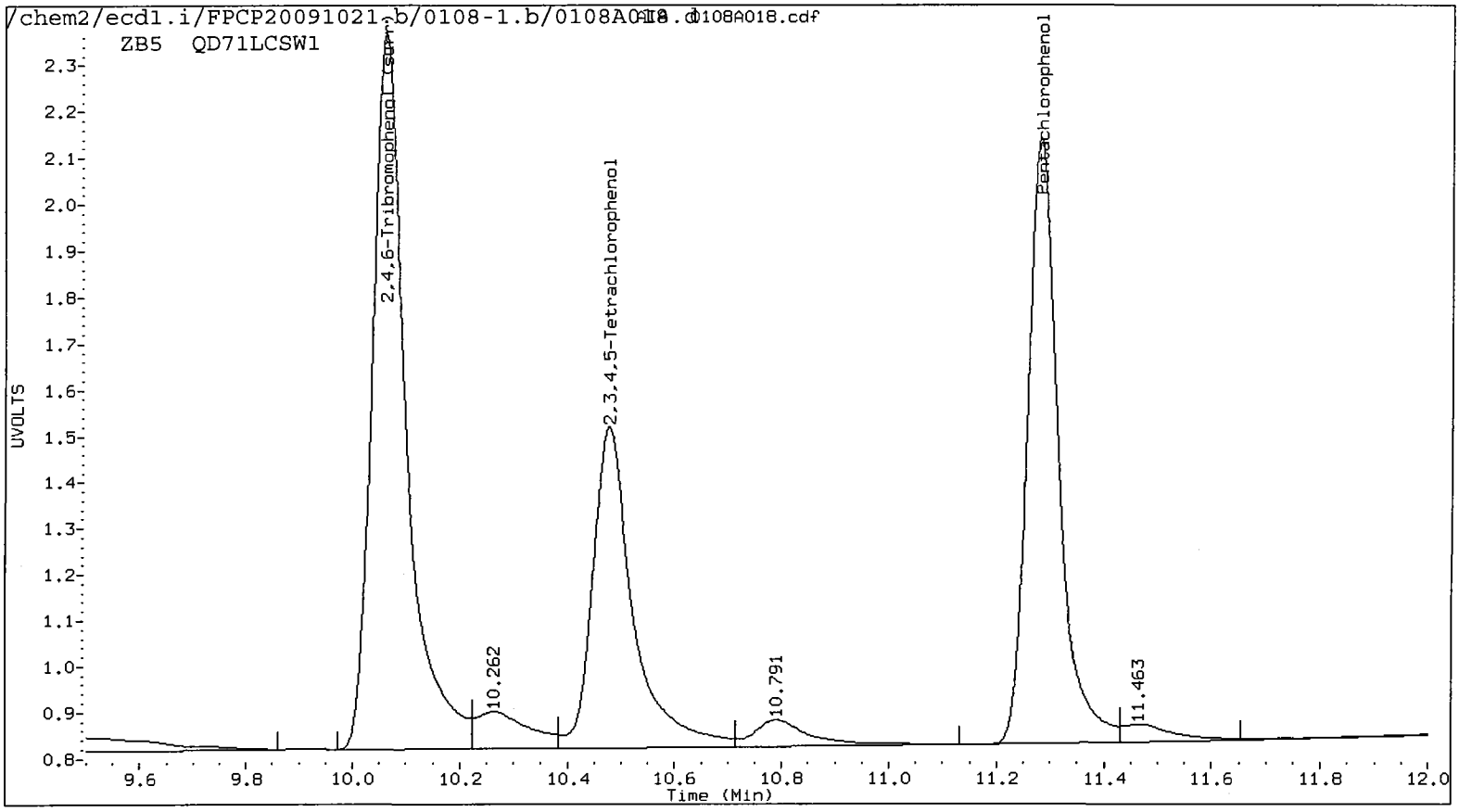
Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A018.d ARI ID: QD71LCSW1
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A018.d Client ID: QD71LCSW1
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 08-JAN-2010 22:44
Compound Sublist: all Report Date: 01/11/2010 13:09
Instrument: 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
11.282	0.010	263462	11.703	0.008	319180	16.9545	19.6974	15.0	Pentachlorophenol
7.296	0.003	124343	7.356	0.004	133663	16.3628	14.0248	15.4	2,4,6-Trichlorophenol
7.652	0.004	184214	7.887	0.004	144857	20.9909	15.6521	29.1	2,3,6-Trichlorophenol
8.273	0.015	70941	8.631	0.011	67442	14.1563	12.2284	14.6	2,4,5-Trichlorophenol
8.844	0.019	57189	9.412	0.014	80516	9.4112	10.7027	12.8	2,3,4-Trichlorophenol
9.046	0.008	224906	9.303	0.008	230587	17.0311	17.2203	1.1	2,3,5,6-Tetrachlorophenol
10.477	0.015	181271	11.171	0.012	197640	17.6656	19.1983	8.3	2,3,4,5-Tetrachlorophenol
6.922	0.004	21631	7.183	0.006	22211	40.1145	42.1316	4.9	2,4-Dichlorophenol
10.062	0.013	342793	10.691	0.011	403669	28.4	31.3	9.7	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	67.8	78.8
2,4,6-Trichlorophenol	65.5	56.1
2,3,6-Trichlorophenol	84.0	62.6
2,4,5-Trichlorophenol	56.6	48.9
2,3,4-Trichlorophenol	37.6	42.8
2,3,5,6-Tetrachlorophenol	68.1	68.9
2,3,4,5-Tetrachlorophenol	70.7	76.8
2,4-Dichlorophenol	16.0	16.9
2,4,6-TBP (surr)	56.8	62.6

27-115%R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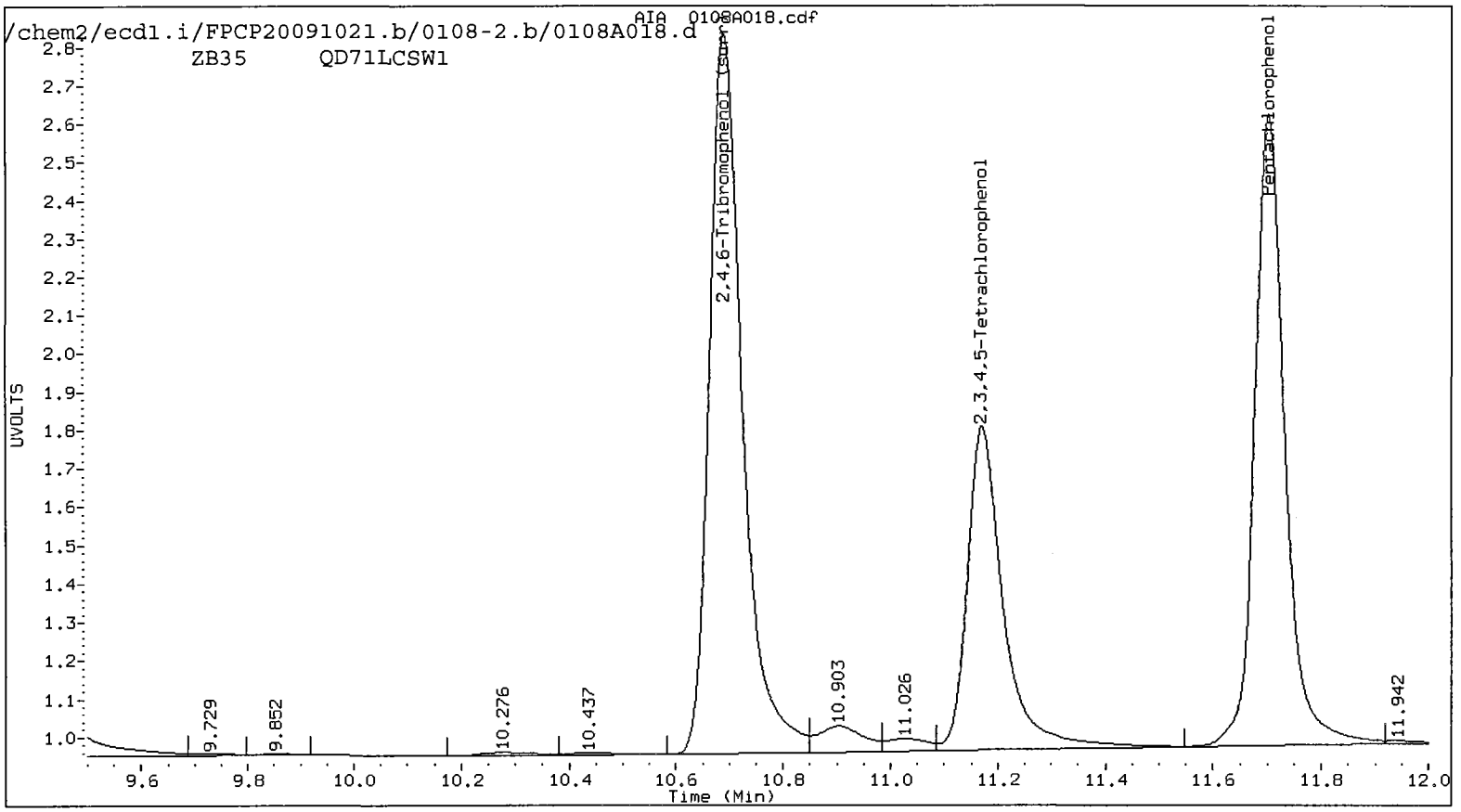
AIA 0108A018.cdf
ZB5 QD71LCSW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.262
10.791
11.463
UVOLTS
Time (Min)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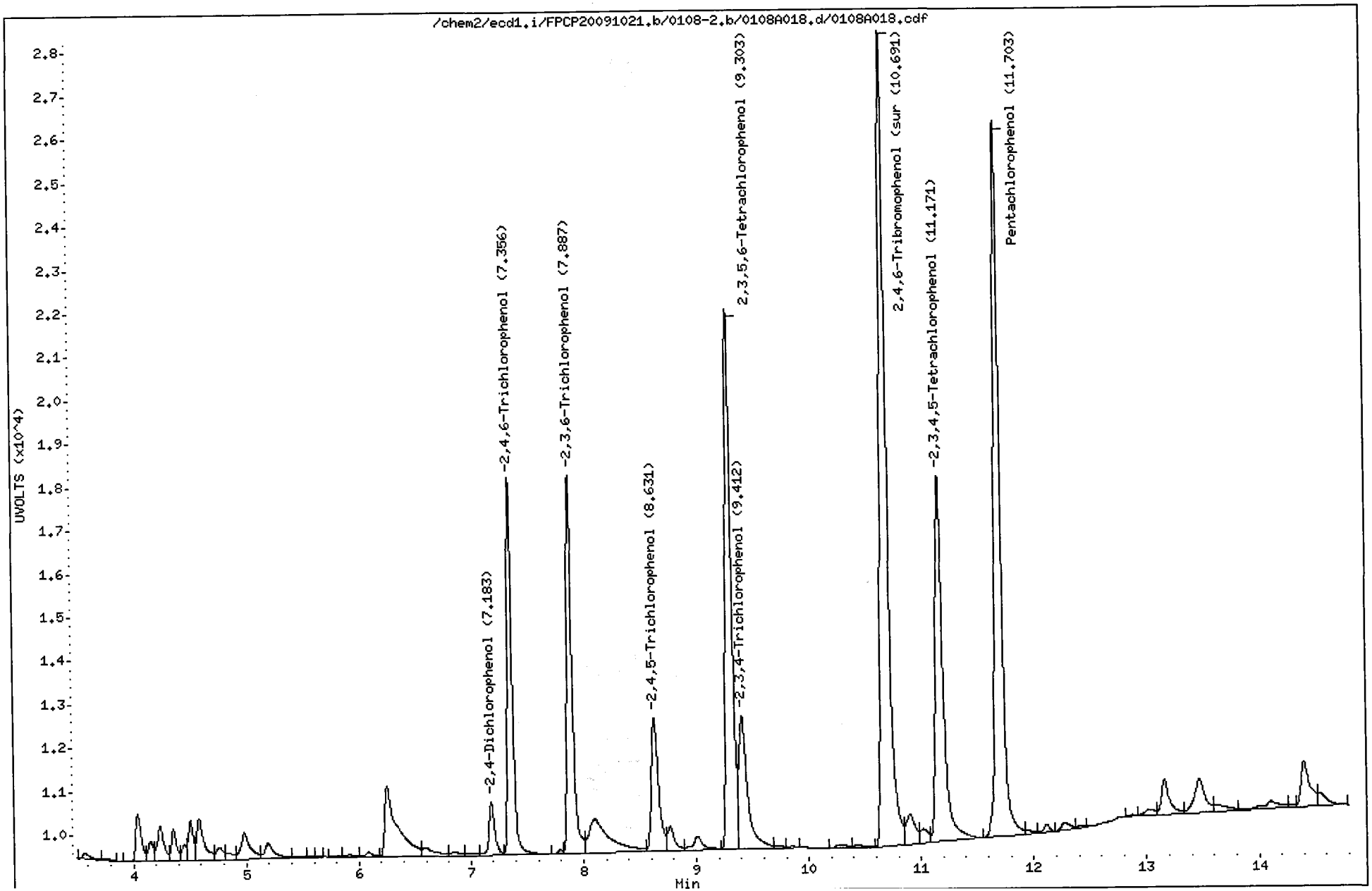
AIA 0108A018.cdf
ZB35 QD71LCSW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.729
9.852
10.276
10.437
10.903
11.026
11.942
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A018.d
Date : 08-JAN-2010 22:44
Client ID: QD71LCSW1
Sample Info: QD71LCSW1
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



QD71 : 00282

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 1/11/2010

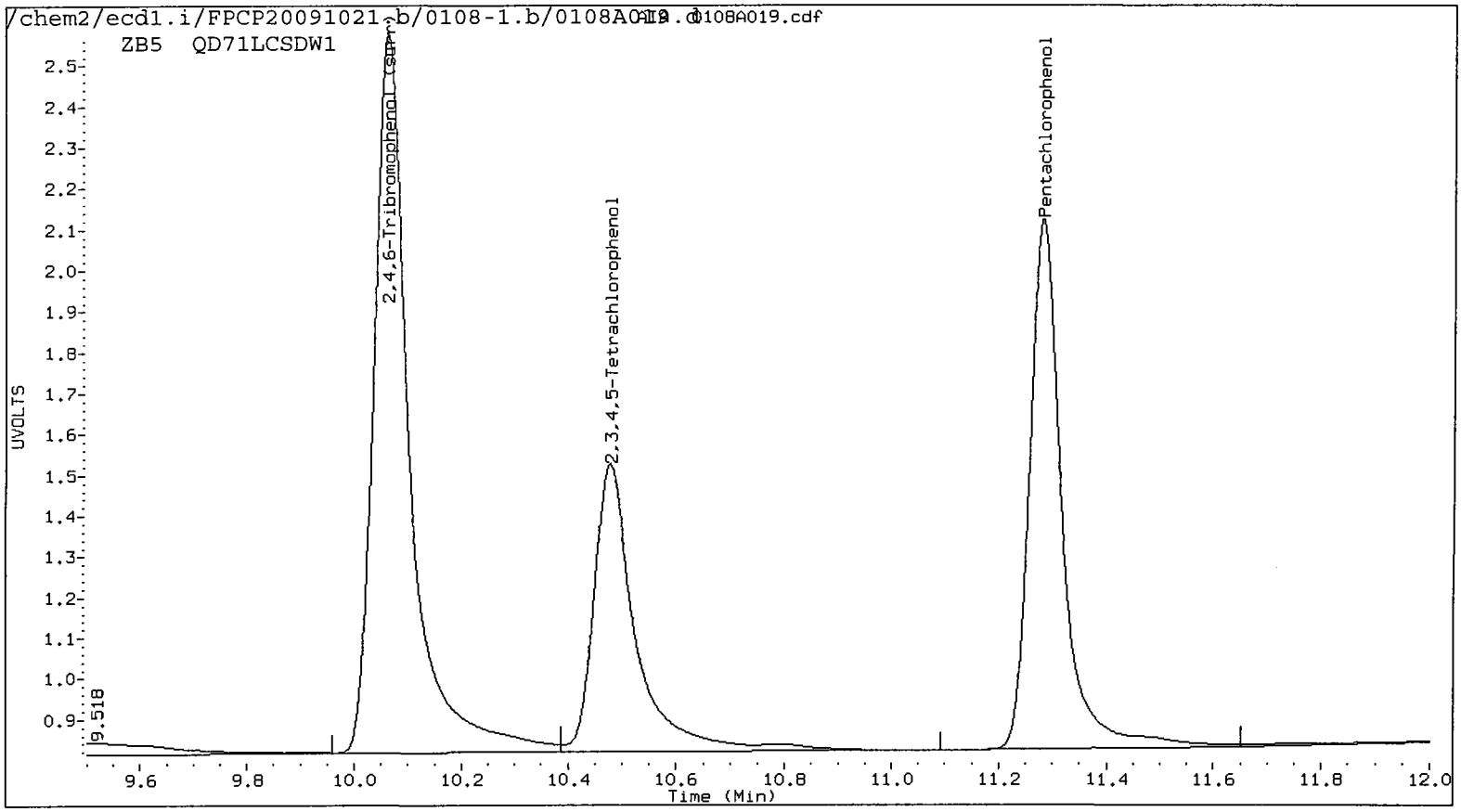
Data file 1: /chem2/ecd1.i/FPCP20091021.b/0108-1.b/0108A019.d ARI ID: QD71LCSDW1
Data file 2: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A019.d Client ID: QD71LCSDW1
Method: /chem2/ecd1.i/FPCP20091021.b/FPCP.m Injection Date: 08-JAN-2010 23:03
Compound Sublist: all Report Date: 01/11/2010 13:09
Instrument: 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
11.284	0.013	272794	11.703	0.008	303672	17.5551	18.7404	6.5	Pentachlorophenol
7.298	0.004	149532	7.356	0.004	159865	19.6776	16.7740	15.9	2,4,6-Trichlorophenol
7.653	0.004	151735	7.888	0.005	168182	17.2900	18.1724	5.0	2,3,6-Trichlorophenol
8.276	0.017	88038	8.631	0.011	87550	17.9038	16.2410	9.7	2,4,5-Trichlorophenol
8.847	0.021	96345	9.412	0.014	130575	15.8548	17.9846	12.6	2,3,4-Trichlorophenol
9.050	0.011	237089	9.303	0.008	237777	17.9537	17.7573	1.1	2,3,5,6-Tetrachlorophenol
10.481	0.018	193088	11.172	0.012	200609	18.8171	19.4867	3.5	2,3,4,5-Tetrachlorophenol
6.921	0.004	57859	7.183	0.006	57886	113.5520	115.4048	1.6	2,4-Dichlorophenol
10.065	0.015	409019	10.690	0.010	472475	33.9	36.6	7.8	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	70.2	75.0
2,4,6-Trichlorophenol	78.7	67.1
2,3,6-Trichlorophenol	69.2	72.7
2,4,5-Trichlorophenol	71.6	65.0
2,3,4-Trichlorophenol	63.4	71.9
2,3,5,6-Tetrachlorophenol	71.8	71.0
2,3,4,5-Tetrachlorophenol	75.3	77.9
2,4-Dichlorophenol	45.4	46.2
2,4,6-TBP (surr)	67.7	73.3

27-115% R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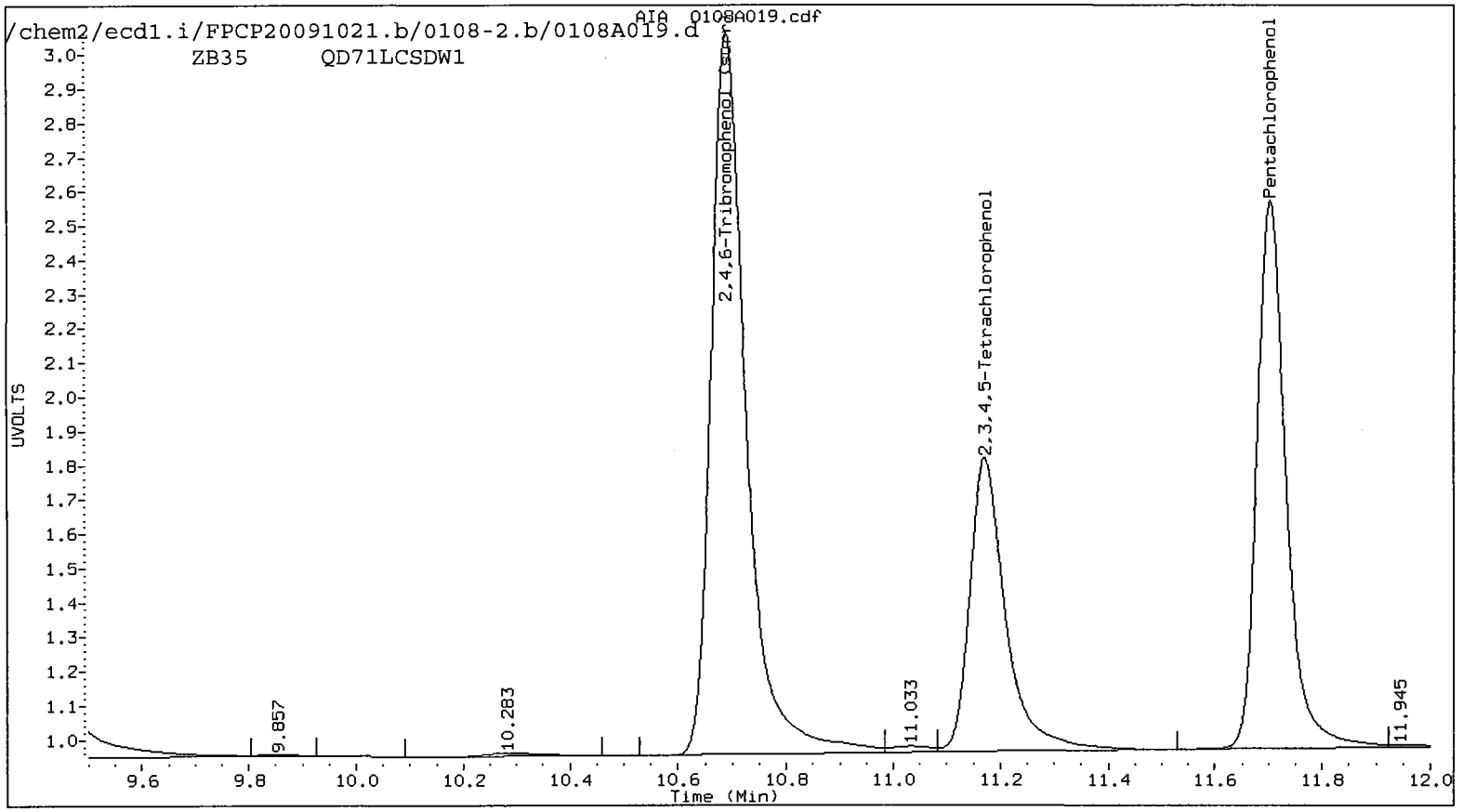
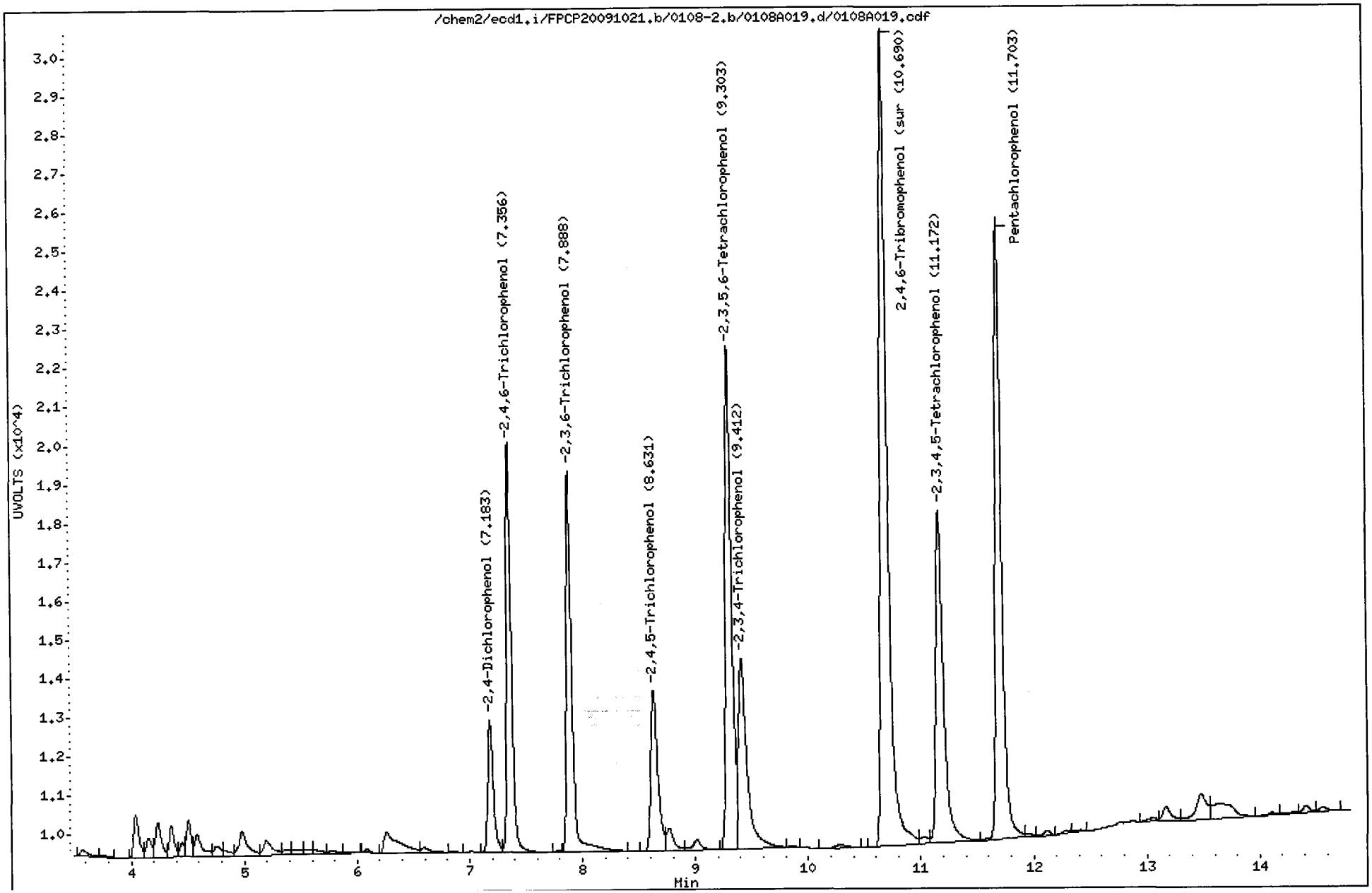
AIA 0108A019.cdf
ZB5 QD71LCSDW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.518
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A019.d
AIA 0108A019.cdf
ZB35 QD71LCSDW1
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.857
10.283
11.033
11.945
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/FPCP20091021.b/0108-2.b/0108A019.d
Date : 08-JAN-2010 23:03
Client ID: QD71LCSDW1
Sample Info: QD71LCSDW1
Purge Volume: 500.0
Column phase: ZB35

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



PCP/Chlorophenols ANALYSIS
Extraction Bench Sheets/Run Logs

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – Water
Separatory Funnel (3510C) (SOP # 328S)

Preparation Test PCP # 1

ARI Job No(s) QD 71

In-House
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
	QD71 MB	Date 01/05/10	500mL			50mL	1-2mL	w/ 10mL Deriv	
	SB	↓	↓			↓	↓	Hex.	
	SB Dup.	↓	↓			↓	↓	↓	
1	A	checked	500mL			↓	↓	↓	
1	B	↓	↓			↓	↓	↓	
2	C	↓	↓	↓	↓	↓	↓	—	Diluted 5x to FEV AR 1/8/2010
								AR 1/8/2010	
					CSZ				
Analyst/Date:	AR 01/05/10	→	RP 1/6/10		1/6/10	→	→	→	

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F 1663-3	100µL 125	1/6/10	AR	M 01/05/10
Spike	6 1655-3	100µL 125	9/24/10	AR	M 01/05/10
Extraction Time: 11:58					

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 1mL

7. Pipet using Hexane into Herb Tubes. 8. GC Analyst to Derivitize. **A. Archive (Y) N**

Diazald I5168
3m NaOH 5757-4

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: QD71

Client ID: Floyd - Snider

Parameter: PCP

Client Project: Lora Lakes Apts

SOP Number(s): 328 S

No Anomalies:

List problems, concerns, corrective actions and any other pertinent information

Samples QD71 A,B have a slight Gray color with particulates. AP 01/05/10

Analyst Initials:

Date:

056F

Revision 006
1/12/07

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 10/21/09 Analysis: PCP/Herb Analyst: AR

GC Program: PCPFAST.M Column No: 150608/148146 Column Type: ZB5/ZB35

Instrument Tune (.U or .CT.): NA EM Voltage: NA

Calibration File: FPCP20091021.b Curve Date: 10/21/09

IS/SS	Ical/Ccal	LCS/ICV
	1659-1 Herb	1353-2 Herb ICV
	1663-2 PCP	1324-1 PCP ICV

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/FPCP20091021.b/ical-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	21-OCT-2009 16:33	1021A009.d	1	PCP D	
2	21-OCT-2009 16:53	1021A010.d	1	PCP A	
3	21-OCT-2009 17:13	1021A011.d	1	PCP B	
4	21-OCT-2009 17:33	1021A012.d	1	PCP C	
5	21-OCT-2009 17:53	1021A013.d	1	PCP E	
6	21-OCT-2009 18:12	1021A014.d	1	PCP F	
7	21-OCT-2009 18:32	1021A015.d	1	PCP ICV	
8	21-OCT-2009 18:52	1021A016.d	1	PCP CCAL	
9	21-OCT-2009 19:12	1021A017.d	1	PS52MBW1	PS52MBW1
10	21-OCT-2009 19:32	1021A018.d	1	PS52LCSW1	PS52LCSW1
11	21-OCT-2009 19:52	1021A019.d	1	PS52A	1009PSR02
12	21-OCT-2009 20:12	1021A020.d	1	PS52B	1009PSR06
13	21-OCT-2009 20:32	1021A021.d	1	PS52D	1009PSR08
14	21-OCT-2009 20:52	1021A022.d	1	PS52F	1009PSR09
15	21-OCT-2009 21:12	1021A023.d	1	PS52G	1009PSR10
16	21-OCT-2009 21:32	1021A024.d	1	PS52H	1009PSR11
17	21-OCT-2009 21:52	1021A025.d	1	PS52HMS	1009PSR11 MS
18	21-OCT-2009 22:12	1021A026.d	1	PS52HMSD	1009PSR11 MSD
19	21-OCT-2009 22:32	1021A027.d	1	PCP	
20	21-OCT-2009 22:51	1021A028.d	1	PCP CCAL	
21	21-OCT-2009 23:11	1021A029.d	1	PS52I	1009PSR12
22	21-OCT-2009 23:31	1021A030.d	1	PS52K	SSV1068
23	21-OCT-2009 23:51	1021A031.d	1	PS67A	1009PSR05
24	22-OCT-2009 00:11	1021A032.d	1	PS67B	1009PSR13
25	22-OCT-2009 00:31	1021A033.d	1	PS67C	1009PSR15
26	22-OCT-2009 00:51	1021A034.d	1	PS67D	1009PSR01
27	22-OCT-2009 01:11	1021A035.d	1	PS67F	1009PSR04
28	22-OCT-2009 01:31	1021A036.d	1	PCP	
29	22-OCT-2009 01:51	1021A037.d	1	PCP CCAL	
30	22-OCT-2009 02:10	1021A038.d	1	PS67MBW1	PS67MBW1
31	22-OCT-2009 02:30	1021A039.d	1	PS67LCSW1	PS67LCSW1
32	22-OCT-2009 02:50	1021A040.d	1	PS67E	1009PSR03
33	22-OCT-2009 03:10	1021A041.d	1	PS67EMS	1009PSR03 MS
34	22-OCT-2009 03:30	1021A042.d	1	PS67EMSD	1009PSR03 MSD
35	22-OCT-2009 03:50	1021A043.d	1	PS95MBW1	PS95MBW1
36	22-OCT-2009 04:10	1021A044.d	1	PS95LCSW1	PS95LCSW1
37	22-OCT-2009 04:29	1021A045.d	1	PS95A	Batch 2# Third Pass
38	22-OCT-2009 04:49	1021A046.d	1	PCP	
39	22-OCT-2009 05:09	1021A047.d	1	PCP CCAL	

AR 10/26/09

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: FPCP Curve Client ID: ~~ARI~~

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): PCP & Tribromophenol (surr) only

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: ~~10/21/09~~ AR 10/22/09 Analysis Start: 10/21/09

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):

Additional Details on Reverse: Yes / (No)

Analyst Signature: [signature] **Date:** 10/22/09

Reviewer's Signature: [signature] **Date:** 10/22/09

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 1/8/2010 Analysis: PCP/Herbicide Analyst: AR

GC Program: PCPFAST.M & Column No: 1506008/148146 Column Type: ZB5/ZB35

Instrument Tune (.U or .CT.): HERB.M EM Voltage: NA

Calibration File: FPCP20091021.b & HERB20091026.b Curve Date: 10/21/09 & 10/26/09

IS/SS	Ical/Ccal	LCS/ICV
	1659-1	1353-2
	1663-2	1324-1

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/FPCP20091021.b/0108-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	08-JAN-2010 17:06	0108A001.d	1	RINSE	
2	08-JAN-2010 17:26	0108A002.d	1	RINSE	
3	08-JAN-2010 17:46	0108A003.d	1	RINSE	
4	08-JAN-2010 18:06	0108A004.d	1	PCPCCAL	
5	08-JAN-2010 18:25	0108A005.d	1	QC28MBS1	QC28MBS1
6	08-JAN-2010 18:45	0108A006.d	1	QC28LCSS1	QC28LCSS1
7	08-JAN-2010 19:05	0108A007.d	1	QC28LCSDS1	QC28LCSDS1
8	08-JAN-2010 19:25	0108A008.d	1	QC28A	CB4857-121009-SED
9	08-JAN-2010 19:45	0108A009.d	10	QC28ARE	
10	08-JAN-2010 20:05	0108A010.d	1	PCP	
11	08-JAN-2010 20:25	0108A011.d	1	PCPCCAL	
12	08-JAN-2010 20:45	0108A012.d	1	QE28MBW1	QE28MBW1
13	08-JAN-2010 21:04	0108A013.d	1	QE28LCSW1	QE28LCSW1
14	08-JAN-2010 21:24	0108A014.d	1	QE28A	SP-2
15	08-JAN-2010 21:44	0108A015.d	1	PCP	
16	08-JAN-2010 22:04	0108A016.d	1	PCPCCAL	
17	08-JAN-2010 22:24	0108A017.d	1	QD71MBW1	QD71MBW1
18	08-JAN-2010 22:44	0108A018.d	1	QD71LCSW1	QD71LCSW1
19	08-JAN-2010 23:03	0108A019.d	1	QD71LCSDW1	QD71LCSDW1
20	08-JAN-2010 23:23	0108A020.d	1	QD71A	CB31A123109COMP
21	08-JAN-2010 23:43	0108A021.d	10	QD71A	CB31A123109COMP
22	09-JAN-2010 00:03	0108A022.d	1	QD71B	CB4857123109COMP
23	09-JAN-2010 00:22	0108A023.d	10	QD71B	CB4857123109COMP
24	09-JAN-2010 00:42	0108A024.d	1	QD71C	CB1123109COMP
25	09-JAN-2010 01:02	0108A025.d	10	QD71C	CB1123109COMP
26	09-JAN-2010 01:22	0108A026.d	1	PCP	
27	09-JAN-2010 01:42	0108A027.d	1	PCPCCAL	
28	09-JAN-2010 02:01	0108A028.d	1	DRVBLK 010810	
29	09-JAN-2010 02:21	0108A029.d	1	DRVBLK 010810	
30	09-JAN-2010 02:57	0108A030.d	1	HERB	
31	09-JAN-2010 03:33	0108A031.d	1	HERB CCAL	
32	09-JAN-2010 04:09	0108A032.d	1	QD68MBW1	QD68MBW1
33	09-JAN-2010 04:45	0108A033.d	1	QD68LCSW1	QD68LCSW1
34	09-JAN-2010 05:21	0108A034.d	1	QD68D	R1
35	09-JAN-2010 05:57	0108A035.d	1	QD68E	C1
36	09-JAN-2010 06:33	0108A036.d	1	QD68F	I1
37	09-JAN-2010 07:09	0108A037.d	1	HERB	
38	09-JAN-2010 07:45	0108A038.d	1	HERB CCAL	
39	09-JAN-2010 08:21	0108A039.d	1	HERB CCAL	

1/11/2010

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: QD71 Client ID: Floyd-Snider

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) (**Other**)

Parameter(s): ~~DRO~~ Cl. Phenols, 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: 10/21/09 Analysis Start: 1/8/2010

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
Lvl 3 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:** 1/11/2010

Reviewer's Signature: _____ **Date:** 1/11/10

Metals Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
CB31A123109COMP	QD71A	10-14	
CB31A123109COMPD	QD71ADUP	10-14	
CB31A123109COMPS	QD71ASPK	10-14	
CB4857123109COMP	QD71B	10-15	
PBW	QD71MB1	10-15	
LCSW	QD71MB1SPK	10-15	
CB1123109COMP	QD71C	10-16	
CB31A123109COMP	QD71D	10-17	
CB31A123109COMPD	QD71DDUP	10-17	
CB31A123109COMPS	QD71DSPK	10-17	
CB4857123109COMP	QD71E	10-18	
PBW	QD71MB2	10-18	
LCSW	QD71MB2SPK	10-18	
CB1123109COMP	QD71F	10-19	

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: 1/11/10 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A123109COMP
MATRIX SPIKE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	0.490	27.5	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

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A123109COMP
DUPLICATE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	0.5	0.5	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: LAB CONTROL

Lab Sample ID: QD71LCS
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	26.4	25.0	106%	

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: QD71MB
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	01/05/10	200.8	01/11/10	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
TOTAL METALS
Page 1 of 1

Sample ID: CB31A123109COMP
MATRIX SPIKE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	1.23	28.4	25.0	109%	

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: CB31A123109COMP
DUPLICATE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	1.2	1.3	8.0%	+/- 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: QD71LCS
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	26.5	25.0	106%	

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: QD71MB
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
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	01/05/10	200.8	01/11/10	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 Lakes Apts

SDG: QD71

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Arsenic	AS	PMS	MS011181	50.0	51.76	103.5	50.0	49.79	99.6	49.96	99.9	49.65	99.3	49.31	98.6	49.76	99.5

QD71 : 00363

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Arsenic	AS	PMS	MS011181	50.0	49.16	98.3	49.92	99.8	49.27	98.5	49.76	99.5				

Control Limits: Mercury 80-120; Other Metals 90-110

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71

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	MS011181		0.2	0.19	**95.0**										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Arsenic	AS	PMS	MS011181	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

QD71 : 09506

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Arsenic	AS	PMS	MS011181	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U				

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

ICS SOURCE: I.V.

PROJECT: Lora Lakes Apts

RUNID: MS011181

SDG: QD71

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.0	19.9	**99.5**						
Barium			0.3	0.3							
Cadmium		20	0.0	20.0	**100.0**						
Chromium		20	0.4	21.3	**106.5**						
Cobalt		20	0.0	20.7	**103.5**						
Copper		20	0.4	20.5	**102.5**						
Manganese		20	0.6	21.5	**107.5**						
Molybdenum	400	400	395.9	394.9	**98.7**						
Nickel		20	0.8	20.9	**104.5**						
Selenium			-0.1	-0.1							
Silver		20	0.0	18.5	**92.5**						
Vanadium			0.0	-0.3							
Zinc		20	1.1	20.8	**104.0**						

QD71 00398

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts

SDG: QD71 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 Lakes Apts

SDG: QD71

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 1/5/2010

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
CB31A123109COMP	QD71A	0.000	50.0	25.0
CB31A123109COMPD	QD71ADUP	0.000	50.0	25.0
CB31A123109COMPS	QD71ASPK	0.000	50.0	25.0
CB4857123109COMP	QD71B	0.000	50.0	25.0
CB1123109COMP	QD71C	0.000	50.0	25.0
CB31A123109COMP	QD71D	0.000	50.0	25.0
CB31A123109COMPD	QD71DDUP	0.000	50.0	25.0
CB31A123109COMPS	QD71DSPK	0.000	50.0	25.0
CB4857123109COMP	QD71E	0.000	50.0	25.0
CB1123109COMP	QD71F	0.000	50.0	25.0
PBW	QD71MB1	0.000	50.0	25.0
LCSW	QD71MB1SPK	0.000	50.0	25.0
PBW	QD71MB2	0.000	50.0	25.0
LCSW	QD71MB2SPK	0.000	50.0	25.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 1/11/2010

SDG: QD71 | RUNID: MS011181 METHOD: PMS | END DATE: 1/11/2010

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	10000				X																										
S1	S1	1.00	10080				X																										
S2	S2	1.00	10160				X																										
S3	S3	1.00	10230				X																										
S4	S4	1.00	10310				X																										
ZZZZZZ	Rinse Sampl	1.00	10390																														
ICV	MICV	1.00	10540				X																										
ICB	ICB	1.00	10590				X																										
CCV	MCCV1	1.00	11040				X																										
CCB	CCB1	1.00	11110				X																										
CRI	MCRI	1.00	11190				X																										
ICSA	ICSAI	1.00	11260				X																										
ICSAB	ICSABI	1.00	11340				X																										
ZZZZZZ	LR200	1.00	11420																														
ZZZZZZ	LR300	1.00	11530																														
CCV	MCCV2	1.00	11570				X																										
CCB	CCB2	1.00	12020				X																										
ZZZZZZ	QE40MB	2.00	12100																														
ZZZZZZ	DI CHECK	1.00	12170																														
ZZZZZZ	ERAP150	10.00	12240																														
ZZZZZZ	QE40MBSPK	2.00	12310																														
ZZZZZZ	QE40C	2.00	12370																														
CCV	MCCV3	1.00	12440				X																										
CCB	CCB3	1.00	12560				X																										
ZZZZZZ	QC54MB1	20.00	13000																														
ZZZZZZ	QC54MB1SPK	20.00	13060																														
ZZZZZZ	QC54REF1	20.00	13130																														
ZZZZZZ	QC54NDUP	20.00	13200																														
ZZZZZZ	QC54N	20.00	13270																														
ZZZZZZ	QC54NSPK	20.00	13340																														
ZZZZZZ	QC54O	20.00	13410																														
ZZZZZZ	QC54P	20.00	13530																														
ZZZZZZ	QC54Q	20.00	13560																														
CCV	MCCV4	1.00	14010				X																										
CCB	CCB4	1.00	14090				X																										

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 1/11/2010

SDG: QD71 | RUNID: MS011181 METHOD: PMS | END DATE: 1/11/2010

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	QD26MB2	2.00	14280																														
ZZZZZZ	QD26MB2SPK	2.00	14350																														
ZZZZZZ	QD14MBSPK	2.00	14410																														
ZZZZZZ	QD14A	2.00	14540																														
ZZZZZZ	QD14B	2.00	14580																														
ZZZZZZ	QD26F	2.00	15020																														
ZZZZZZ	QD26G	2.00	15090																														
ZZZZZZ	QD26H	2.00	15150																														
ZZZZZZ	QD26I	2.00	15220																														
ZZZZZZ	QD26J	2.00	15290																														
CCV	MCCV5	1.00	15360				X																										
CCB	CCB5	1.00	15430				X																										
ZZZZZZ	QC99MB1	2.00	15540																														
ZZZZZZ	QC99MB2	2.00	15580																														
ZZZZZZ	QC99MB1SPK	2.00	16050																														
ZZZZZZ	QC99MB2SPK	2.00	16110																														
ZZZZZZ	QC99A	2.00	16180																														
ZZZZZZ	QC99B	2.00	16250																														
ZZZZZZ	QC99C	2.00	16320																														
ZZZZZZ	QC99D	2.00	16390																														
ZZZZZZ	QC99E	2.00	16450																														
ZZZZZZ	QC99F	2.00	16570																														
CCV	MCCV6	1.00	16590				X																										
CCB	CCB6	1.00	17070				X																										
ZZZZZZ	QC75MB	20.00	17140																														
ZZZZZZ	QC75MBSPK	20.00	17210																														
ZZZZZZ	QC75ADUP	20.00	17270																														
ZZZZZZ	QC75A	20.00	17340																														
ZZZZZZ	QC75ASPK	20.00	17410																														
ZZZZZZ	QC75B	20.00	17540																														
ZZZZZZ	QC75C	20.00	17560																														
ZZZZZZ	QC75D	20.00	18020																														
ZZZZZZ	QC75E	20.00	18090																														
CCV	MCCV7	1.00	18150				X																										
CCB	CCB7	1.00	18230				X																										

QD71.9312

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Floyd-Snider

PROJECT: Lora Lakes Apts | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 1/11/2010

SDG: QD71 | RUNID: MS011181 METHOD: PMS | END DATE: 1/11/2010

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
PBW	QD71MB1	2.00	18300				X																										
LCSW	QD71MB1SPK	2.00	18370				X																										
CB4857123109COMP	QD71B	2.00	18440				X																										
CB1123109COMP	QD71C	2.00	18550				X																										
CB4857123109COMP	QD71E	2.00	18590				X																										
CB1123109COMP	QD71F	2.00	19040				X																										
ZZZZZZ	QC99G	2.00	19110																														
ZZZZZZ	QC99H	2.00	19180																														
ZZZZZZ	QC99I	2.00	19240																														
ZZZZZZ	QC99J	2.00	19310																														
CCV	MCCV8	1.00	19380				X																										
CCB	CCB8	1.00	19450				X																										
PBW	QD71MB2	2.00	19560				X																										
LCSW	QD71MB2SPK	2.00	19590				X																										
CB31A123109COMPD	QD71ADUP	2.00	20070				X																										
CB31A123109COMP	QD71A	2.00	20130				X																										
CB31A123109COMPS	QD71ASPK	2.00	20200				X																										
CB31A123109COMPD	QD71DDUP	2.00	20270				X																										
CB31A123109COMP	QD71D	2.00	20340				X																										
CB31A123109COMPS	QD71DSPK	2.00	20410				X																										
CCV	MCCV9	1.00	20530				X																										
CCB	CCB9	1.00	20580				X																										

QD71 : 093013

Metals Analysis
Sample Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71A
LIMS ID: 10-14
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71B
LIMS ID: 10-15
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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: CB1123109COMP
SAMPLE

Lab Sample ID: QD71C
LIMS ID: 10-16
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**7440-38-2**	**Arsenic**	0.2	**0.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A123109COMP
SAMPLE

Lab Sample ID: QD71D
LIMS ID: 10-17
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**7440-38-2**	**Arsenic**	0.2	**1.2**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB4857123109COMP
SAMPLE

Lab Sample ID: QD71E
LIMS ID: 10-18
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**7440-38-2**	**Arsenic**	0.2	**1.0**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB1123109COMP
SAMPLE

Lab Sample ID: QD71F
LIMS ID: 10-19
Matrix: Water
Data Release Authorized:
Reported: 01/12/10

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	01/05/10	200.8	01/11/10	**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 Apts, POS-LLA

ARI JOB NO: QD71

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: 4-11-10 **Analyst:** AA **Page:** 1 **of** 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2666-3
		1			2671-9
		2			-10
		3			-11
		4			-12
		Rinse Soln			
		ICV			2612-4
		ICB			
		CCV1			
		CCB1			
		low check			Ba high (NR)
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			
		CCB2			
		QE40 MB	REN	2	
		DI Check			
		EPA 9150		10	
QE40		QE40 MB Dup	REN	2	
		" "	"	"	
		CCV3			
		CCB3			

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 1-11-10 **Analyst:** KA **Page:** 2 of 5

All corrections made by analyst unless otherwise noted. KA 1-12-10

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		QC54 MB1	SW	20	TL
		MB1SPK			✓
		Ref1			✓
		Dup			✓
		N			
		N SPK			✓
		O			
		P			
		Q	↓	↓	↓
		CCV3 4			
		CCB3 4			
		QD26 MB2	DEN	2	
		MB2SPK			
		QD14 MB2SPK			Pb
		A			Pb Cr Mn
		B			↓
		QD26 F			
		G			
		H			
		I			
		J	↓	↓	
		CCV4 5			
		CCB4 6			
		QC99 MB4	REN	2	

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 1-16-10 **Analyst:** MA **Page:** 3 of 5

All corrections made by analyst unless otherwise noted. MA 1-12-10

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		QC99 MBZ	REN	2	
		MBlspk			
		MBZspk			
		A			
		B			
		C			
		D			
		E			
		F			
		CCV# 6			
		CCB# 6			
		QC75 MB	SWN	20	
		MBSpk			
		ADup			Pb 30% RPD
		A			CAF
		ASpk			Pb 126%R Sb 5%R
		B			
		C			
		D			
		E			
		CCV 7			
		CCB 7			
		QD71 MB	REN	2	
		MBlspk			

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 1-11-10 **Analyst:** FA **Page:** 4 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		QD71 B	REN	2	
		C			
		E			
		F			
		QD99 G			
		H			
		I			
		J			
		CCV 8			
		CCB 8			
		QD71 MB2	REN	2	
		MB2spk			
		ADup			
		A			
		Aspk			
		DDup			
		D			
		Dspk			
		CCV9			
		CCB9			end pkg
		QD60 MB1	REN	2	
		MB2			
		MB1spk			
		MB2spk			

1/12/10

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 1-11-10

	Analyst HJ 1-12	Peer MW 1.12.10	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	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	See Log
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	QC75
Matrix Duplicates	✓	✓	b
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	✓	✓	CAF QC75

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	2032	2161	0.677	
Mg	23.985	23.979	5653	2276	0.664	
Co	58.933	58.979	14150	2560	0.666	
In	114.904	114.929	27760	3028	0.682	
Pb	207.977	207.977	50379	3832	0.692	

Instrument Tuning Report

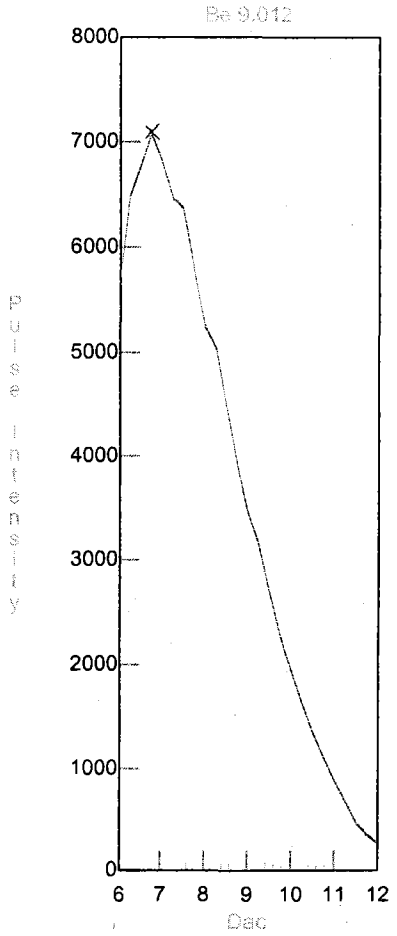
File Name: 2008.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.028	2032	2161	0.666	
Mg	23.985	23.979	5653	2271	0.684	
Co	58.933	58.979	14150	2555	0.711	
In	114.904	114.929	27760	3028	0.699	
Pb	207.977	207.977	50379	3832	0.700	

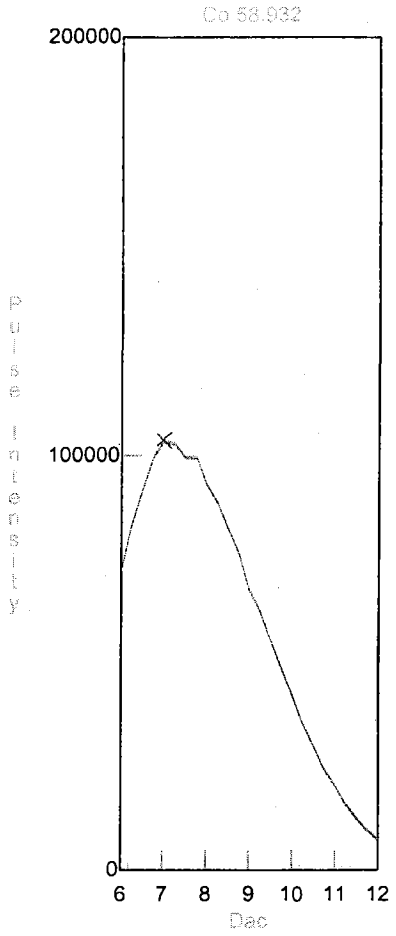
Instrument Tuning Report

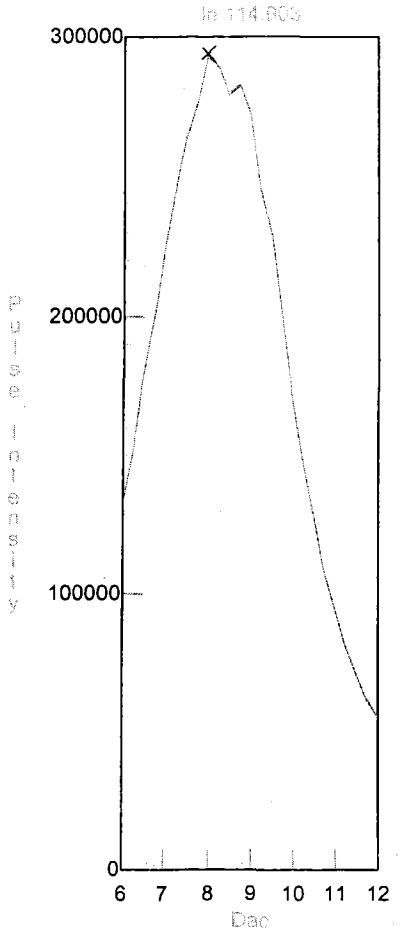
File Name: 2008.tun
File Path: c:\elandata\Tuning

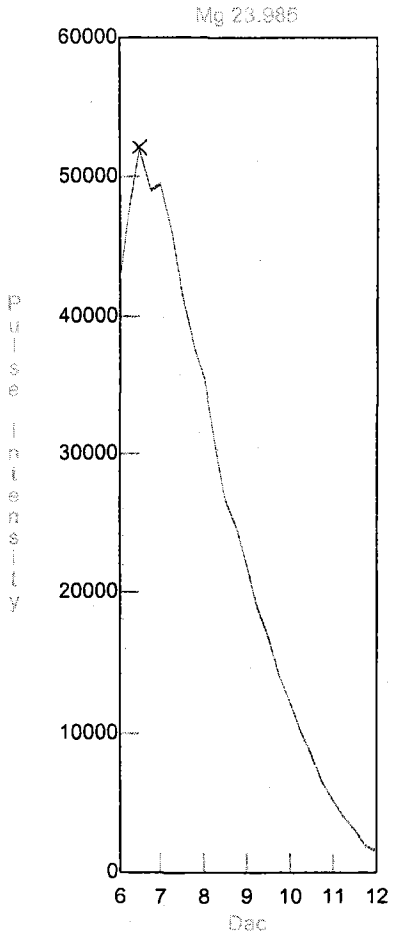
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.028	2032	2156	0.679	
Mg	23.985	23.979	5653	2271	0.687	
Co	58.933	58.979	14150	2555	0.714	
In	114.904	114.929	27760	3028	0.698	
Pb	207.977	207.977	50379	3832	0.700	

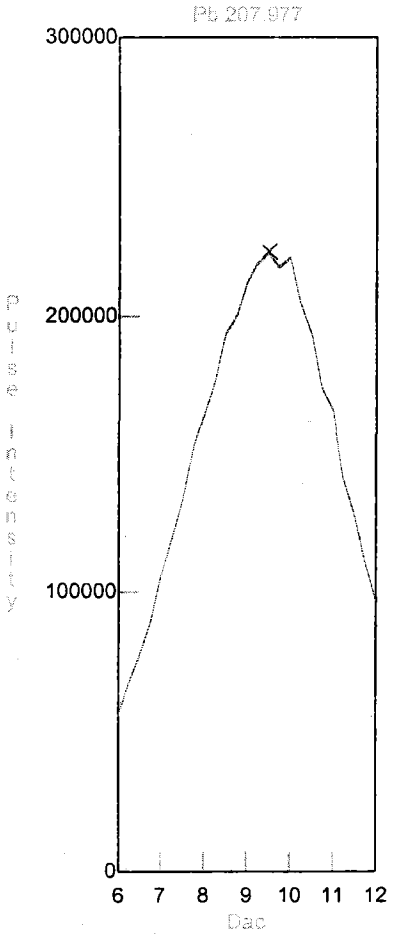


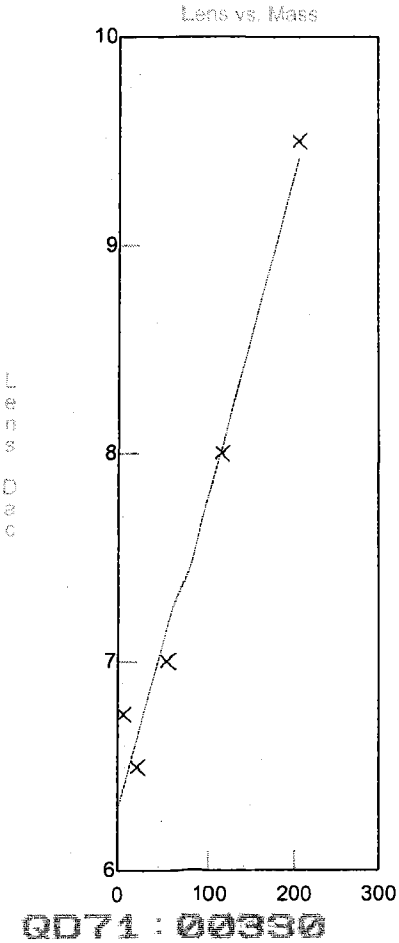
1-11-10











QD71 : 00330

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, January 11, 2010 08:56:53
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.6212
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	46338.999	482.631	1.042
	In	115	289550.803	2998.125	1.035
	Pb	208	237085.695	4285.123	1.807
⌈>	Ba	138	228273.239	3828.553	1.677
⌊	Ba++	69	0.008	0.000	6.359
⌈>	Ce	140	280007.492	3767.135	1.345
⌊	CeO	156	0.027	0.001	2.551
	Bkgd	220	3.500	2.710	77.427

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, January 11, 2010 08:56:57
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.6213
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	49429.071	864.670	1.749
	In	115	315273.983	2334.896	0.741
	Pb	208	250622.285	1393.254	0.556
⌈>	Ba	138	242531.862	2986.558	1.231
⌊	Ba++	69	0.008	0.000	1.606
⌈>	Ce	140	297400.061	4318.709	1.452
⌊	CeO	156	0.028	0.001	2.807
	Bkgd	220	4.250	1.896	44.605

after dead

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, January 11, 2010 09:23:45
Sample Description:
Sample File: 1120.sam
Method File: c:\elandata\Method\aridailyperf.mth
Dataset File: c:\elandata\Dataset\daily performance\Sample.6216
Tuning File: c:\elandata\Tuning\2008.tun
Optimization File: c:\elandata\Optimize\arioptimize.dac
Number of Replicates: 5
Dual Detector Mode: Pulse

1.00

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	46876.311	739.982	1.579
	In	115	310674.437	1764.398	0.568
	Pb	208	256625.837	3118.705	1.215
⌈>	Ba	138	244858.929	1777.806	0.726
⌊	Ba++	69	0.008	0.000	3.018
⌈>	Ce	140	299781.986	1591.396	0.531
⌊	CeO	156	0.026	0.000	1.647
	Bkgd	220	6.001	3.580	59.658

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:00:05
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				679421	0
	Be	9		ug/L				10	6
	C	13		mg/L				9055	5
	Cl	37		mg/L				2835631	0
>	Sc	45		ug/L				207649	1
	V-1	51		ug/L				1125	1
	V	51		ug/L				460	0
	Cr	52		ug/L				3531	2
	Cr	53		ug/L				186	3
	Mn	55		ug/L				488	10
	Co	59		ug/L				100	5
>	Ge	72		ug/L				228614	0
	Ni	60		ug/L				69	2
	Ni	62		ug/L				90	10
	Cu	63		ug/L				209	7
	Cu	65		ug/L				124	19
	Zn	66		ug/L				671	17
	Zn	67		ug/L				127	33
	Zn	68		ug/L				2543	3
	As-1	75		ug/L				34	2
	As	75		ug/L				5075	1
	Se	82		ug/L				5	60
	Se	78		ug/L				5176	1
	Mo	98		ug/L				105	14
	Y	89		ug/L				221819	1
	Kr	83		ug/L				55	3
>	In	115		ug/L				279471	0
	Ag	107		ug/L				46	11
	Cd	111		ug/L				237	2
	Cd	114		ug/L				18	23
	Sb	121		ug/L				72	11
	Sb	123		ug/L				56	18
	Ba	135		ug/L				22	14
	Ba	137		ug/L				38	28
>	Tb	159		ug/L				394483	1
	Tl	205		ug/L				77	7
	Pb	208		ug/L				785	5
	Bi	209		ug/L				347909	0
	Th	232		ug/L				387	8
	U	238		ug/L				52	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:08:13
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	671157	0
⌊	Be	9	10.000	ug/L	0.056	0	10	6805	0
	C	13		mg/L			9055	6308	5
	Cl	37		mg/L			2835631	2865986	0
⌈>	Sc	45		ug/L			207649	203620	0
|	V-1	51	10.000	ug/L	0.122	1	1125	89733	1
|	V	51	10.000	ug/L	0.045	0	460	90962	0
|	Cr	52	10.000	ug/L	0.199	1	3531	80418	1
|	Cr	53	10.000	ug/L	0.187	1	186	9480	1
|	Mn	55	10.000	ug/L	0.118	1	488	129369	0
⌊	Co	59	10.000	ug/L	0.123	1	100	97203	1
⌈>	Ge	72		ug/L			228614	222925	0
|	Ni	60	10.000	ug/L	0.089	0	69	19770	0
|	Ni	62	10.000	ug/L	0.259	2	90	2966	2
|	Cu	63	10.000	ug/L	0.185	1	209	43049	1
|	Cu	65	10.000	ug/L	0.020	0	124	20617	0
|	Zn	66	10.000	ug/L	0.081	0	671	14282	0
|	Zn	67	10.000	ug/L	0.286	2	127	2350	2
|	Zn	68	10.000	ug/L	0.119	1	2543	12018	1
|	As-1	75	10.000	ug/L	0.145	1	34	13142	1
|	As	75	10.000	ug/L	0.058	0	5075	17824	0
|	Se	82	10.000	ug/L	0.339	3	5	1605	3
|	Se	78	10.000	ug/L	0.067	0	5176	8898	0
⌊	Mo	98	10.000	ug/L	0.157	1	105	46656	1
	Y	89		ug/L			221819	217316	1
	Kr	83		ug/L			55	60	7
⌈>	In	115		ug/L			279471	270235	1
|	Ag	107	10.000	ug/L	0.073	0	46	87343	1
|	Cd	111	10.000	ug/L	0.218	2	237	22861	1
|	Cd	114	10.000	ug/L	0.243	2	18	53399	1
|	Sb	121	10.000	ug/L	0.132	1	72	75834	1
|	Sb	123	10.000	ug/L	0.321	3	56	58790	1
|	Ba	135	10.000	ug/L	0.282	2	22	19138	1
⌊	Ba	137	10.000	ug/L	0.133	1	38	33832	1
⌈>	Tb	159		ug/L			394483	381382	1
|	Tl	205	10.000	ug/L	0.268	2	77	292899	1
|	Pb	208	10.000	ug/L	0.181	1	785	414567	1
|	Bi	209		ug/L			347909	332301	1
|	Th	232	10.000	ug/L	0.150	1	387	499163	1
⌊	U	238	10.000	ug/L	0.165	1	52	581321	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:16:01
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	685881	1
⌊	Be	9	19.976	ug/L	0.527	2	10	13812	1
	C	13		mg/L			9055	5884	5
	Cl	37		mg/L			2835631	2830796	0
⌈>	Sc	45		ug/L			207649	203562	1
|	V-1	51	19.926	ug/L	0.301	1	1125	175047	0
|	V	51	19.913	ug/L	0.205	1	460	177531	0
|	Cr	52	19.977	ug/L	0.303	1	3531	156450	0
|	Cr	53	19.935	ug/L	0.036	0	186	18473	1
|	Mn	55	19.911	ug/L	0.172	0	488	252564	0
⌊	Co	59	19.909	ug/L	0.270	1	100	189916	0
⌈>	Ge	72		ug/L			228614	223693	0
|	Ni	60	19.952	ug/L	0.116	0	69	39135	0
|	Ni	62	19.960	ug/L	0.325	1	90	5807	1
|	Cu	63	19.992	ug/L	0.120	0	209	86009	0
|	Cu	65	19.881	ug/L	0.187	0	124	40063	1
|	Zn	66	19.956	ug/L	0.157	0	671	27709	0
|	Zn	67	20.009	ug/L	0.470	2	127	4601	2
|	Zn	68	19.938	ug/L	0.127	0	2543	21334	0
|	As-1	75	19.949	ug/L	0.069	0	34	26011	0
|	As	75	19.934	ug/L	0.121	0	5075	30383	0
|	Se	82	19.948	ug/L	0.281	1	5	3175	1
|	Se	78	19.882	ug/L	0.215	1	5176	12569	0
⌊	Mo	98	19.896	ug/L	0.191	0	105	91155	0
	Y	89		ug/L			221819	218680	0
	Kr	83		ug/L			55	58	13
⌈>	In	115		ug/L			279471	273935	2
|	Ag	107	19.868	ug/L	0.162	0	46	171356	1
|	Cd	111	19.944	ug/L	0.617	3	237	45470	1
|	Cd	114	19.930	ug/L	0.490	2	18	106376	0
|	Sb	121	19.947	ug/L	0.557	2	72	151617	1
|	Sb	123	19.924	ug/L	0.490	2	56	116908	0
|	Ba	135	19.945	ug/L	0.317	1	22	38251	0
⌊	Ba	137	19.878	ug/L	0.448	2	38	66495	0
⌈>	Tb	159		ug/L			394483	387291	0
|	Tl	205	19.880	ug/L	0.196	0	77	577611	1
|	Pb	208	19.871	ug/L	0.078	0	785	814964	0
|	Bi	209		ug/L			347909	332720	0
|	Th	232	19.975	ug/L	0.172	0	387	1007262	0
⌊	U	238	19.879	ug/L	0.221	1	52	1146036	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:23:49
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	691476	1
⌊	Be	9	49.719	ug/L	0.825	1	10	33697	0
	C	13		mg/L			9055	5919	2
	Cl	37		mg/L			2835631	2798494	0
⌈>	Sc	45		ug/L			207649	204713	0
|	V-1	51	49.918	ug/L	0.198	0	1125	435844	0
|	V	51	49.871	ug/L	0.115	0	460	440807	0
|	Cr	52	49.874	ug/L	0.452	0	3531	382855	0
|	Cr	53	49.727	ug/L	0.133	0	186	44849	0
|	Mn	55	49.859	ug/L	0.350	0	488	626518	0
⌊	Co	59	49.857	ug/L	0.289	0	100	471454	1
⌈>	Ge	72		ug/L			228614	224683	0
|	Ni	60	49.672	ug/L	0.292	0	69	94667	0
|	Ni	62	49.772	ug/L	0.494	0	90	14091	0
|	Cu	63	49.651	ug/L	0.528	1	209	207040	1
|	Cu	65	49.723	ug/L	0.449	0	124	97753	0
|	Zn	66	49.815	ug/L	0.658	1	671	67260	1
|	Zn	67	49.999	ug/L	0.738	1	127	11358	1
|	Zn	68	49.899	ug/L	0.170	0	2543	49402	0
|	As-1	75	49.840	ug/L	0.228	0	34	64193	0
|	As	75	49.833	ug/L	0.204	0	5075	67760	0
|	Se	82	49.811	ug/L	0.530	1	5	7809	1
|	Se	78	49.789	ug/L	0.379	0	5176	23573	0
⌊	Mo	98	49.862	ug/L	0.588	1	105	226180	1
	Y	89		ug/L			221819	218709	1
	Kr	83		ug/L			55	73	8
⌈>	In	115		ug/L			279471	274441	1
|	Ag	107	49.871	ug/L	1.211	2	46	425257	1
|	Cd	111	49.853	ug/L	0.955	1	237	111909	1
|	Cd	114	49.841	ug/L	1.451	2	18	262313	0
|	Sb	121	49.734	ug/L	1.318	2	72	368850	1
|	Sb	123	49.825	ug/L	0.818	1	56	287825	0
|	Ba	135	49.850	ug/L	0.994	1	22	94337	0
⌊	Ba	137	49.846	ug/L	1.441	2	38	164449	0
⌈>	Tb	159		ug/L			394483	387163	0
|	Tl	205	49.846	ug/L	0.715	1	77	1425592	0
|	Pb	208	49.807	ug/L	0.434	0	785	2002235	0
|	Bi	209		ug/L			347909	333121	0
|	Th	232	50.003	ug/L	0.355	0	387	2520991	1
⌊	U	238	50.032	ug/L	0.568	1	52	2892387	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:31:39
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	664313	2
[	Be	9	100.375	ug/L	1.733	1	10	66169	1
	C	13		mg/L			9055	5757	1
	Cl	37		mg/L			2835631	2799192	0
[>	Sc	45		ug/L			207649	208086	1
[	V-1	51	100.042	ug/L	1.320	1	1125	887863	0
[	V	51	99.949	ug/L	1.286	1	460	895876	0
[	Cr	52	99.788	ug/L	1.603	1	3531	769620	1
[	Cr	53	99.499	ug/L	1.517	1	186	89529	1
[	Mn	55	99.711	ug/L	1.551	1	488	1260831	1
[	Co	59	99.582	ug/L	1.766	1	100	943695	0
[>	Ge	72		ug/L			228614	227332	1
[	Ni	60	99.976	ug/L	0.626	0	69	192558	1
[	Ni	62	99.837	ug/L	1.291	1	90	28354	1
[	Cu	63	99.709	ug/L	0.949	0	209	416454	2
[	Cu	65	99.812	ug/L	0.685	0	124	197188	1
[	Zn	66	99.659	ug/L	0.670	0	671	133950	0
[	Zn	67	99.782	ug/L	1.755	1	127	22647	3
[	Zn	68	99.670	ug/L	2.529	2	2543	96272	1
[	As-1	75	100.013	ug/L	0.171	0	34	130356	1
[	As	75	100.056	ug/L	0.320	0	5075	132809	1
[	Se	82	99.623	ug/L	0.957	0	5	15601	1
[	Se	78	99.715	ug/L	0.555	0	5176	42252	1
[	Mo	98	100.108	ug/L	0.598	0	105	460992	0
	Y	89		ug/L			221819	221771	1
	Kr	83		ug/L			55	73	5
[>	In	115		ug/L			279471	276580	1
[	Ag	107	99.745	ug/L	1.444	1	46	850085	1
[	Cd	111	99.902	ug/L	1.725	1	237	225067	1
[	Cd	114	100.020	ug/L	1.355	1	18	530981	0
[	Sb	121	100.514	ug/L	1.476	1	72	764539	2
[	Sb	123	100.283	ug/L	0.902	0	56	589439	1
[	Ba	135	100.112	ug/L	0.811	0	22	191670	1
[	Ba	137	100.230	ug/L	1.085	1	38	335913	1
[>	Tb	159		ug/L			394483	389858	1
[	Tl	205	100.210	ug/L	0.940	0	77	2906076	1
[	Pb	208	100.169	ug/L	1.337	1	785	4076657	0
[	Bi	209		ug/L			347909	338522	1
[	Th	232	99.858	ug/L	0.360	0	387	5044950	1
[	U	238	99.939	ug/L	2.070	2	52	5804696	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:39:27
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:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	685883	1
[	Be	9	-0.002	ug/L	0.004	221	10	9	34
	C	13		mg/L			9055	8070	2
	Cl	37		mg/L			2835631	2856787	0
[>	Sc	45		ug/L			207649	211071	1
|	V-1	51	-0.008	ug/L	0.011	135	1125	1073	7
|	V	51	-0.003	ug/L	0.003	91	460	441	5
|	Cr	52	-0.017	ug/L	0.002	13	3531	3460	0
|	Cr	53	-0.001	ug/L	0.032	3625	186	188	16
|	Mn	55	-0.002	ug/L	0.001	27	488	470	0
[	Co	59	0.002	ug/L	0.002	90	100	122	15
[>	Ge	72		ug/L			228614	230086	0
|	Ni	60	0.002	ug/L	0.009	402	69	73	22
|	Ni	62	-0.009	ug/L	0.065	704	90	88	20
|	Cu	63	0.007	ug/L	0.002	27	209	240	2
|	Cu	65	-0.006	ug/L	0.011	178	124	112	19
|	Zn	66	-0.292	ug/L	0.011	3	671	280	6
|	Zn	67	-0.245	ug/L	0.025	10	127	72	8
|	Zn	68	-0.169	ug/L	0.052	30	2543	2399	1
|	As-1	75	0.003	ug/L	0.003	103	34	38	11
|	As	75	0.044	ug/L	0.041	92	5075	5165	0
|	Se	82	-0.028	ug/L	0.018	65	5	0	379
|	Se	78	0.117	ug/L	0.159	136	5176	5253	0
[	Mo	98	0.016	ug/L	0.009	59	105	179	23
	Y	89		ug/L			221819	222273	0
	Kr	83		ug/L			55	56	5
[>	In	115		ug/L			279471	283587	1
|	Ag	107	0.006	ug/L	0.003	48	46	101	24
|	Cd	111	-0.002	ug/L	0.011	596	237	236	9
|	Cd	114	0.004	ug/L	0.003	67	18	39	34
|	Sb	121	0.093	ug/L	0.018	19	72	798	16
|	Sb	123	0.090	ug/L	0.015	16	56	600	13
|	Ba	135	0.004	ug/L	0.005	116	22	30	29
[	Ba	137	-0.000	ug/L	0.001	451	38	38	11
[>	Tb	159		ug/L			394483	396884	0
|	Tl	205	0.006	ug/L	0.002	38	77	244	26
|	Pb	208	0.007	ug/L	0.001	12	785	1077	3
|	Bi	209		ug/L			347909	346424	0
|	Th	232	0.030	ug/L	0.004	14	387	1953	11
[	U	238	0.014	ug/L	0.005	33	52	909	32

Quantitative Analysis - Calibration Report

Sample Date/Time: Monday, January 11, 2010 10:31:39
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\011110.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	1.0000	0.0010	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V-1	51	1.0000	0.0426	10	20	50	100	
V	51	1.0000	0.0431	10	20	50	100	
Cr	52	1.0000	0.0369	10	20	50	100	
Cr	53	0.9999	0.0043	10	20	50	100	
Mn	55	1.0000	0.0608	10	20	50	100	
Co	59	1.0000	0.0455	10	20	50	100	
Ge	72							
Ni	60	1.0000	0.0085	10	20	50	100	
Ni	62	1.0000	0.0012	10	20	50	100	
Cu	63	1.0000	0.0184	10	20	50	100	
Cu	65	1.0000	0.0087	10	20	50	100	
Zn	66	1.0000	0.0059	10	20	50	100	
Zn	67	1.0000	0.0010	10	20	50	100	
Zn	68	1.0000	0.0041	10	20	50	100	
As-1	75	1.0000	0.0057	10	20	50	100	
As	75	1.0000	0.0056	10	20	50	100	
Se	82	1.0000	0.0007	10	20	50	100	
Se	78	1.0000	0.0016	10	20	50	100	
Mo	98	1.0000	0.0203	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0308	10	20	50	100	
Cd	111	1.0000	0.0081	10	20	50	100	
Cd	114	1.0000	0.0192	10	20	50	100	
Sb	121	0.9999	0.0275	10	20	50	100	
Sb	123	1.0000	0.0212	10	20	50	100	
Ba	135	1.0000	0.0069	10	20	50	100	
Ba	137	1.0000	0.0121	10	20	50	100	
Tb	159							
Tl	205	1.0000	0.0744	10	20	50	100	
Pb	208	1.0000	0.1044	10	20	50	100	
Bi	209							
Th	232	1.0000	0.1296	10	20	50	100	
U	238	1.0000	0.1490	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:54:56
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌜>	**Li**	**6**		ug/L			679421	686457	0
⌞	**Be**	**9**	**49.332**	ug/L	1.027	2	10	33616	1
	C	**13**		mg/L			9055	8146	0
	Cl	**37**		mg/L			2835631	2803670	0
⌜>	**Sc**	**45**		ug/L			207649	207280	0
⌞	**V-1**	**51**	**50.545**	ug/L	0.277	0	1125	447460	0
⌞	**V**	**51**	**50.619**	ug/L	0.092	0	460	452254	0
⌞	**Cr**	**52**	**50.260**	ug/L	0.550	1	3531	387908	0
⌞	**Cr**	**53**	**50.507**	ug/L	0.139	0	186	45366	0
⌞	**Mn**	**55**	**51.938**	ug/L	0.330	0	488	654515	0
⌞	**Co**	**59**	**49.607**	ug/L	0.339	0	100	468442	1
⌜>	**Ge**	**72**		ug/L			228614	224409	0
⌞	**Ni**	**60**	**52.525**	ug/L	0.525	0	69	99893	0
⌞	**Ni**	**62**	**51.590**	ug/L	0.454	0	90	14506	0
⌞	**Cu**	**63**	**51.864**	ug/L	0.294	0	209	213921	0
⌞	**Cu**	**65**	**51.090**	ug/L	0.136	0	124	99691	0
⌞	**Zn**	**66**	**50.547**	ug/L	0.303	0	671	67396	1
⌞	**Zn**	**67**	**49.761**	ug/L	0.205	0	127	11210	0
⌞	**Zn**	**68**	**50.331**	ug/L	0.200	0	2543	49234	1
⌞	**As-1**	**75**	**51.763**	ug/L	0.354	0	34	66614	0
⌞	**As**	**75**	**50.984**	ug/L	0.297	0	5075	69244	0
⌞	**Se**	**82**	**80.480**	ug/L	0.203	0	5	12442	0
⌞	**Se**	**78**	**79.775**	ug/L	0.195	0	5176	34386	0
⌞	**Mo**	**98**	**50.563**	ug/L	0.341	0	105	229903	0
	Y	**89**		ug/L			221819	221555	1
	Kr	**83**		ug/L			55	65	2
⌜>	**In**	**115**		ug/L			279471	282085	1
⌞	**Ag**	**107**	**47.094**	ug/L	0.980	2	46	409336	0
⌞	**Cd**	**111**	**48.602**	ug/L	0.642	1	237	111789	0
⌞	**Cd**	**114**	**49.074**	ug/L	1.024	2	18	265703	0
⌞	**Sb**	**121**	**48.527**	ug/L	0.889	1	72	376459	1
⌞	**Sb**	**123**	**48.587**	ug/L	0.499	1	56	291273	0
⌞	**Ba**	**135**	**49.698**	ug/L	0.528	1	22	97051	0
⌞	**Ba**	**137**	**49.758**	ug/L	0.846	1	38	170081	0
⌜>	**Tb**	**159**		ug/L			394483	394579	0
⌞	**Tl**	**205**	**49.585**	ug/L	0.477	0	77	1455481	0
⌞	**Pb**	**208**	**50.968**	ug/L	0.360	0	785	2100084	1
⌞	**Bi**	**209**		ug/L			347909	338480	1
⌞	**Th**	**232**	**50.085**	ug/L	0.392	0	387	2561233	0
⌞	**U**	**238**	**50.493**	ug/L	0.761	1	52	2969171	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 10:59:15
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	694514	0
⌊	Be	9	-0.005	ug/L	0.000	1	10	7	0
	C	13		mg/L			9055	8035	0
	Cl	37		mg/L			2835631	2850928	0
⌈>	Sc	45		ug/L			207649	208054	1
|	V-1	51	-0.003	ug/L	0.016	610	1125	1104	11
|	V	51	-0.007	ug/L	0.003	37	460	400	6
|	Cr	52	-0.010	ug/L	0.025	240	3531	3456	4
|	Cr	53	-0.024	ug/L	0.022	94	186	165	13
|	Mn	55	-0.002	ug/L	0.004	193	488	460	10
⌊	Co	59	-0.000	ug/L	0.002	382	100	97	13
⌈>	Ge	72		ug/L			228614	228351	1
|	Ni	60	-0.005	ug/L	0.002	31	69	59	4
|	Ni	62	-0.018	ug/L	0.042	226	90	85	13
|	Cu	63	-0.002	ug/L	0.002	84	209	201	4
|	Cu	65	-0.008	ug/L	0.003	35	124	107	4
|	Zn	66	-0.273	ug/L	0.012	4	671	303	5
|	Zn	67	-0.265	ug/L	0.067	25	127	67	21
|	Zn	68	-0.193	ug/L	0.061	31	2543	2357	1
|	As-1	75	-0.005	ug/L	0.012	234	34	27	56
|	As	75	0.084	ug/L	0.041	48	5075	5176	0
|	Se	82	-0.033	ug/L	0.019	56	5	0	3034
|	Se	78	0.295	ug/L	0.156	52	5176	5280	0
⌊	Mo	98	-0.000	ug/L	0.004	1433	105	104	17
	Y	89		ug/L			221819	225911	1
	Kr	83		ug/L			55	58	6
⌈>	In	115		ug/L			279471	283633	1
|	Ag	107	0.003	ug/L	0.001	29	46	76	10
|	Cd	111	0.001	ug/L	0.009	1465	237	242	8
|	Cd	114	0.002	ug/L	0.001	29	18	30	12
|	Sb	121	0.022	ug/L	0.004	16	72	247	9
|	Sb	123	0.023	ug/L	0.004	16	56	194	11
|	Ba	135	0.001	ug/L	0.004	315	22	24	28
⌊	Ba	137	-0.001	ug/L	0.001	91	38	37	5
⌈>	Tb	159		ug/L			394483	392917	2
|	Tl	205	0.002	ug/L	0.001	53	77	147	23
|	Pb	208	0.005	ug/L	0.002	37	785	973	5
|	Bi	209		ug/L			347909	344203	0
|	Th	232	0.021	ug/L	0.004	17	387	1433	11
⌊	U	238	0.009	ug/L	0.003	31	52	564	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:04:17
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	682674	0
[	Be	9	49.044	ug/L	1.315	2	10	33236	2
	C	13		mg/L			9055	5856	2
	Cl	37		mg/L			2835631	2820242	0
[>	Sc	45		ug/L			207649	208156	1
[	V-1	51	49.704	ug/L	0.552	1	1125	441866	1
[	V	51	49.869	ug/L	0.438	0	460	447428	1
[	Cr	52	49.749	ug/L	0.611	1	3531	385597	1
[	Cr	53	50.275	ug/L	0.341	0	186	45351	2
[	Mn	55	49.899	ug/L	1.267	2	488	631313	0
[	Co	59	49.769	ug/L	0.601	1	100	471882	0
[>	Ge	72		ug/L			228614	229158	0
[	Ni	60	49.739	ug/L	0.594	1	69	96605	1
[	Ni	62	49.479	ug/L	0.613	1	90	14211	1
[	Cu	63	50.311	ug/L	0.239	0	209	211908	0
[	Cu	65	50.098	ug/L	0.476	0	124	99828	1
[	Zn	66	50.032	ug/L	0.138	0	671	68126	0
[	Zn	67	50.148	ug/L	0.835	1	127	11535	1
[	Zn	68	50.661	ug/L	0.870	1	2543	50589	1
[	As-1	75	49.790	ug/L	0.078	0	34	65434	0
[	As	75	49.741	ug/L	0.196	0	5075	69111	0
[	Se	82	50.158	ug/L	0.448	0	5	7920	1
[	Se	78	50.009	ug/L	0.641	1	5176	23948	1
[	Mo	98	49.943	ug/L	0.728	1	105	231896	1
	Y	89		ug/L			221819	221263	0
	Kr	83		ug/L			55	65	6
[>	In	115		ug/L			279471	283242	0
[	Ag	107	48.993	ug/L	0.319	0	46	427658	1
[	Cd	111	48.954	ug/L	0.293	0	237	113070	1
[	Cd	114	49.605	ug/L	0.598	1	18	269735	1
[	Sb	121	49.124	ug/L	0.634	1	72	382701	1
[	Sb	123	48.629	ug/L	0.654	1	56	292752	1
[	Ba	135	48.864	ug/L	0.358	0	22	95821	1
[	Ba	137	48.554	ug/L	0.221	0	38	166668	0
[>	Tb	159		ug/L			394483	392748	1
[	Tl	205	49.427	ug/L	0.083	0	77	1444186	1
[	Pb	208	49.862	ug/L	0.738	1	785	2044669	0
[	Bi	209		ug/L			347909	341791	0
[	Th	232	50.351	ug/L	0.754	1	387	2562648	1
[	U	238	51.051	ug/L	1.408	2	52	2987143	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:11:38
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	697365	1
⌊	**Be**	**9**	**-0.002**	ug/L	0.001	56	10	9	7
	C	**13**		mg/L			9055	8015	2
	Cl	**37**		mg/L			2835631	2861539	0
⌈>	**Sc**	**45**		ug/L			207649	209552	0
|	**V-1**	**51**	**-0.003**	ug/L	0.004	154	1125	1113	3
|	**V**	**51**	**-0.006**	ug/L	0.000	7	460	407	1
|	**Cr**	**52**	**-0.018**	ug/L	0.015	82	3531	3423	2
|	**Cr**	**53**	**-0.029**	ug/L	0.014	48	186	161	7
|	**Mn**	**55**	**-0.003**	ug/L	0.002	63	488	452	6
⌊	**Co**	**59**	**0.000**	ug/L	0.001	1956	100	102	6
⌈>	**Ge**	**72**		ug/L			228614	228462	1
|	**Ni**	**60**	**-0.001**	ug/L	0.004	361	69	66	12
|	**Ni**	**62**	**-0.022**	ug/L	0.069	311	90	84	24
|	**Cu**	**63**	**-0.004**	ug/L	0.004	100	209	191	9
|	**Cu**	**65**	**-0.011**	ug/L	0.002	14	124	103	1
|	**Zn**	**66**	**-0.269**	ug/L	0.024	8	671	308	9
|	**Zn**	**67**	**-0.264**	ug/L	0.031	11	127	67	10
|	**Zn**	**68**	**-0.155**	ug/L	0.034	21	2543	2395	1
|	**As-1**	**75**	**-0.005**	ug/L	0.017	347	34	28	81
|	**As**	**75**	**0.111**	ug/L	0.046	41	5075	5213	0
|	**Se**	**82**	**-0.050**	ug/L	0.040	79	5	-2	233
|	**Se**	**78**	**0.368**	ug/L	0.138	37	5176	5310	0
⌊	**Mo**	**98**	**0.001**	ug/L	0.004	267	105	112	14
	Y	**89**		ug/L			221819	223631	0
	Kr	**83**		ug/L			55	59	2
⌈>	**In**	**115**		ug/L			279471	286290	1
|	**Ag**	**107**	**0.005**	ug/L	0.001	18	46	87	7
|	**Cd**	**111**	**-0.002**	ug/L	0.005	243	237	237	6
|	**Cd**	**114**	**0.002**	ug/L	0.001	58	18	32	24
|	**Sb**	**121**	**0.054**	ug/L	0.011	20	72	500	16
|	**Sb**	**123**	**0.056**	ug/L	0.013	22	56	394	18
|	**Ba**	**135**	**0.000**	ug/L	0.004	1023	22	23	30
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	1141	38	40	8
⌈>	**Tb**	**159**		ug/L			394483	399811	1
|	**Tl**	**205**	**0.003**	ug/L	0.002	47	77	176	26
|	**Pb**	**208**	**0.004**	ug/L	0.002	35	785	978	7
|	**Bi**	**209**		ug/L			347909	349421	1
|	**Th**	**232**	**0.025**	ug/L	0.003	11	387	1661	8
⌊	**U**	**238**	**0.009**	ug/L	0.002	23	52	572	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:19:04
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			679421	699987	0
[	**Be**	**9**	**0.176**	ug/L	0.025	14	10	132	13
	C	**13**		mg/L			9055	6924	1
	Cl	**37**		mg/L			2835631	2874177	0
[>	**Sc**	**45**		ug/L			207649	212464	1
[	**V-1**	**51**	**0.172**	ug/L	0.013	7	1125	2708	3
[	**V**	**51**	**0.179**	ug/L	0.001	0	460	2105	1
[	**Cr**	**52**	**0.471**	ug/L	0.025	5	3531	7305	1
[	**Cr**	**53**	**0.482**	ug/L	0.029	6	186	632	5
[	**Mn**	**55**	**0.484**	ug/L	0.006	1	488	6742	1
[	**Co**	**59**	**0.195**	ug/L	0.004	2	100	1987	3
[>	**Ge**	**72**		ug/L			228614	232232	0
[	**Ni**	**60**	**0.473**	ug/L	0.007	1	69	1000	1
[	**Ni**	**62**	**0.452**	ug/L	0.044	9	90	222	5
[	**Cu**	**63**	**0.504**	ug/L	0.011	2	209	2361	1
[	**Cu**	**65**	**0.486**	ug/L	0.020	4	124	1107	4
[	**Zn**	**66**	**3.745**	ug/L	0.072	1	671	5798	1
[	**Zn**	**67**	**3.394**	ug/L	0.115	3	127	912	2
[	**Zn**	**68**	**3.783**	ug/L	0.032	0	2543	6219	1
[	**As-1**	**75**	**0.191**	ug/L	0.017	8	34	289	7
[	**As**	**75**	**0.253**	ug/L	0.013	5	5075	5485	0
[	**Se**	**82**	**0.484**	ug/L	0.005	0	5	82	1
[	**Se**	**78**	**0.710**	ug/L	0.034	4	5176	5528	0
[	**Mo**	**98**	**0.188**	ug/L	0.005	2	105	991	2
	Y	**89**		ug/L			221819	227403	1
	Kr	**83**		ug/L			55	55	0
[>	**In**	**115**		ug/L			279471	287277	0
[	**Ag**	**107**	**0.192**	ug/L	0.004	1	46	1747	2
[	**Cd**	**111**	**0.185**	ug/L	0.014	7	237	676	5
[	**Cd**	**114**	**0.204**	ug/L	0.013	6	18	1146	6
[	**Sb**	**121**	**0.204**	ug/L	0.002	0	72	1688	1
[	**Sb**	**123**	**0.209**	ug/L	0.012	5	56	1335	4
[	**Ba**	**135**	**1.020**	ug/L	0.035	3	22	2051	2
[	**Ba**	**137**	**0.987**	ug/L	0.020	2	38	3474	2
[>	**Tb**	**159**		ug/L			394483	402115	0
[	**Tl**	**205**	**0.204**	ug/L	0.004	1	77	6179	1
[	**Pb**	**208**	**0.968**	ug/L	0.013	1	785	41417	1
[	**Bi**	**209**		ug/L			347909	353244	1
[	**Th**	**232**	**0.200**	ug/L	0.003	1	387	10837	1
[	**U**	**238**	**0.196**	ug/L	0.003	1	52	11774	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:26:30
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	691863	0
[	Be	9	-0.003	ug/L	0.004	115	10	8	31
	C	13		mg/L			9055	20735	0
	Cl	37		mg/L			2835631	3889842	0
[>	Sc	45		ug/L			207649	198771	2
[	V-1	51	-0.000	ug/L	0.018	6163	1125	1074	14
[	V	51	0.536	ug/L	0.048	8	460	5023	6
[	Cr	52	0.407	ug/L	0.005	1	3531	6368	2
[	Cr	53	2.105	ug/L	0.131	6	186	1982	3
[	Mn	55	0.565	ug/L	0.007	1	488	7287	2
[	Co	59	0.024	ug/L	0.002	10	100	313	8
[>	Ge	72		ug/L			228614	219220	0
[	Ni	60	0.767	ug/L	0.028	3	69	1491	3
[	Ni	62	4.097	ug/L	0.127	3	90	1205	3
[	Cu	63	0.399	ug/L	0.013	3	209	1806	3
[	Cu	65	0.761	ug/L	0.030	3	124	1568	3
[	Zn	66	1.097	ug/L	0.015	1	671	2058	1
[	Zn	67	0.951	ug/L	0.049	5	127	329	2
[	Zn	68	0.445	ug/L	0.037	8	2543	2842	1
[	As-1	75	0.011	ug/L	0.029	257	34	46	76
[	As	75	0.046	ug/L	0.023	49	5075	4924	0
[	Se	82	-0.078	ug/L	0.073	93	5	-6	159
[	Se	78	0.201	ug/L	0.117	58	5176	5036	1
[	Mo	98	395.872	ug/L	8.651	2	105	1757701	2
	Y	89		ug/L			221819	212191	2
	Kr	83		ug/L			55	76	2
[>	In	115		ug/L			279471	266192	2
[	Ag	107	0.016	ug/L	0.002	14	46	176	10
[	Cd	111	0.008	ug/L	0.023	286	237	243	20
[	Cd	114	0.511	ug/L	0.010	2	18	2627	3
[	Sb	121	0.052	ug/L	0.004	7	72	451	6
[	Sb	123	0.054	ug/L	0.001	2	56	360	0
[	Ba	135	0.298	ug/L	0.029	9	22	570	9
[	Ba	137	0.287	ug/L	0.003	1	38	962	3
[>	Tb	159		ug/L			394483	376450	1
[	Tl	205	0.010	ug/L	0.001	12	77	342	9
[	Pb	208	0.050	ug/L	0.002	4	785	2706	4
[	Bi	209		ug/L			347909	317094	0
[	Th	232	0.030	ug/L	0.002	8	387	1831	5
[	U	238	0.001	ug/L	0.000	14	52	98	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:34:17
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	705530	1
[	Be	9	-0.001	ug/L	0.003	273	10	10	21
	C	13		mg/L			9055	20041	0
	Cl	37		mg/L			2835631	3718212	0
[>	Sc	45		ug/L			207649	186871	0
[	V-1	51	-0.293	ug/L	0.029	10	1125	-1317	17
[	V	51	0.648	ug/L	0.048	7	460	5626	6
[	Cr	52	21.289	ug/L	0.146	0	3531	149969	0
[	Cr	53	23.560	ug/L	0.139	0	186	19167	0
[	Mn	55	21.536	ug/L	0.129	0	488	244933	0
[	Co	59	20.734	ug/L	0.110	0	100	176563	0
[>	Ge	72		ug/L			228614	209126	0
[	Ni	60	20.923	ug/L	0.230	1	69	37120	0
[	Ni	62	23.906	ug/L	0.317	1	90	6308	1
[	Cu	63	20.497	ug/L	0.160	0	209	78899	0
[	Cu	65	20.891	ug/L	0.065	0	124	38055	0
[	Zn	66	20.836	ug/L	0.269	1	671	26251	1
[	Zn	67	18.425	ug/L	0.428	2	127	3941	1
[	Zn	68	19.716	ug/L	0.410	2	2543	19388	1
[	As-1	75	19.926	ug/L	0.118	0	34	23915	0
[	As	75	20.436	ug/L	0.122	0	5075	28647	0
[	Se	82	-0.136	ug/L	0.015	10	5	-14	13
[	Se	78	0.407	ug/L	0.081	19	5176	4874	0
[	Mo	98	394.936	ug/L	4.584	1	105	1672745	0
	Y	89		ug/L			221819	195922	0
	Kr	83		ug/L			55	77	4
[>	In	115		ug/L			279471	249323	0
[	Ag	107	18.504	ug/L	0.172	0	46	142199	0
[	Cd	111	20.009	ug/L	0.064	0	237	40805	0
[	Cd	114	20.586	ug/L	0.108	0	18	98538	0
[	Sb	121	0.054	ug/L	0.003	4	72	435	4
[	Sb	123	0.051	ug/L	0.003	6	56	319	5
[	Ba	135	0.298	ug/L	0.005	1	22	533	1
[	Ba	137	0.302	ug/L	0.020	6	38	946	6
[>	Tb	159		ug/L			394483	353773	0
[	Tl	205	0.016	ug/L	0.001	4	77	490	4
[	Pb	208	0.032	ug/L	0.002	4	785	1892	2
[	Bi	209		ug/L			347909	294790	0
[	Th	232	0.017	ug/L	0.000	0	387	1108	1
[	U	238	0.001	ug/L	0.000	25	52	76	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:42:02
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	689125	3
	Be	9	188.903	ug/L	8.300	4	10	129081	1
	C	13		mg/L			9055	6773	3
	Cl	37		mg/L			2835631	2669857	1
>	Sc	45		ug/L			207649	200244	2
	V-1	51	202.090	ug/L	1.017	0	1125	1724980	2
	V	51	203.761	ug/L	1.778	0	460	1757097	1
	Cr	52	199.548	ug/L	0.741	0	3531	1477867	2
	Cr	53	204.966	ug/L	2.502	1	186	177269	1
	Mn	55	206.548	ug/L	0.468	0	488	2513159	2
	Co	59	199.025	ug/L	1.945	0	100	1815009	1
>	Ge	72		ug/L			228614	225157	1
	Ni	60	192.676	ug/L	0.397	0	69	367489	1
	Ni	62	193.355	ug/L	3.709	1	90	54312	2
	Cu	63	193.303	ug/L	1.508	0	209	799455	2
	Cu	65	194.169	ug/L	3.259	1	124	379853	2
	Zn	66	194.311	ug/L	3.586	1	671	258098	3
	Zn	67	192.325	ug/L	2.777	1	127	43117	2
	Zn	68	193.647	ug/L	1.441	0	2543	182933	2
	As-1	75	196.422	ug/L	1.931	0	34	253553	2
	As	75	197.016	ug/L	1.369	0	5075	254176	2
	Se	82	192.995	ug/L	2.107	1	5	29933	2
	Se	78	194.759	ug/L	1.105	0	5176	76881	1
	Mo	98	198.556	ug/L	2.480	1	105	905599	2
	Y	89		ug/L			221819	214967	2
	Kr	83		ug/L			55	94	15
>	In	115		ug/L			279471	269931	2
	Ag	107	191.140	ug/L	1.462	0	46	1589742	2
	Cd	111	195.409	ug/L	2.327	1	237	429344	1
	Cd	114	194.406	ug/L	3.752	1	18	1007216	2
	Sb	121	200.401	ug/L	2.257	1	72	1487265	1
	Sb	123	199.264	ug/L	1.201	0	56	1142902	2
	Ba	135	202.166	ug/L	2.207	1	22	377658	1
	Ba	137	200.108	ug/L	4.886	2	38	654196	0
>	Tb	159		ug/L			394483	371030	3
	Tl	205	198.633	ug/L	2.072	1	77	5481590	2
	Pb	208	198.810	ug/L	2.765	1	785	7698766	2
	Bi	209		ug/L			347909	306726	0
	Th	232	205.313	ug/L	4.399	2	387	9867461	1
	U	238	206.573	ug/L	3.840	1	52	11417240	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:53:48
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	639823	1
[	Be	9	302.287	ug/L	5.424	1	10	191936	0
	C	13		mg/L			9055	7226	3
	Cl	37		mg/L			2835631	2790528	1
[>	Sc	45		ug/L			207649	212298	2
|	V-1	51	308.407	ug/L	3.506	1	1125	2790235	2
|	V	51	308.635	ug/L	4.600	1	460	2821400	1
|	Cr	52	302.713	ug/L	3.736	1	3531	2374390	1
|	Cr	53	303.632	ug/L	7.442	2	186	278272	0
|	Mn	55	305.350	ug/L	3.669	1	488	3938543	2
[	Co	59	301.396	ug/L	3.097	1	100	2914263	2
[>	Ge	72		ug/L			228614	239265	1
|	Ni	60	283.342	ug/L	2.329	0	69	574191	0
|	Ni	62	283.394	ug/L	2.627	0	90	84541	2
|	Cu	63	284.625	ug/L	2.331	0	209	1250715	1
|	Cu	65	283.152	ug/L	0.662	0	124	588485	1
|	Zn	66	281.269	ug/L	2.601	0	671	396597	0
|	Zn	67	281.901	ug/L	2.638	0	127	67081	0
|	Zn	68	280.383	ug/L	3.189	1	2543	280233	1
|	As-1	75	289.709	ug/L	2.289	0	34	397333	1
|	As	75	290.691	ug/L	1.803	0	5075	395965	1
|	Se	82	279.719	ug/L	2.288	0	5	46091	1
|	Se	78	282.328	ug/L	0.416	0	5176	115994	1
[	Mo	98	299.656	ug/L	1.128	0	105	1452123	1
	Y	89		ug/L			221819	225238	2
	Kr	83		ug/L			55	117	4
[>	In	115		ug/L			279471	287218	1
|	Ag	107	290.243	ug/L	1.892	0	46	2568626	1
|	Cd	111	292.250	ug/L	3.054	1	237	683193	0
|	Cd	114	289.953	ug/L	3.231	1	18	1598598	1
|	Sb	121	303.554	ug/L	1.368	0	72	2397573	2
|	Sb	123	295.861	ug/L	2.878	0	56	1805674	1
|	Ba	135	299.816	ug/L	4.937	1	22	595954	0
[	Ba	137	297.997	ug/L	3.811	1	38	1036959	1
[>	Tb	159		ug/L			394483	393468	0
|	Tl	205	297.950	ug/L	0.810	0	77	8721090	0
|	Pb	208	298.171	ug/L	3.114	1	785	12247451	1
|	Bi	209		ug/L			347909	316533	1
|	Th	232	305.520	ug/L	2.542	0	387	15577513	0
[	U	238	305.656	ug/L	4.169	1	52	17921647	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 11:57:23
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	657555	0
⌊	Be	9	51.225	ug/L	0.134	0	10	33439	1
	C	13		mg/L			9055	5970	1
	Cl	37		mg/L			2835631	2936436	0
⌈>	Sc	45		ug/L			207649	215357	0
|	V-1	51	49.822	ug/L	0.363	0	1125	458257	0
|	V	51	49.954	ug/L	0.408	0	460	463696	0
|	Cr	52	50.419	ug/L	0.830	1	3531	404267	1
|	Cr	53	50.819	ug/L	0.471	0	186	47421	0
|	Mn	55	50.611	ug/L	0.305	0	488	662648	0
⌊	Co	59	50.196	ug/L	0.634	1	100	492424	0
⌈>	Ge	72		ug/L			228614	240462	1
|	Ni	60	49.176	ug/L	0.832	1	69	100210	0
|	Ni	62	49.495	ug/L	0.986	1	90	14915	0
|	Cu	63	50.183	ug/L	0.711	1	209	221778	0
|	Cu	65	50.017	ug/L	0.971	1	124	104572	1
|	Zn	66	50.145	ug/L	0.968	1	671	71636	0
|	Zn	67	50.323	ug/L	0.917	1	127	12145	1
|	Zn	68	51.207	ug/L	0.722	1	2543	53622	0
|	As-1	75	49.959	ug/L	0.961	1	34	68885	0
|	As	75	50.084	ug/L	0.811	1	5075	72976	0
|	Se	82	50.172	ug/L	1.009	2	5	8312	0
|	Se	78	50.598	ug/L	0.459	0	5176	25359	0
⌊	Mo	98	48.921	ug/L	0.736	1	105	238330	0
	Y	89		ug/L			221819	228666	1
	Kr	83		ug/L			55	67	3
⌈>	In	115		ug/L			279471	288700	0
|	Ag	107	50.216	ug/L	0.206	0	46	446768	0
|	Cd	111	49.446	ug/L	0.469	0	237	116400	0
|	Cd	114	50.084	ug/L	0.539	1	18	277571	0
|	Sb	121	49.849	ug/L	0.386	0	72	395818	1
|	Sb	123	49.768	ug/L	0.708	1	56	305364	1
|	Ba	135	48.950	ug/L	0.607	1	22	97836	0
⌊	Ba	137	48.732	ug/L	0.826	1	38	170494	1
⌈>	Tb	159		ug/L			394483	388620	0
|	Tl	205	50.013	ug/L	0.421	0	77	1445920	0
|	Pb	208	49.351	ug/L	0.033	0	785	2002729	0
|	Bi	209		ug/L			347909	335664	1
|	Th	232	50.676	ug/L	0.810	1	387	2552361	1
⌊	U	238	50.821	ug/L	0.588	1	52	2943210	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 12:02:45
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: C:\Elandata\Caldata\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	675070	1
[	Be	9	-0.005	ug/L	0.003	59	10	7	26
	C	13		mg/L			9055	7763	0
	Cl	37		mg/L			2835631	2979340	0
[>	Sc	45		ug/L			207649	211991	0
[	V-1	51	-0.008	ug/L	0.009	112	1125	1080	7
[	V	51	0.073	ug/L	0.006	8	460	1135	5
[	Cr	52	0.005	ug/L	0.008	166	3531	3644	1
[	Cr	53	0.261	ug/L	0.013	4	186	429	2
[	Mn	55	-0.004	ug/L	0.002	47	488	450	4
[	Co	59	0.001	ug/L	0.001	164	100	110	11
[>	Ge	72		ug/L			228614	237828	1
[	Ni	60	-0.002	ug/L	0.003	175	69	68	8
[	Ni	62	-0.068	ug/L	0.024	35	90	74	8
[	Cu	63	0.014	ug/L	0.003	23	209	277	4
[	Cu	65	0.000	ug/L	0.006	25983	124	129	8
[	Zn	66	-0.273	ug/L	0.008	2	671	316	2
[	Zn	67	-0.172	ug/L	0.028	16	127	92	7
[	Zn	68	0.099	ug/L	0.088	88	2543	2743	3
[	As-1	75	0.006	ug/L	0.006	112	34	43	21
[	As	75	0.246	ug/L	0.011	4	5075	5608	1
[	Se	82	-0.060	ug/L	0.012	19	5	-4	42
[	Se	78	0.805	ug/L	0.038	4	5176	5698	0
[	Mo	98	0.022	ug/L	0.003	11	105	214	4
	Y	89		ug/L			221819	228934	0
	Kr	83		ug/L			55	64	1
[>	In	115		ug/L			279471	284696	0
[	Ag	107	0.010	ug/L	0.003	32	46	132	20
[	Cd	111	0.003	ug/L	0.009	318	237	248	8
[	Cd	114	0.004	ug/L	0.002	52	18	39	26
[	Sb	121	0.115	ug/L	0.024	20	72	973	19
[	Sb	123	0.112	ug/L	0.018	16	56	735	14
[	Ba	135	0.004	ug/L	0.002	42	22	29	10
[	Ba	137	0.003	ug/L	0.001	48	38	50	10
[>	Tb	159		ug/L			394483	378463	1
[	Tl	205	0.009	ug/L	0.003	30	77	331	24
[	Pb	208	0.008	ug/L	0.003	31	785	1083	10
[	Bi	209		ug/L			347909	331315	0
[	Th	232	0.047	ug/L	0.006	13	387	2658	11
[	U	238	0.017	ug/L	0.004	26	52	1000	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QE40 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 12:10:38
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	709295	0
[	Be	9	-0.007	ug/L	0.002	27	10	6	20
	C	13		mg/L			9055	8793	0
	Cl	37		mg/L			2835631	2955251	0
[>	Sc	45		ug/L			207649	218162	1
[	V-1	51	0.014	ug/L	0.006	42	1125	1315	3
[	V	51	0.072	ug/L	0.004	5	460	1158	3
[	Cr	52	0.069	ug/L	0.011	16	3531	4263	1
[	Cr	53	0.251	ug/L	0.002	0	186	431	1
[	Mn	55	0.004	ug/L	0.002	61	488	561	6
[	Co	59	-0.005	ug/L	0.001	12	100	56	9
[>	Ge	72		ug/L			228614	241697	0
[	Ni	60	-0.019	ug/L	0.002	13	69	34	14
[	Ni	62	-0.059	ug/L	0.037	62	90	78	14
[	Cu	63	0.054	ug/L	0.007	13	209	462	6
[	Cu	65	0.050	ug/L	0.004	7	124	236	4
[	Zn	66	0.328	ug/L	0.024	7	671	1175	3
[	Zn	67	0.396	ug/L	0.067	16	127	230	7
[	Zn	68	0.750	ug/L	0.049	6	2543	3439	2
[	As-1	75	0.011	ug/L	0.011	100	34	51	28
[	As	75	0.146	ug/L	0.057	39	5075	5563	0
[	Se	82	-0.003	ug/L	0.034	978	5	4	115
[	Se	78	0.484	ug/L	0.139	28	5176	5664	0
[	Mo	98	0.047	ug/L	0.007	16	105	339	10
	Y	89		ug/L			221819	230509	1
	Kr	83		ug/L			55	62	3
[>	In	115		ug/L			279471	287574	0
[	Ag	107	0.006	ug/L	0.002	36	46	98	18
[	Cd	111	0.011	ug/L	0.010	90	237	268	8
[	Cd	114	0.001	ug/L	0.001	197	18	22	28
[	Sb	121	0.046	ug/L	0.003	5	72	440	4
[	Sb	123	0.048	ug/L	0.003	5	56	352	4
[	Ba	135	-0.000	ug/L	0.002	470	22	22	14
[	Ba	137	0.001	ug/L	0.004	309	38	44	32
[>	Tb	159		ug/L			394483	395375	0
[	Tl	205	0.002	ug/L	0.000	14	77	149	6
[	Pb	208	-0.008	ug/L	0.001	8	785	459	5
[	Bi	209		ug/L			347909	342480	0
[	Th	232	0.036	ug/L	0.002	6	387	2256	4
[	U	238	0.005	ug/L	0.000	5	52	324	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 12:17:26
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	703524	1
⌊	Be	9	-0.008	ug/L	0.001	14	10	5	13
	C	13		mg/L			9055	5737	2
	Cl	37		mg/L			2835631	3000553	0
⌈>	Sc	45		ug/L			207649	217722	0
|	V-1	51	-0.011	ug/L	0.008	71	1125	1080	7
|	V	51	0.050	ug/L	0.001	2	460	951	1
|	Cr	52	-0.032	ug/L	0.013	39	3531	3443	2
|	Cr	53	0.163	ug/L	0.035	21	186	347	8
|	Mn	55	0.005	ug/L	0.001	28	488	575	3
⌊	Co	59	0.001	ug/L	0.002	135	100	118	14
⌈>	Ge	72		ug/L			228614	239567	1
|	Ni	60	-0.004	ug/L	0.008	211	69	64	26
|	Ni	62	-0.041	ug/L	0.016	39	90	82	6
|	Cu	63	0.027	ug/L	0.001	3	209	336	1
|	Cu	65	0.012	ug/L	0.004	35	124	154	4
|	Zn	66	-0.210	ug/L	0.013	6	671	407	3
|	Zn	67	-0.171	ug/L	0.031	17	127	93	8
|	Zn	68	0.197	ug/L	0.028	14	2543	2861	0
|	As-1	75	0.013	ug/L	0.006	48	34	53	16
|	As	75	0.207	ug/L	0.053	25	5075	5597	0
|	Se	82	-0.022	ug/L	0.010	43	5	1	93
|	Se	78	0.683	ug/L	0.207	30	5176	5691	0
⌊	Mo	98	-0.011	ug/L	0.002	15	105	59	12
	Y	89		ug/L			221819	226348	0
	Kr	83		ug/L			55	64	2
⌈>	In	115		ug/L			279471	282411	0
|	Ag	107	0.001	ug/L	0.001	56	46	55	9
|	Cd	111	-0.007	ug/L	0.005	72	237	224	5
|	Cd	114	0.001	ug/L	0.001	63	18	26	18
|	Sb	121	0.022	ug/L	0.004	16	72	244	11
|	Sb	123	0.021	ug/L	0.001	4	56	182	3
|	Ba	135	0.003	ug/L	0.006	166	22	28	37
⌊	Ba	137	0.004	ug/L	0.003	62	38	52	16
⌈>	Tb	159		ug/L			394483	391889	0
|	Tl	205	0.002	ug/L	0.000	10	77	128	4
|	Pb	208	-0.008	ug/L	0.000	3	785	458	3
|	Bi	209		ug/L			347909	336594	0
|	Th	232	0.008	ug/L	0.001	7	387	784	4
⌊	U	238	0.002	ug/L	0.000	5	52	179	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ERAP150
Sample Dil Factor: 10
Comments:
Sample Date/Time: Monday, January 11, 2010 12:24:14
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	702168	0
	Be	9	33.650	ug/L	0.270	0	10	23460	1
	C	13		mg/L			9055	9872	0
	Cl	37		mg/L			2835631	2997091	0
>	Sc	45		ug/L			207649	213184	0
	V-1	51	44.168	ug/L	0.338	0	1125	402300	0
	V	51	44.534	ug/L	0.267	0	460	409276	0
	Cr	52	49.064	ug/L	0.550	1	3531	389563	1
	Cr	53	50.065	ug/L	0.228	0	186	46251	0
	Mn	55	247.070	ug/L	2.134	0	488	3200450	1
	Co	59	13.905	ug/L	0.024	0	100	135118	0
>	Ge	72		ug/L			228614	239791	0
	Ni	60	31.729	ug/L	0.243	0	69	64509	0
	Ni	62	31.614	ug/L	0.373	1	90	9535	1
	Cu	63	11.234	ug/L	0.099	0	209	49684	0
	Cu	65	11.142	ug/L	0.120	1	124	23334	1
	Zn	66	89.281	ug/L	0.670	0	671	126661	1
	Zn	67	83.037	ug/L	1.141	1	127	19900	1
	Zn	68	89.561	ug/L	0.568	0	2543	91534	1
	As-1	75	67.370	ug/L	0.327	0	34	92634	1
	As	75	67.251	ug/L	0.637	0	5075	95904	1
	Se	82	77.757	ug/L	0.792	1	5	12845	0
	Se	78	78.007	ug/L	0.178	0	5176	36049	0
	Mo	98	23.527	ug/L	0.359	1	105	114375	1
	Y	89		ug/L			221819	226633	1
	Kr	83		ug/L			55	65	5
>	In	115		ug/L			279471	285861	1
	Ag	107	56.090	ug/L	0.834	1	46	494079	1
	Cd	111	66.966	ug/L	1.095	1	237	155996	1
	Cd	114	67.555	ug/L	0.520	0	18	370700	1
	Sb	121	61.177	ug/L	0.082	0	72	480963	1
	Sb	123	60.428	ug/L	0.393	0	56	367102	0
	Ba	135	47.923	ug/L	0.413	0	22	94840	1
	Ba	137	47.691	ug/L	0.316	0	38	165218	1
>	Tb	159		ug/L			394483	386574	1
	Tl	205	58.022	ug/L	0.731	1	77	1668491	0
	Pb	208	74.295	ug/L	0.713	0	785	2998530	0
	Bi	209		ug/L			347909	336888	0
	Th	232	0.004	ug/L	0.001	20	387	567	6
	U	238	0.001	ug/L	0.000	11	52	121	7

ICP-MS Quantitative Analysis - Summary Report

QC40

Sample ID: ~~Q340~~ MBSPK REN

Sample Dil Factor: 2

1-11-10

Comments:

Sample Date/Time: Monday, January 11, 2010 12:31:02

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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	709279	1
	Be	9	23.115	ug/L	0.555	2	10	16279	1
	C	13		mg/L			9055	8725	1
	Cl	37		mg/L			2835631	2956276	0
>	Sc	45		ug/L			207649	215268	0
	V-1	51	24.328	ug/L	0.092	0	1125	224281	0
	V	51	24.561	ug/L	0.133	0	460	228142	0
	Cr	52	24.927	ug/L	0.068	0	3531	201649	0
	Cr	53	25.649	ug/L	0.076	0	186	24021	0
	Mn	55	24.917	ug/L	0.273	1	488	326366	0
	Co	59	24.901	ug/L	0.216	0	100	244246	0
>	Ge	72		ug/L			228614	238162	0
	Ni	60	24.870	ug/L	0.427	1	69	50232	0
	Ni	62	25.519	ug/L	0.487	1	90	7662	1
	Cu	63	28.193	ug/L	0.529	1	209	123499	1
	Cu	65	28.374	ug/L	0.291	1	124	58813	0
	Zn	66	78.051	ug/L	1.806	2	671	110050	1
	Zn	67	72.322	ug/L	0.878	1	127	17230	0
	Zn	68	77.398	ug/L	0.867	1	2543	78922	0
	As-1	75	25.480	ug/L	0.213	0	34	34818	0
	As	75	24.883	ug/L	0.182	0	5075	38573	0
	Se	82	73.854	ug/L	0.621	0	5	12117	0
	Se	78	75.149	ug/L	0.511	0	5176	34688	0
	Mo	98	0.016	ug/L	0.003	19	105	186	8
	Y	89		ug/L			221819	230522	0
	Kr	83		ug/L			55	67	8
>	In	115		ug/L			279471	286831	0
	Ag	107	24.274	ug/L	0.058	0	46	214597	0
	Cd	111	23.600	ug/L	0.129	0	237	55325	1
	Cd	114	24.021	ug/L	0.085	0	18	132278	0
	Sb	121	0.034	ug/L	0.007	20	72	339	15
	Sb	123	0.035	ug/L	0.007	19	56	269	14
	Ba	135	24.317	ug/L	0.535	2	22	48299	2
	Ba	137	23.930	ug/L	0.027	0	38	83202	0
>	Tb	159		ug/L			394483	385614	1
	Tl	205	24.826	ug/L	0.406	1	77	712163	0
	Pb	208	24.498	ug/L	0.172	0	785	986801	0
	Bi	209		ug/L			347909	334275	1
	Th	232	24.257	ug/L	0.503	2	387	1212296	0
	U	238	24.231	ug/L	0.044	0	52	1392447	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QE40 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	685249	0
⌊	Be	9	-0.001	ug/L	0.005	627	10	10	33
	C	13		mg/L			9055	9394	1
	Cl	37		mg/L			2835631	3463689	0
⌈>	Sc	45		ug/L			207649	253055	1
|	V-1	51	7.409	ug/L	0.099	1	1125	81238	1
|	V	51	7.508	ug/L	0.058	0	460	82361	1
|	Cr	52	2.041	ug/L	0.164	8	3531	23352	6
|	Cr	53	2.537	ug/L	0.033	1	186	2997	2
|	Mn	55	17.858	ug/L	0.249	1	488	275088	0
⌊	Co	59	0.097	ug/L	0.001	1	100	1240	2
⌈>	Ge	72		ug/L			228614	239255	1
|	Ni	60	1.863	ug/L	0.019	1	69	3847	0
|	Ni	62	1.271	ug/L	0.061	4	90	473	3
|	Cu	63	3.150	ug/L	0.056	1	209	14056	1
|	Cu	65	3.064	ug/L	0.030	0	124	6496	0
|	Zn	66	9.332	ug/L	0.177	1	671	13838	1
|	Zn	67	9.793	ug/L	0.191	1	127	2460	2
|	Zn	68	10.456	ug/L	0.226	2	2543	13013	2
|	As-1	75	4.678	ug/L	0.055	1	34	6451	1
|	As	75	5.056	ug/L	0.076	1	5075	12106	1
|	Se	82	0.535	ug/L	0.031	5	5	93	6
|	Se	78	1.631	ug/L	0.059	3	5176	6056	1
⌊	Mo	98	30.541	ug/L	0.158	0	105	148093	0
	Y	89		ug/L			221819	231969	1
	Kr	83		ug/L			55	72	2
⌈>	In	115		ug/L			279471	286861	0
|	Ag	107	0.011	ug/L	0.001	6	46	142	4
|	Cd	111	0.044	ug/L	0.012	26	237	347	8
|	Cd	114	0.088	ug/L	0.002	1	18	505	1
|	Sb	121	2.324	ug/L	0.034	1	72	18404	1
|	Sb	123	2.294	ug/L	0.030	1	56	14043	1
|	Ba	135	33.989	ug/L	0.131	0	22	67507	0
⌊	Ba	137	33.353	ug/L	0.287	0	38	115962	0
⌈>	Tb	159		ug/L			394483	392458	1
|	Tl	205	0.016	ug/L	0.001	6	77	557	3
|	Pb	208	0.895	ug/L	0.010	1	785	37434	1
|	Bi	209		ug/L			347909	323337	1
|	Th	232	0.062	ug/L	0.005	7	387	3529	5
⌊	U	238	0.448	ug/L	0.007	1	52	26268	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 12:44:40
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	667046	1
[	Be	9	50.714	ug/L	0.797	1	10	33578	0
	C	13		mg/L			9055	6110	3
	Cl	37		mg/L			2835631	3168858	0
[>	Sc	45		ug/L			207649	218962	0
[	V-1	51	50.553	ug/L	0.490	0	1125	472751	0
[	V	51	50.898	ug/L	0.624	1	460	480351	0
[	Cr	52	50.230	ug/L	0.130	0	3531	409538	0
[	Cr	53	51.340	ug/L	0.560	1	186	48708	0
[	Mn	55	50.671	ug/L	0.494	0	488	674545	0
[	Co	59	50.702	ug/L	0.387	0	100	505747	0
[>	Ge	72		ug/L			228614	246708	0
[	Ni	60	48.962	ug/L	0.709	1	69	102385	2
[	Ni	62	49.194	ug/L	0.719	1	90	15213	1
[	Cu	63	49.866	ug/L	0.177	0	209	226125	0
[	Cu	65	49.856	ug/L	0.077	0	124	106955	0
[	Zn	66	49.616	ug/L	0.207	0	671	72738	0
[	Zn	67	49.906	ug/L	0.572	1	127	12360	1
[	Zn	68	50.679	ug/L	0.431	0	2543	54483	1
[	As-1	75	49.649	ug/L	0.071	0	34	70246	0
[	As	75	50.167	ug/L	0.066	0	5075	74995	0
[	Se	82	48.973	ug/L	0.280	0	5	8325	0
[	Se	78	50.722	ug/L	0.512	1	5176	26069	0
[	Mo	98	48.392	ug/L	0.426	0	105	241907	1
	Y	89		ug/L			221819	231654	0
	Kr	83		ug/L			55	75	4
[>	In	115		ug/L			279471	289454	1
[	Ag	107	51.031	ug/L	0.255	0	46	455198	1
[	Cd	111	49.472	ug/L	0.230	0	237	116763	0
[	Cd	114	49.855	ug/L	1.303	2	18	276967	1
[	Sb	121	49.277	ug/L	0.577	1	72	392246	0
[	Sb	123	48.540	ug/L	0.273	0	56	298605	1
[	Ba	135	49.390	ug/L	0.506	1	22	98964	0
[	Ba	137	49.103	ug/L	0.714	1	38	172239	1
[>	Tb	159		ug/L			394483	381639	1
[	Tl	205	49.246	ug/L	0.680	1	77	1398071	0
[	Pb	208	49.901	ug/L	0.374	0	785	1988602	0
[	Bi	209		ug/L			347909	331140	0
[	Th	232	50.649	ug/L	0.881	1	387	2504882	0
[	U	238	50.576	ug/L	0.453	0	52	2876151	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 12:56:02
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	678550	0
	Be	9	-0.005	ug/L	0.005	93	10	7	44
	C	13		mg/L			9055	7795	1
	Cl	37		mg/L			2835631	3166460	0
>	Sc	45		ug/L			207649	218440	0
	V-1	51	0.018	ug/L	0.003	17	1125	1354	2
	V	51	0.059	ug/L	0.003	4	460	1043	3
	Cr	52	0.048	ug/L	0.008	17	3531	4098	0
	Cr	53	0.178	ug/L	0.015	8	186	363	3
	Mn	55	0.007	ug/L	0.004	58	488	605	8
	Co	59	-0.000	ug/L	0.001	265	100	103	6
>	Ge	72		ug/L			228614	243563	0
	Ni	60	-0.006	ug/L	0.002	28	69	61	5
	Ni	62	-0.061	ug/L	0.023	38	90	78	9
	Cu	63	-0.004	ug/L	0.002	47	209	204	3
	Cu	65	-0.014	ug/L	0.004	30	124	102	9
	Zn	66	-0.273	ug/L	0.020	7	671	323	9
	Zn	67	-0.198	ug/L	0.026	13	127	88	6
	Zn	68	0.285	ug/L	0.073	25	2543	2997	2
	As-1	75	0.009	ug/L	0.008	88	34	49	23
	As	75	0.374	ug/L	0.060	16	5075	5918	1
	Se	82	-0.036	ug/L	0.043	119	5	0	1243
	Se	78	1.256	ug/L	0.215	17	5176	6015	1
	Mo	98	0.001	ug/L	0.003	205	105	119	11
	Y	89		ug/L			221819	231061	0
	Kr	83		ug/L			55	66	5
>	In	115		ug/L			279471	289580	0
	Ag	107	0.005	ug/L	0.002	52	46	88	24
	Cd	111	-0.002	ug/L	0.003	132	237	240	2
	Cd	114	0.003	ug/L	0.001	29	18	33	12
	Sb	121	0.055	ug/L	0.012	21	72	513	18
	Sb	123	0.058	ug/L	0.011	18	56	413	16
	Ba	135	0.003	ug/L	0.003	112	22	28	23
	Ba	137	-0.000	ug/L	0.001	314	38	39	8
>	Tb	159		ug/L			394483	383013	0
	Tl	205	0.003	ug/L	0.001	27	77	174	16
	Pb	208	0.005	ug/L	0.002	34	785	947	7
	Bi	209		ug/L			347909	333468	1
	Th	232	0.027	ug/L	0.003	9	387	1705	7
	U	238	0.010	ug/L	0.003	29	52	600	27

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 MB1 SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:00:48
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	741542	1
[	Be	9	-0.007	ug/L	0.003	41	10	6	34
	C	13		mg/L			9055	8320	0
	Cl	37		mg/L			2835631	3143326	0
[>	Sc	45		ug/L			207649	230643	0
|	V-1	51	0.001	ug/L	0.006	721	1125	1259	4
|	V	51	0.044	ug/L	0.004	8	460	950	3
|	Cr	52	0.019	ug/L	0.007	34	3531	4086	1
|	Cr	53	0.157	ug/L	0.012	7	186	362	3
|	Mn	55	-0.002	ug/L	0.003	159	488	517	7
[	Co	59	-0.004	ug/L	0.000	8	100	71	5
[>	Ge	72		ug/L			228614	258289	0
|	Ni	60	-0.020	ug/L	0.002	11	69	33	15
|	Ni	62	-0.055	ug/L	0.017	31	90	85	6
|	Cu	63	-0.009	ug/L	0.002	21	209	193	5
|	Cu	65	-0.012	ug/L	0.003	29	124	114	7
|	Zn	66	-0.337	ug/L	0.015	4	671	246	9
|	Zn	67	-0.263	ug/L	0.032	12	127	77	11
|	Zn	68	0.149	ug/L	0.025	16	2543	3033	0
|	As-1	75	-0.006	ug/L	0.011	175	34	29	54
|	As	75	0.085	ug/L	0.026	31	5075	5857	1
|	Se	82	-0.035	ug/L	0.056	158	5	0	2044
|	Se	78	0.308	ug/L	0.093	30	5176	5978	1
[	Mo	98	-0.016	ug/L	0.001	5	105	38	10
	Y	89		ug/L			221819	245560	0
	Kr	83		ug/L			55	67	10
[>	In	115		ug/L			279471	308005	0
|	Ag	107	-0.001	ug/L	0.001	49	46	40	12
|	Cd	111	-0.004	ug/L	0.008	206	237	251	7
|	Cd	114	-0.001	ug/L	0.001	53	18	14	23
|	Sb	121	0.009	ug/L	0.001	12	72	155	5
|	Sb	123	0.009	ug/L	0.002	19	56	123	9
|	Ba	135	-0.001	ug/L	0.003	247	22	21	29
[	Ba	137	-0.003	ug/L	0.002	70	38	32	21
[>	Tb	159		ug/L			394483	412542	0
|	Tl	205	u -0.000	ug/L	0.000	497	77	79	12
|	Pb	208	-0.008	ug/L	0.001	11	785	460	8
|	Bi	209		ug/L			347909	357399	0
|	Th	232	0.003	ug/L	0.001	21	387	588	6
[	U	238	0.001	ug/L	0.000	33	52	118	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 MB1SPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:06:56
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	710393	1
⌊	Be	9	23.929	ug/L	0.961	4	10	16876	2
	C	13		mg/L			9055	9030	1
	Cl	37		mg/L			2835631	3136424	0
⌈>	Sc	45		ug/L			207649	222243	1
|	V-1	51	24.841	ug/L	0.270	1	1125	236380	1
|	V	51	24.965	ug/L	0.293	1	460	239375	1
|	Cr	52	25.213	ug/L	0.233	0	3531	210525	1
|	Cr	53	25.596	ug/L	0.222	0	186	24747	1
|	Mn	55	25.255	ug/L	0.198	0	488	341495	1
⌊	Co	59	25.681	ug/L	0.253	0	100	260052	1
⌈>	Ge	72		ug/L			228614	246690	0
|	Ni	60	25.200	ug/L	0.320	1	69	52723	0
|	Ni	62	25.075	ug/L	0.460	1	90	7800	1
|	Cu	63	26.089	ug/L	0.201	0	209	118406	1
|	Cu	65	26.163	ug/L	0.254	0	124	56187	1
|	Zn	66	78.972	ug/L	0.793	1	671	115345	1
|	Zn	67	73.108	ug/L	0.577	0	127	18040	0
|	Zn	68	78.195	ug/L	0.184	0	2543	82566	0
|	As-1	75	26.372	ug/L	0.133	0	34	37327	0
|	As	75	25.652	ug/L	0.216	0	5075	41020	0
|	Se	82	77.105	ug/L	0.461	0	5	13105	1
|	Se	78	78.154	ug/L	0.481	0	5176	37146	1
⌊	Mo	98	-0.014	ug/L	0.004	25	105	43	41
	Y	89		ug/L			221819	234294	0
	Kr	83		ug/L			55	72	4
⌈>	In	115		ug/L			279471	292936	1
|	Ag	107	24.741	ug/L	0.394	1	46	223337	0
|	Cd	111	24.600	ug/L	0.505	2	237	58872	0
|	Cd	114	24.816	ug/L	0.690	2	18	139525	1
|	Sb	121	0.009	ug/L	0.002	18	72	145	9
|	Sb	123	0.009	ug/L	0.001	14	56	117	7
|	Ba	135	24.816	ug/L	0.313	1	22	50333	0
⌊	Ba	137	24.652	ug/L	0.239	0	38	87525	0
⌈>	Tb	159		ug/L			394483	390208	1
|	Tl	205	25.127	ug/L	0.606	2	77	729272	1
|	Pb	208	25.195	ug/L	0.464	1	785	1026819	0
|	Bi	209		ug/L			347909	345077	0
|	Th	232	24.621	ug/L	0.450	1	387	1245070	0
⌊	U	238	24.604	ug/L	0.567	2	52	1430309	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 REF1 SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:13:46
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌜>	Li	6		ug/L			679421	731062	0
⌞	Be	9	87.058	ug/L	1.024	1	10	63177	1
	C	13		mg/L			9055	10783	1
	Cl	37		mg/L			2835631	3040053	0
⌜>	Sc	45		ug/L			207649	253238	0
⌜	V-1	51	75.787	ug/L	0.616	0	1125	818996	1
⌞	V	51	75.801	ug/L	0.508	0	460	827110	0
⌜	Cr	52	65.339	ug/L	0.403	0	3531	614819	0
⌞	Cr	53	65.738	ug/L	0.118	0	186	72069	0
⌜	Mn	55	425.778	ug/L	2.384	0	488	6550985	0
⌞	Co	59	67.423	ug/L	0.995	1	100	777713	0
⌜>	Ge	72		ug/L			228614	249101	0
⌜	Ni	60	57.687	ug/L	0.258	0	69	121777	0
⌞	Ni	62	60.218	ug/L	0.819	1	90	18779	1
⌜	Cu	63	69.337	ug/L	1.411	2	209	317380	2
⌞	Cu	65	69.940	ug/L	0.156	0	124	151439	0
⌜	Zn	66	180.010	ug/L	1.943	1	671	264543	1
⌞	Zn	67	176.206	ug/L	1.420	0	127	43710	0
⌜	Zn	68	183.336	ug/L	2.034	1	2543	191744	0
⌜	As-1	75	129.182	ug/L	1.160	0	34	184483	0
⌞	As	75	128.675	ug/L	1.032	0	5075	185565	0
⌜	Se	82	161.463	ug/L	1.196	0	5	27703	0
⌞	Se	78	162.053	ug/L	0.749	0	5176	71718	0
⌞	Mo	98	43.333	ug/L	0.194	0	105	218727	0
	Y	89		ug/L			221819	542411	0
	Kr	83		ug/L			55	110	4
⌜>	In	115		ug/L			279471	293516	0
⌜	Ag	107	91.752	ug/L	0.442	0	46	829878	0
⌜	Cd	111	69.393	ug/L	0.422	0	237	165991	1
⌞	Cd	114	69.506	ug/L	0.885	1	18	391611	0
⌜	Sb	121	13.489	ug/L	0.133	0	72	108945	0
⌞	Sb	123	13.249	ug/L	0.093	0	56	82689	0
⌜	Ba	135	327.268	ug/L	4.753	1	22	664861	1
⌞	Ba	137	323.867	ug/L	1.062	0	38	1151821	1
⌜>	Tb	159		ug/L			394483	420333	0
⌜	Tl	205	132.212	ug/L	1.423	1	77	4134094	0
⌜	Pb	208	127.170	ug/L	0.419	0	785	5580531	0
⌜	Bi	209		ug/L			347909	349251	0
⌜	Th	232	13.168	ug/L	0.078	0	387	717654	1
⌞	U	238	1.629	ug/L	0.023	1	52	102087	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 NDUP SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:20:37
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	707096	0
[	Be	9	0.148	ug/L	0.005	3	10	114	2
	C	13		mg/L			9055	22240	0
	Cl	37		mg/L			2835631	3160989	1
[>	Sc	45		ug/L			207649	259900	0
[	V-1	51	31.926	ug/L	0.441	1	1125	354891	1
[	V	51	31.746	ug/L	0.445	1	460	355848	1
[	Cr	52	20.440	ug/L	0.205	1	3531	200418	0
[	Cr	53	20.256	ug/L	0.127	0	186	22953	1
[	Mn	55	417.231	ug/L	2.740	0	488	6588232	0
[	Co	59	6.424	ug/L	0.036	0	100	76166	0
[>	Ge	72		ug/L			228614	249813	0
[	Ni	60	22.757	ug/L	0.339	1	69	48222	1
[	Ni	62	28.993	ug/L	0.146	0	90	9119	0
[	Cu	63	41.230	ug/L	1.003	2	209	189348	2
[	Cu	65	42.067	ug/L	0.471	1	124	91399	0
[	Zn	66	99.900	ug/L	1.681	1	671	147554	1
[	Zn	67	92.362	ug/L	1.116	1	127	23043	0
[	Zn	68	99.006	ug/L	1.070	1	2543	105121	0
[	As-1	75	7.886	ug/L	0.126	1	34	11329	1
[	As	75	8.138	ug/L	0.146	1	5075	16964	0
[	Se	82	0.052	ug/L	0.038	72	5	14	44
[	Se	78	0.601	ug/L	0.117	19	5176	5902	0
[	Mo	98	1.265	ug/L	0.018	1	105	6516	1
	Y	89		ug/L			221819	384539	1
	Kr	83		ug/L			55	98	5
[>	In	115		ug/L			279471	293708	1
[	Ag	107	0.195	ug/L	0.011	5	46	1812	6
[	Cd	111	0.669	ug/L	0.014	2	237	1849	2
[	Cd	114	0.321	ug/L	0.013	4	18	1828	5
[	Sb	121	0.191	ug/L	0.009	4	72	1620	2
[	Sb	123	0.191	ug/L	0.002	1	56	1251	2
[	Ba	135	32.890	ug/L	0.624	1	22	66871	0
[	Ba	137	32.255	ug/L	0.689	2	38	114814	2
[>	Tb	159		ug/L			394483	395169	0
[	Tl	205	0.069	ug/L	0.006	8	77	2117	7
[	Pb	208	59.928	ug/L	0.568	0	785	2472771	1
[	Bi	209		ug/L			347909	340753	1
[	Th	232	0.673	ug/L	0.006	0	387	34864	0
[	U	238	0.515	ug/L	0.006	1	52	30378	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 N SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:27:28
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	701636	0
⌊	**Be**	**9**	**0.156**	ug/L	0.004	2	10	119	2
	C	**13**		mg/L			9055	10570	0
	Cl	**37**		mg/L			2835631	3202047	0
⌈>	**Sc**	**45**		ug/L			207649	247417	0
|	**V-1**	**51**	**28.794**	ug/L	0.409	1	1125	304822	0
|	**V**	**51**	**28.771**	ug/L	0.411	1	460	307039	0
|	**Cr**	**52**	**16.655**	ug/L	0.163	0	3531	156240	0
|	**Cr**	**53**	**16.992**	ug/L	0.185	1	186	18364	0
|	**Mn**	**55**	**163.001**	ug/L	0.621	0	488	2450619	0
⌊	**Co**	**59**	**4.760**	ug/L	0.064	1	100	53755	0
⌈>	**Ge**	**72**		ug/L			228614	247661	0
|	**Ni**	**60**	**21.870**	ug/L	0.039	0	69	45948	0
|	**Ni**	**62**	**27.234**	ug/L	0.245	0	90	8498	0
|	**Cu**	**63**	**28.155**	ug/L	0.060	0	209	128264	0
|	**Cu**	**65**	**28.577**	ug/L	0.216	0	124	61597	0
|	**Zn**	**66**	**74.764**	ug/L	0.864	1	671	109666	1
|	**Zn**	**67**	**70.990**	ug/L	0.460	0	127	17591	0
|	**Zn**	**68**	**74.110**	ug/L	0.854	1	2543	78704	1
|	**As-1**	**75**	**6.467**	ug/L	0.062	0	34	9217	0
|	**As**	**75**	**6.777**	ug/L	0.040	0	5075	14926	0
|	**Se**	**82**	**0.082**	ug/L	0.058	70	5	19	50
|	**Se**	**78**	**0.872**	ug/L	0.069	7	5176	5961	0
⌊	**Mo**	**98**	**1.163**	ug/L	0.004	0	105	5949	0
	Y	**89**		ug/L			221819	330496	0
	Kr	**83**		ug/L			55	87	4
⌈>	**In**	**115**		ug/L			279471	290481	0
|	**Ag**	**107**	**0.171**	ug/L	0.011	6	46	1580	5
|	**Cd**	**111**	**0.508**	ug/L	0.027	5	237	1447	4
|	**Cd**	**114**	**0.201**	ug/L	0.005	2	18	1139	2
|	**Sb**	**121**	**0.067**	ug/L	0.008	11	72	612	9
|	**Sb**	**123**	**0.063**	ug/L	0.003	4	56	448	3
|	**Ba**	**135**	**34.969**	ug/L	0.331	0	22	70330	0
⌊	**Ba**	**137**	**34.694**	ug/L	0.064	0	38	122146	0
⌈>	**Tb**	**159**		ug/L			394483	390686	0
|	**Tl**	**205**	**0.050**	ug/L	0.001	1	77	1537	1
|	**Pb**	**208**	**47.472**	ug/L	0.271	0	785	1936744	0
|	**Bi**	**209**		ug/L			347909	332904	0
|	**Th**	**232**	**0.636**	ug/L	0.003	0	387	32560	0
⌊	**U**	**238**	**0.531**	ug/L	0.006	1	52	30986	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 NSPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:34:20
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	702614	1
⌊	**Be**	**9**	**25.012**	ug/L	0.300	1	10	17450	0
	C	**13**		mg/L			9055	12740	0
	Cl	**37**		mg/L			2835631	3146690	0
⌈>	**Sc**	**45**		ug/L			207649	249810	0
⌈	**V-1**	**51**	**50.756**	ug/L	0.342	0	1125	541541	1
⌊	**V**	**51**	**50.818**	ug/L	0.288	0	460	547200	1
⌈	**Cr**	**52**	**40.771**	ug/L	0.061	0	3531	380046	0
⌊	**Cr**	**53**	**41.306**	ug/L	0.352	0	186	44754	1
⌈	**Mn**	**55**	**178.286**	ug/L	1.534	0	488	2706329	0
⌊	**Co**	**59**	**26.635**	ug/L	0.146	0	100	303176	1
⌈>	**Ge**	**72**		ug/L			228614	243418	0
⌈	**Ni**	**60**	**45.533**	ug/L	0.222	0	69	93946	1
⌊	**Ni**	**62**	**51.994**	ug/L	0.296	0	90	15858	1
⌈	**Cu**	**63**	**60.495**	ug/L	0.184	0	209	270613	0
⌊	**Cu**	**65**	**61.258**	ug/L	0.140	0	124	129631	0
⌈	**Zn**	**66**	**193.434**	ug/L	0.833	0	671	277738	1
⌊	**Zn**	**67**	**181.752**	ug/L	0.656	0	127	44053	0
⌈	**Zn**	**68**	**193.960**	ug/L	1.125	0	2543	198069	0
⌈	**As-1**	**75**	**33.132**	ug/L	0.153	0	34	46263	0
⌊	**As**	**75**	**32.347**	ug/L	0.106	0	5075	49630	0
⌈	**Se**	**82**	**77.336**	ug/L	0.839	1	5	12969	1
⌊	**Se**	**78**	**77.871**	ug/L	0.417	0	5176	36539	0
⌊	**Mo**	**98**	**1.299**	ug/L	0.041	3	105	6514	2
	Y	**89**		ug/L			221819	337805	0
	Kr	**83**		ug/L			55	96	9
⌈>	**In**	**115**		ug/L			279471	288104	1
⌈	**Ag**	**107**	**19.482**	ug/L	0.132	0	46	172998	1
⌊	**Cd**	**111**	**25.655**	ug/L	0.369	1	237	60382	0
⌊	**Cd**	**114**	**25.344**	ug/L	0.182	0	18	140186	1
⌈	**Sb**	**121**	**0.099**	ug/L	0.002	1	72	857	0
⌊	**Sb**	**123**	**0.093**	ug/L	0.002	2	56	627	2
⌈	**Ba**	**135**	**163.261**	ug/L	2.488	1	22	325555	0
⌊	**Ba**	**137**	**161.273**	ug/L	0.580	0	38	562985	0
⌈>	**Tb**	**159**		ug/L			394483	388942	1
⌈	**Tl**	**205**	**25.005**	ug/L	0.393	1	77	723449	0
⌊	**Pb**	**208**	**74.272**	ug/L	1.517	2	785	3015544	0
⌈	**Bi**	**209**		ug/L			347909	336237	1
⌊	**Th**	**232**	**25.923**	ug/L	0.323	1	387	1306736	0
⌊	**U**	**238**	**25.715**	ug/L	0.262	1	52	1490326	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 O SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:41:12
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	729175	1
[	Be	9	0.177	ug/L	0.008	4	10	139	5
	C	13		mg/L			9055	25632	0
	Cl	37		mg/L			2835631	3147295	1
[>	Sc	45		ug/L			207649	259944	1
[	V-1	51	34.217	ug/L	0.225	0	1125	380325	0
[	V	51	34.110	ug/L	0.223	0	460	382368	0
[	Cr	52	18.900	ug/L	0.298	1	3531	185675	0
[	Cr	53	19.079	ug/L	0.193	1	186	21634	0
[	Mn	55	157.471	ug/L	1.429	0	488	2487267	0
[	Co	59	4.589	ug/L	0.084	1	100	54453	1
[>	Ge	72		ug/L			228614	253582	1
[	Ni	60	24.357	ug/L	0.494	2	69	52376	0
[	Ni	62	32.216	ug/L	0.747	2	90	10272	0
[	Cu	63	31.173	ug/L	0.293	0	209	145373	1
[	Cu	65	31.974	ug/L	0.343	1	124	70544	0
[	Zn	66	86.512	ug/L	0.808	0	671	129800	0
[	Zn	67	79.485	ug/L	0.691	0	127	20148	1
[	Zn	68	84.331	ug/L	0.656	0	2543	91315	2
[	As-1	75	6.271	ug/L	0.040	0	34	9152	1
[	As	75	6.532	ug/L	0.072	1	5075	14932	1
[	Se	82	0.059	ug/L	0.074	123	5	15	79
[	Se	78	0.710	ug/L	0.122	17	5176	6036	0
[	Mo	98	1.188	ug/L	0.014	1	105	6218	0
	Y	89		ug/L			221819	349664	0
	Kr	83		ug/L			55	93	9
[>	In	115		ug/L			279471	295861	0
[	Ag	107	0.270	ug/L	0.004	1	46	2513	2
[	Cd	111	0.726	ug/L	0.023	3	237	1999	2
[	Cd	114	0.304	ug/L	0.014	4	18	1746	4
[	Sb	121	0.135	ug/L	0.003	2	72	1178	2
[	Sb	123	0.135	ug/L	0.006	4	56	905	4
[	Ba	135	44.215	ug/L	0.709	1	22	90560	0
[	Ba	137	43.882	ug/L	0.921	2	38	157327	1
[>	Tb	159		ug/L			394483	398277	0
[	Tl	205	U 0.061	ug/L	0.002	3	77	1893	4
[	Pb	208	45.283	ug/L	0.552	1	785	1883290	0
[	Bi	209		ug/L			347909	341563	0
[	Th	232	0.909	ug/L	0.018	2	387	47308	1
[	U	238	0.579	ug/L	0.007	1	52	34411	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 P SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:53:22
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	746815	0
	Be	9	0.167	ug/L	0.015	9	10	135	7
	C	13		mg/L			9055	12978	1
	Cl	37		mg/L			2835631	3095917	0
>	Sc	45		ug/L			207649	255055	0
	V-1	51	35.997	ug/L	0.442	1	1125	392513	1
	V	51	35.904	ug/L	0.400	1	460	394875	1
	Cr	52	19.167	ug/L	0.052	0	3531	184718	0
	Cr	53	19.442	ug/L	0.084	0	186	21628	1
	Mn	55	349.344	ug/L	1.860	0	488	5413835	1
	Co	59	5.483	ug/L	0.020	0	100	63821	1
>	Ge	72		ug/L			228614	249472	0
	Ni	60	22.315	ug/L	0.166	0	69	47225	1
	Ni	62	27.861	ug/L	0.157	0	90	8755	0
	Cu	63	39.514	ug/L	0.202	0	209	181234	0
	Cu	65	40.130	ug/L	0.247	0	124	87079	0
	Zn	66	142.898	ug/L	1.189	0	671	210461	0
	Zn	67	130.948	ug/L	1.345	1	127	32567	0
	Zn	68	141.471	ug/L	0.334	0	2543	148816	0
	As-1	75	10.885	ug/L	0.150	1	34	15602	0
	As	75	11.204	ug/L	0.213	1	5075	21237	0
	Se	82	0.072	ug/L	0.029	39	5	17	27
	Se	78	0.593	ug/L	0.212	35	5176	5890	0
	Mo	98	3.622	ug/L	0.071	1	105	18415	1
	Y	89		ug/L			221819	335970	1
	Kr	83		ug/L			55	90	2
>	In	115		ug/L			279471	286121	1
	Ag	107	0.248	ug/L	0.008	3	46	2232	1
	Cd	111	0.710	ug/L	0.007	1	237	1896	0
	Cd	114	0.380	ug/L	0.005	1	18	2107	0
	Sb	121	0.096	ug/L	0.006	5	72	829	6
	Sb	123	0.095	ug/L	0.009	9	56	634	8
	Ba	135	36.510	ug/L	0.446	1	22	72317	0
	Ba	137	36.222	ug/L	0.819	2	38	125581	0
>	Tb	159		ug/L			394483	387441	1
	Tl	205	0.059	ug/L	0.001	2	77	1784	1
	Pb	208	60.801	ug/L	0.485	0	785	2459637	0
	Bi	209		ug/L			347909	333486	1
	Th	232	0.703	ug/L	0.007	1	387	35686	1
	U	238	0.799	ug/L	0.006	0	52	46177	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC54 Q SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 13:56:55
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	722463	0
	Be	9	0.151	ug/L	0.005	3	10	119	2
	C	13		mg/L			9055	12381	1
	Cl	37		mg/L			2835631	3089656	0
>	Sc	45		ug/L			207649	242566	0
	V-1	51	28.742	ug/L	0.329	1	1125	298326	0
	V	51	28.706	ug/L	0.244	0	460	300365	0
	Cr	52	19.969	ug/L	0.310	1	3531	182841	1
	Cr	53	20.152	ug/L	0.035	0	186	21313	0
	Mn	55	156.858	ug/L	1.342	0	488	2312079	0
	Co	59	4.594	ug/L	0.044	0	100	50874	0
>	Ge	72		ug/L			228614	234167	0
	Ni	60	23.592	ug/L	0.410	1	69	46855	1
	Ni	62	29.133	ug/L	0.317	1	90	8588	1
	Cu	63	34.913	ug/L	0.396	1	209	150330	0
	Cu	65	35.651	ug/L	0.194	0	124	72628	0
	Zn	66	82.367	ug/L	0.988	1	671	114157	0
	Zn	67	76.776	ug/L	1.393	1	127	17976	1
	Zn	68	82.623	ug/L	0.445	0	2543	82662	0
	As-1	75	6.487	ug/L	0.072	1	34	8741	0
	As	75	6.860	ug/L	0.068	0	5075	14221	0
	Se	82	0.040	ug/L	0.089	223	5	11	122
	Se	78	1.029	ug/L	0.132	12	5176	5696	1
	Mo	98	1.148	ug/L	0.022	1	105	5551	1
	Y	89		ug/L			221819	311775	0
	Kr	83		ug/L			55	81	10
>	In	115		ug/L			279471	275174	1
	Ag	107	0.148	ug/L	0.003	1	46	1297	2
	Cd	111	0.446	ug/L	0.024	5	237	1231	3
	Cd	114	0.216	ug/L	0.010	4	18	1158	3
	Sb	121	0.089	ug/L	0.003	3	72	742	3
	Sb	123	0.089	ug/L	0.007	7	56	573	7
	Ba	135	42.057	ug/L	0.927	2	22	80112	1
	Ba	137	41.734	ug/L	0.705	1	38	139163	0
>	Tb	159		ug/L			394483	372133	0
	Tl	205	U 0.054	ug/L	0.003	4	77	1564	4
	Pb	208	37.336	ug/L	0.126	0	785	1451044	0
	Bi	209		ug/L			347909	321091	1
	Th	232	0.744	ug/L	0.005	0	387	36233	0
	U	238	0.486	ug/L	0.009	1	52	26983	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 14:01:28
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	703531	1
[	Be	9	48.625	ug/L	0.505	1	10	33958	0
	C	13		mg/L			9055	6235	1
	Cl	37		mg/L			2835631	3029340	0
[>	Sc	45		ug/L			207649	208697	1
|	V-1	51	49.601	ug/L	0.253	0	1125	442122	0
|	V	51	49.710	ug/L	0.146	0	460	447178	1
|	Cr	52	49.182	ug/L	0.135	0	3531	382267	1
|	Cr	53	49.542	ug/L	0.767	1	186	44813	2
|	Mn	55	49.058	ug/L	0.484	0	488	622440	0
[	Co	59	48.834	ug/L	0.281	0	100	464268	0
[>	Ge	72		ug/L			228614	224478	0
|	Ni	60	49.478	ug/L	0.266	0	69	94134	0
|	Ni	62	49.966	ug/L	0.454	0	90	14057	0
|	Cu	63	49.975	ug/L	0.481	0	209	206200	1
|	Cu	65	49.831	ug/L	0.496	0	124	97265	0
|	Zn	66	50.256	ug/L	0.906	1	671	67028	1
|	Zn	67	50.422	ug/L	0.500	0	127	11361	1
|	Zn	68	50.262	ug/L	0.562	1	2543	49183	0
|	As-1	75	49.311	ug/L	0.009	0	34	63481	0
|	As	75	49.662	ug/L	0.123	0	5075	67601	0
|	Se	82	49.337	ug/L	0.641	1	5	7631	0
|	Se	78	50.621	ug/L	0.362	0	5176	23683	0
[	Mo	98	48.029	ug/L	0.391	0	105	218455	0
	Y	89		ug/L			221819	211502	1
	Kr	83		ug/L			55	77	4
[>	In	115		ug/L			279471	261160	0
|	Ag	107	50.559	ug/L	0.579	1	46	406928	1
|	Cd	111	50.071	ug/L	0.542	1	237	106623	0
|	Cd	114	49.951	ug/L	0.173	0	18	250432	1
|	Sb	121	49.063	ug/L	0.629	1	72	352411	1
|	Sb	123	48.632	ug/L	0.224	0	56	269941	1
|	Ba	135	48.674	ug/L	0.473	0	22	88001	0
[	Ba	137	48.437	ug/L	0.460	0	38	153298	0
[>	Tb	159		ug/L			394483	352631	0
|	Tl	205	49.858	ug/L	0.115	0	77	1307963	0
|	Pb	208	49.691	ug/L	0.328	0	785	1829719	0
|	Bi	209		ug/L			347909	302346	1
|	Th	232	50.863	ug/L	0.577	1	387	2324458	0
[	U	238	51.028	ug/L	0.291	0	52	2681383	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 14:09:01
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	710822	0
⌊	Be	9	-0.005	ug/L	0.006	135	10	7	60
	C	13		mg/L			9055	7550	0
	Cl	37		mg/L			2835631	3022747	0
⌈>	Sc	45		ug/L			207649	206624	0
|	V-1	51	-0.003	ug/L	0.003	84	1125	1092	2
|	V	51	0.022	ug/L	0.001	3	460	650	1
|	Cr	52	-0.004	ug/L	0.002	52	3531	3482	0
|	Cr	53	0.075	ug/L	0.008	11	186	252	2
|	Mn	55	-0.002	ug/L	0.005	312	488	465	13
⌊	Co	59	-0.002	ug/L	0.001	64	100	83	12
⌈>	Ge	72		ug/L			228614	223608	0
|	Ni	60	-0.005	ug/L	0.002	31	69	58	4
|	Ni	62	-0.053	ug/L	0.025	46	90	74	8
|	Cu	63	-0.007	ug/L	0.006	88	209	176	13
|	Cu	65	-0.015	ug/L	0.002	14	124	92	4
|	Zn	66	-0.266	ug/L	0.009	3	671	307	3
|	Zn	67	-0.200	ug/L	0.007	3	127	80	2
|	Zn	68	0.319	ug/L	0.101	31	2543	2782	2
|	As-1	75	0.013	ug/L	0.009	69	34	50	22
|	As	75	0.263	ug/L	0.056	21	5075	5293	0
|	Se	82	-0.006	ug/L	0.051	914	5	4	189
|	Se	78	0.904	ug/L	0.192	21	5176	5393	0
⌊	Mo	98	-0.004	ug/L	0.006	158	105	87	30
	Y	89		ug/L			221819	209015	0
	Kr	83		ug/L			55	62	8
⌈>	In	115		ug/L			279471	261599	0
|	Ag	107	0.005	ug/L	0.001	25	46	86	12
|	Cd	111	-0.007	ug/L	0.011	159	237	206	12
|	Cd	114	0.003	ug/L	0.002	46	18	34	23
|	Sb	121	0.056	ug/L	0.008	14	72	470	12
|	Sb	123	0.052	ug/L	0.011	21	56	341	17
|	Ba	135	-0.002	ug/L	0.003	142	22	16	33
⌊	Ba	137	0.001	ug/L	0.000	20	38	39	1
⌈>	Tb	159		ug/L			394483	351182	0
|	Tl	205	0.003	ug/L	0.001	32	77	146	17
|	Pb	208	0.007	ug/L	0.001	13	785	949	4
|	Bi	209		ug/L			347909	309049	1
|	Th	232	0.025	ug/L	0.003	10	387	1473	8
⌊	U	238	0.010	ug/L	0.003	30	52	560	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 14:28:24
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	700126	0
⌊	**Be**	**9**	**-0.006**	ug/L	0.002	27	10	6	20
	C	**13**		mg/L			9055	9273	0
	Cl	**37**		mg/L			2835631	2979940	0
⌈>	**Sc**	**45**		ug/L			207649	203269	0
|	**V-1**	**51**	**0.018**	ug/L	0.012	64	1125	1258	8
|	**V**	**51**	**0.021**	ug/L	0.002	9	460	636	3
|	**Cr**	**52**	**0.057**	ug/L	0.010	17	3531	3881	2
|	**Cr**	**53**	**0.065**	ug/L	0.027	41	186	239	9
|	**Mn**	**55**	**0.166**	ug/L	0.006	3	488	2522	3
⌊	**Co**	**59**	**-0.007**	ug/L	0.001	10	100	36	18
⌈>	**Ge**	**72**		ug/L			228614	216165	0
|	**Ni**	**60**	**-0.007**	ug/L	0.001	11	69	52	2
|	**Ni**	**62**	**-0.070**	ug/L	0.047	67	90	67	17
|	**Cu**	**63**	**0.024**	ug/L	0.006	22	209	295	7
|	**Cu**	**65**	**0.018**	ug/L	0.005	28	124	151	5
|	**Zn**	**66**	**0.717**	ug/L	0.043	5	671	1546	3
|	**Zn**	**67**	**0.712**	ug/L	0.050	7	127	273	3
|	**Zn**	**68**	**1.561**	ug/L	0.045	2	2543	3801	1
|	**As-1**	75	**0.026**	ug/L	0.015	60	34	64	29
|	**As**	**75**	**0.428**	ug/L	0.042	9	5075	5318	0
|	**Se**	**82**	**0.030**	ug/L	0.080	264	5	9	127
|	**Se**	**78**	**1.489**	ug/L	0.150	10	5176	5421	0
⌊	**Mo**	**98**	**-0.009**	ug/L	0.004	39	105	59	27
	Y	**89**		ug/L			221819	206887	0
	Kr	**83**		ug/L			55	63	8
⌈>	**In**	**115**		ug/L			279471	253836	1
|	**Ag**	**107**	**-0.002**	ug/L	0.001	39	46	29	17
|	**Cd**	**111**	**-0.011**	ug/L	0.008	71	237	192	8
|	**Cd**	**114**	**0.001**	ug/L	0.000	15	18	19	3
|	**Sb**	**121**	**0.001**	ug/L	0.001	98	72	72	7
|	**Sb**	**123**	**0.001**	ug/L	0.002	204	56	55	15
|	**Ba**	**135**	**0.204**	ug/L	0.014	6	22	377	5
⌊	**Ba**	**137**	**0.178**	ug/L	0.015	8	38	582	7
⌈>	**Tb**	**159**		ug/L			394483	345787	1
|	**Tl**	**205**	**0.001**	ug/L	0.001	44	77	105	14
|	**Pb**	**208**	**-0.004**	ug/L	0.001	35	785	559	8
|	**Bi**	**209**		ug/L			347909	302126	1
|	**Th**	**232**	**0.003**	ug/L	0.001	45	387	486	12
⌊	**U**	**238**	**0.000**	ug/L	0.000	37	52	57	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 14:35:10
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	725883	1
[	Be	9	24.189	ug/L	0.397	1	10	17434	0
	C	13		mg/L			9055	7947	0
	Cl	37		mg/L			2835631	3012065	0
[>	Sc	45		ug/L			207649	208693	0
[	V-1	51	25.055	ug/L	0.207	0	1125	223885	0
[	V	51	25.210	ug/L	0.191	0	460	226997	0
[	Cr	52	25.096	ug/L	0.266	1	3531	196792	1
[	Cr	53	25.588	ug/L	0.160	0	186	23232	0
[	Mn	55	25.655	ug/L	0.298	1	488	325746	0
[	Co	59	25.412	ug/L	0.214	0	100	241647	0
[>	Ge	72		ug/L			228614	225003	0
[	Ni	60	25.724	ug/L	0.254	0	69	49087	0
[	Ni	62	26.236	ug/L	0.541	2	90	7440	1
[	Cu	63	26.763	ug/L	0.534	1	209	110770	1
[	Cu	65	26.550	ug/L	0.269	1	124	52000	0
[	Zn	66	82.361	ug/L	1.158	1	671	109680	0
[	Zn	67	75.378	ug/L	0.343	0	127	16961	0
[	Zn	68	82.225	ug/L	0.350	0	2543	79058	0
[	As-1	75	26.965	ug/L	0.053	0	34	34810	0
[	As	75	26.069	ug/L	0.230	0	5075	37940	0
[	Se	82	79.324	ug/L	0.647	0	5	12296	0
[	Se	78	79.889	ug/L	1.194	1	5176	34517	0
[	Mo	98	-0.006	ug/L	0.001	10	105	78	2
	Y	89		ug/L			221819	213860	1
	Kr	83		ug/L			55	66	7
[>	In	115		ug/L			279471	264644	1
[	Ag	107	25.127	ug/L	0.294	1	46	204926	0
[	Cd	111	24.853	ug/L	0.207	0	237	53742	0
[	Cd	114	25.348	ug/L	0.282	1	18	128789	1
[	Sb	121	0.011	ug/L	0.002	13	72	150	6
[	Sb	123	0.009	ug/L	0.001	7	56	102	3
[	Ba	135	24.964	ug/L	0.509	2	22	45743	1
[	Ba	137	24.753	ug/L	0.598	2	38	79388	1
[>	Tb	159		ug/L			394483	360614	1
[	Tl	205	25.878	ug/L	0.632	2	77	694164	1
[	Pb	208	25.556	ug/L	0.302	1	785	962632	0
[	Bi	209		ug/L			347909	318236	0
[	Th	232	25.418	ug/L	0.356	1	387	1187991	0
[	U	238	25.238	ug/L	0.629	2	52	1356026	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD14 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 14:41:57
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	730306	1
[	Be	9	23.899	ug/L	0.290	1	10	17333	1
	C	13		mg/L			9055	9429	0
	Cl	37		mg/L			2835631	3011407	0
[>	Sc	45		ug/L			207649	212742	0
[	V-1	51	24.705	ug/L	0.251	1	1125	225069	1
[	V	51	24.811	ug/L	0.183	0	460	227754	0
[	Cr	52	24.547	ug/L	0.318	1	3531	196310	1
[	Cr	53	24.890	ug/L	0.169	0	186	23041	0
[	Mn	55	24.683	ug/L	0.239	0	488	319519	1
[	Co	59	24.318	ug/L	0.163	0	100	235746	1
[>	Ge	72		ug/L			228614	227812	1
[	Ni	60	24.983	ug/L	0.472	1	69	48274	2
[	Ni	62	24.996	ug/L	0.148	0	90	7182	2
[	Cu	63	24.869	ug/L	0.250	1	209	104232	0
[	Cu	65	24.867	ug/L	0.238	0	124	49318	0
[	Zn	66	77.985	ug/L	0.543	0	671	105185	0
[	Zn	67	71.863	ug/L	1.230	1	127	16375	0
[	Zn	68	78.201	ug/L	0.668	0	2543	76247	0
[	As-1	75	25.620	ug/L	0.543	2	34	33487	2
[	As	75	25.015	ug/L	0.381	1	5075	37068	2
[	Se	82	75.397	ug/L	1.083	1	5	11832	1
[	Se	78	76.827	ug/L	0.139	0	5176	33808	1
[	Mo	98	-0.004	ug/L	0.004	78	105	84	19
	Y	89		ug/L			221819	217798	1
	Kr	83		ug/L			55	74	2
[>	In	115		ug/L			279471	263764	0
[	Ag	107	24.414	ug/L	0.194	0	46	198472	1
[	Cd	111	24.634	ug/L	0.195	0	237	53094	0
[	Cd	114	24.620	ug/L	0.037	0	18	124670	0
[	Sb	121	0.092	ug/L	0.004	4	72	734	2
[	Sb	123	0.094	ug/L	0.006	6	56	580	5
[	Ba	135	24.729	ug/L	0.078	0	22	45167	0
[	Ba	137	24.527	ug/L	0.409	1	38	78412	0
[>	Tb	159		ug/L			394483	367601	1
[	Tl	205	24.810	ug/L	0.225	0	77	678507	0
[	Pb	208	24.472	ug/L	0.330	1	785	939666	0
[	Bi	209		ug/L			347909	314254	0
[	Th	232	24.518	ug/L	0.160	0	387	1168224	0
[	U	238	24.599	ug/L	0.320	1	52	1347457	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD14 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 14:54:13
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\011110.cal

Pb & Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	703790	0
[	Be	9	0.012	ug/L	0.007	55	10	19	24
	C	13		mg/L			9055	8826	0
	Cl	37		mg/L			2835631	2897086	0
[>	Sc	45		ug/L			207649	241946 ✓	1
[	V-1	51	0.664	ug/L	0.019	2	1125	8155	1
[	V	51	0.706	ug/L	0.019	2	460	7893	1
[	Cr	52	M 0.339	ug/L	0.009	2	3531	7141	0
[	Cr	53	0.485	ug/L	0.017	3	186	723	2
[	Mn	55	1.694	ug/L	0.029	1	488	25470	0
[	Co	59	0.056	ug/L	0.003	5	100	730	3
[>	Ge	72		ug/L			228614	223637	0
[	Ni	60	0.869	ug/L	0.051	5	69	1712	5
[	Ni	62	0.622	ug/L	0.070	11	90	262	8
[	Cu	63	1.068	ug/L	0.037	3	209	4588	2
[	Cu	65	1.055	ug/L	0.029	2	124	2171	2
[	Zn	66	1.025	ug/L	0.034	3	671	2005	2
[	Zn	67	1.060	ug/L	0.063	5	127	360	4
[	Zn	68	1.761	ug/L	0.060	3	2543	4117	0
[	As-1	75	0.903	ug/L	0.031	3	34	1191	3
[	As	75	1.127	ug/L	0.020	1	5075	6381	0
[	Se	82	0.015	ug/L	0.078	504	5	7	161
[	Se	78	0.812	ug/L	0.117	14	5176	5361	0
[	Mo	98	0.341	ug/L	0.014	4	105	1649	4
	Y	89		ug/L			221819	213576	0
	Kr	83		ug/L			55	67	6
[>	In	115		ug/L			279471	262152	1
[	Ag	107	0.013	ug/L	0.001	4	46	147	3
[	Cd	111	0.009	ug/L	0.002	23	237	242	3
[	Cd	114	0.016	ug/L	0.001	7	18	96	5
[	Sb	121	0.165	ug/L	0.011	6	72	1256	5
[	Sb	123	0.173	ug/L	0.010	5	56	1014	4
[	Ba	135	2.123	ug/L	0.009	0	22	3872	1
[	Ba	137	2.079	ug/L	0.066	3	38	6637	2
[>	Tb	159		ug/L			394483	354450 ✓	0
[	Tl	205	0.016	ug/L	0.001	8	77	487	6
[	Pb	208	U 0.047	ug/L	0.001	1	785	2436	0
[	Bi	209		ug/L			347909	308467	1
[	Th	232	0.046	ug/L	0.004	9	387	2445	7
[	U	238	0.027	ug/L	0.003	9	52	1491	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD14 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 14:58:39
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	702165	0
	Be	9	0.001	ug/L	0.009	689	10	11	52
	C	13		mg/L			9055	9104	2
	Cl	37		mg/L			2835631	2960480	0
>	Sc	45		ug/L			207649	243625	0
	V-1	51	0.282	ug/L	0.015	5	1125	4248	3
	V	51	0.311	ug/L	0.006	1	460	3806	2
	Cr	52	0.490	ug/L	0.021	4	3531	8547	1
	Cr	53	0.577	ug/L	0.024	4	186	824	3
	Mn	55	82.181	ug/L	0.760	0	488	1216957	1
	Co	59	0.098	ug/L	0.006	6	100	1203	6
>	Ge	72		ug/L			228614	222371	0
	Ni	60	0.699	ug/L	0.011	1	69	1383	1
	Ni	62	0.376	ug/L	0.092	24	90	192	13
	Cu	63	0.439	ug/L	0.022	4	209	1997	4
	Cu	65	0.460	ug/L	0.014	2	124	1010	2
	Zn	66	4.646	ug/L	0.009	0	671	6731	0
	Zn	67	4.467	ug/L	0.249	5	127	1110	4
	Zn	68	5.682	ug/L	0.078	1	2543	7702	0
	As-1	75	1.081	ug/L	0.001	0	34	1411	0
	As	75	1.422	ug/L	0.078	5	5075	6712	0
	Se	82	0.813	ug/L	0.020	2	5	129	2
	Se	78	2.026	ug/L	0.302	14	5176	5772	1
	Mo	98	23.268	ug/L	0.404	1	105	104885	1
	Y	89		ug/L			221819	214902	0
	Kr	83		ug/L			55	63	6
>	In	115		ug/L			279471	260663	1
	Ag	107	0.005	ug/L	0.001	12	46	85	6
	Cd	111	0.004	ug/L	0.006	153	237	229	5
	Cd	114	0.036	ug/L	0.003	8	18	197	6
	Sb	121	0.075	ug/L	0.004	5	72	602	3
	Sb	123	0.071	ug/L	0.002	2	56	445	0
	Ba	135	14.538	ug/L	0.052	0	22	26249	1
	Ba	137	14.260	ug/L	0.132	0	38	45069	0
>	Tb	159		ug/L			394483	354212	0
	Tl	205	0.007	ug/L	0.000	3	77	253	2
	Pb	208	0.088	ug/L	0.000	0	785	3968	0
	Bi	209		ug/L			347909	306770	0
	Th	232	0.116	ug/L	0.002	2	387	5661	1
	U	238	0.151	ug/L	0.002	1	52	8041	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:02:19
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	698934	1
[	Be	9	0.060	ug/L	0.006	9	10	52	7
	C	13		mg/L			9055	9081	2
	Cl	37		mg/L			2835631	2792374	2
[>	Sc	45		ug/L			207649	279730	2
[	V-1	51	2.215	ug/L	0.076	3	1125	27901	1
[	V	51	2.255	ug/L	0.068	3	460	27769	1
[	Cr	52	0.840	ug/L	0.045	5	3531	13421	1
[	Cr	53	1.014	ug/L	0.026	2	186	1474	0
[	Mn	55	33.470	ug/L	0.807	2	488	569244	0
[	Co	59	0.249	ug/L	0.005	1	100	3302	0
[>	Ge	72		ug/L			228614	217320	0
[	Ni	60	1.624	ug/L	0.048	2	69	3054	2
[	Ni	62	1.620	ug/L	0.106	6	90	524	5
[	Cu	63	0.377	ug/L	0.004	1	209	1703	1
[	Cu	65	0.424	ug/L	0.036	8	124	919	7
[	Zn	66	3.006	ug/L	0.046	1	671	4481	1
[	Zn	67	4.086	ug/L	0.270	6	127	1003	5
[	Zn	68	4.948	ug/L	0.112	2	2543	6868	1
[	As-1	75	0.642	ug/L	0.025	3	34	832	3
[	As	75	0.887	ug/L	0.037	4	5075	5906	0
[	Se	82	0.311	ug/L	0.024	7	5	51	7
[	Se	78	1.232	ug/L	0.147	11	5176	5359	0
[	Mo	98	7.235	ug/L	0.090	1	105	31943	1
	Y	89		ug/L			221819	225315	0
	Kr	83		ug/L			55	67	11
[>	In	115		ug/L			279471	250220	0
[	Ag	107	0.012	ug/L	0.001	6	46	131	4
[	Cd	111	0.011	ug/L	0.015	135	237	235	13
[	Cd	114	0.020	ug/L	0.002	10	18	112	9
[	Sb	121	0.135	ug/L	0.004	2	72	992	3
[	Sb	123	0.135	ug/L	0.004	2	56	768	2
[	Ba	135	64.717	ug/L	1.105	1	22	112100	1
[	Ba	137	64.347	ug/L	1.264	1	38	195110	1
[>	Tb	159		ug/L			394483	349970	2
[	Tl	205	0.016	ug/L	0.000	2	77	481	1
[	Pb	208	0.863	ug/L	0.013	1	785	32208	1
[	Bi	209		ug/L			347909	294858	0
[	Th	232	1.513	ug/L	0.037	2	387	68964	1
[	U	238	0.764	ug/L	0.007	0	52	39893	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:09:00
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	716975	0
[	Be	9	-0.007	ug/L	0.002	26	10	5	24
	C	13		mg/L			9055	8501	0
	Cl	37		mg/L			2835631	2935725	0
[>	Sc	45		ug/L			207649	279878	0
[	V-1	51	11.570	ug/L	0.166	1	1125	139466	1
[	V	51	11.532	ug/L	0.155	1	460	139591	1
[	Cr	52	0.215	ug/L	0.016	7	3531	6978	2
[	Cr	53	0.478	ug/L	0.017	3	186	828	2
[	Mn	55	6.121	ug/L	0.026	0	488	104732	0
[	Co	59	0.085	ug/L	0.001	0	100	1216	0
[>	Ge	72		ug/L			228614	214434	0
[	Ni	60	1.492	ug/L	0.087	5	69	2773	5
[	Ni	62	0.712	ug/L	0.029	4	90	275	3
[	Cu	63	0.343	ug/L	0.006	1	209	1545	2
[	Cu	65	0.504	ug/L	0.021	4	124	1054	3
[	Zn	66	1.072	ug/L	0.031	2	671	1982	2
[	Zn	67	3.066	ug/L	0.039	1	127	772	0
[	Zn	68	2.532	ug/L	0.075	2	2543	4632	1
[	As-1	75	1.066	ug/L	0.002	0	34	1342	0
[	As	75	1.354	ug/L	0.049	3	5075	6391	0
[	Se	82	0.454	ug/L	0.011	2	5	71	2
[	Se	78	1.494	ug/L	0.158	10	5176	5379	0
[	Mo	98	2.437	ug/L	0.020	0	105	10682	1
	Y	89		ug/L			221819	207140	0
	Kr	83		ug/L			55	65	3
[>	In	115		ug/L			279471	249105	1
[	Ag	107	-0.002	ug/L	0.001	60	46	26	31
[	Cd	111	-0.017	ug/L	0.003	16	237	176	4
[	Cd	114	0.006	ug/L	0.001	14	18	46	9
[	Sb	121	0.019	ug/L	0.001	3	72	195	2
[	Sb	123	0.020	ug/L	0.002	9	56	158	5
[	Ba	135	32.777	ug/L	0.383	1	22	56531	1
[	Ba	137	32.447	ug/L	0.366	1	38	97959	1
[>	Tb	159		ug/L			394483	348762	0
[	Tl	205	0.010	ug/L	0.001	5	77	323	4
[	Pb	208	-0.002	ug/L	0.001	51	785	640	4
[	Bi	209		ug/L			347909	292517	0
[	Th	232	0.008	ug/L	0.000	6	387	693	3
[	U	238	2.081	ug/L	0.005	0	52	108215	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:15:59
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	709799	1
[	Be	9	-0.005	ug/L	0.001	17	10	7	10
	C	13		mg/L			9055	8795	1
	Cl	37		mg/L			2835631	2909013	0
[>	Sc	45		ug/L			207649	257391	0
|	V-1	51	2.140	ug/L	0.014	0	1125	24864	0
|	V	51	2.182	ug/L	0.013	0	460	24757	1
|	Cr	52	0.071	ug/L	0.004	5	3531	5055	1
|	Cr	53	0.276	ug/L	0.017	6	186	537	4
|	Mn	55	19.600	ug/L	0.056	0	488	307091	0
[	Co	59	0.169	ug/L	0.010	6	100	2106	5
[>	Ge	72		ug/L			228614	212755	0
|	Ni	60	3.992	ug/L	0.018	0	69	7257	0
|	Ni	62	3.479	ug/L	0.148	4	90	1006	4
|	Cu	63	0.386	ug/L	0.015	4	209	1703	2
|	Cu	65	0.437	ug/L	0.010	2	124	923	2
|	Zn	66	1.155	ug/L	0.073	6	671	2070	4
|	Zn	67	2.142	ug/L	0.076	3	127	571	2
|	Zn	68	2.736	ug/L	0.101	3	2543	4775	1
|	As-1	75	0.698	ug/L	0.038	5	34	883	5
|	As	75	0.950	ug/L	0.063	6	5075	5858	0
|	Se	82	1.651	ug/L	0.086	5	5	246	5
|	Se	78	2.662	ug/L	0.181	6	5176	5744	0
[	Mo	98	3.415	ug/L	0.035	1	105	14812	1
	Y	89		ug/L			221819	203516	1
	Kr	83		ug/L			55	63	2
[>	In	115		ug/L			279471	246874	0
|	Ag	107	-0.001	ug/L	0.001	108	46	34	19
|	Cd	111	-0.007	ug/L	0.008	104	237	194	7
|	Cd	114	0.015	ug/L	0.002	12	18	87	9
|	Sb	121	0.156	ug/L	0.004	2	72	1124	2
|	Sb	123	0.156	ug/L	0.009	5	56	867	5
|	Ba	135	43.040	ug/L	0.595	1	22	73560	0
[	Ba	137	42.600	ug/L	0.286	0	38	127453	0
[>	Tb	159		ug/L			394483	344300	0
|	Tl	205	0.012	ug/L	0.000	1	77	385	1
|	Pb	208	0.004	ug/L	0.001	16	785	828	2
|	Bi	209		ug/L			347909	293521	0
|	Th	232	0.005	ug/L	0.000	5	387	539	2
[	U	238	0.410	ug/L	0.002	0	52	21103	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:22:48
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	691998	0
	Be	9	-0.005	ug/L	0.005	106	10	7	44
	C	13		mg/L			9055	9229	0
	Cl	37		mg/L			2835631	2909473	0
>	Sc	45		ug/L			207649	298112	0
	V-1	51	21.075	ug/L	0.202	0	1125	269260	0
	V	51	20.984	ug/L	0.207	0	460	270001	0
	Cr	52	0.395	ug/L	0.003	0	3531	9417	0
	Cr	53	0.804	ug/L	0.026	3	186	1301	1
	Mn	55	4.943	ug/L	0.068	1	488	90221	0
	Co	59	0.136	ug/L	0.004	2	100	1985	3
>	Ge	72		ug/L			228614	205947	0
	Ni	60	2.209	ug/L	0.025	1	69	3915	0
	Ni	62	1.329	ug/L	0.114	8	90	422	6
	Cu	63	1.471	ug/L	0.018	1	209	5750	1
	Cu	65	1.585	ug/L	0.017	1	124	2946	0
	Zn	66	1.535	ug/L	0.057	3	671	2464	2
	Zn	67	4.838	ug/L	0.072	1	127	1104	1
	Zn	68	2.748	ug/L	0.122	4	2543	4634	2
	As-1	75	9.017	ug/L	0.068	0	34	10674	0
	As	75	9.428	ug/L	0.050	0	5075	15478	0
	Se	82	0.957	ug/L	0.089	9	5	140	9
	Se	78	1.935	ug/L	0.088	4	5176	5315	0
	Mo	98	3.290	ug/L	0.034	1	105	13817	1
	Y	89		ug/L			221819	199826	1
	Kr	83		ug/L			55	67	1
>	In	115		ug/L			279471	240242	0
	Ag	107	-0.000	ug/L	0.000	68	46	37	5
	Cd	111	-0.022	ug/L	0.006	29	237	161	7
	Cd	114	0.009	ug/L	0.002	20	18	56	15
	Sb	121	0.036	ug/L	0.003	7	72	299	6
	Sb	123	0.038	ug/L	0.005	12	56	242	9
	Ba	135	16.454	ug/L	0.066	0	22	27378	0
	Ba	137	16.310	ug/L	0.271	1	38	47507	1
>	Tb	159		ug/L			394483	336946	0
	Tl	205	0.015	ug/L	0.001	9	77	443	8
	Pb	208	-0.000	ug/L	0.001	824	785	668	3
	Bi	209		ug/L			347909	281858	0
	Th	232	0.002	ug/L	0.000	28	387	400	4
	U	238	2.351	ug/L	0.017	0	52	118072	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD26 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:29:37
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	685184	0
⌊	**Be**	**9**	**0.069**	ug/L	0.011	15	10	57	12
	C	**13**		mg/L			9055	9381	0
	Cl	**37**		mg/L			2835631	2802274	0
⌈>	**Sc**	**45**		ug/L			207649	251038	0
|	**V-1**	**51**	**7.604**	ug/L	0.078	1	1125	82683	0
|	**V**	**51**	**7.666**	ug/L	0.042	0	460	83418	0
|	**Cr**	**52**	**4.079**	ug/L	0.051	1	3531	42047	0
|	**Cr**	**53**	**4.394**	ug/L	0.086	1	186	4986	2
|	**Mn**	**55**	**44.677**	ug/L	0.261	0	488	681983	1
⌊	**Co**	**59**	**0.757**	ug/L	0.010	1	100	8779	1
⌈>	**Ge**	**72**		ug/L			228614	201597	1
|	**Ni**	**60**	**3.973**	ug/L	0.095	2	69	6844	2
|	**Ni**	**62**	**5.944**	ug/L	0.067	1	90	1572	0
|	**Cu**	**63**	**2.292**	ug/L	0.030	1	209	8669	1
|	**Cu**	**65**	**2.389**	ug/L	0.060	2	124	4291	1
|	**Zn**	**66**	**5.115**	ug/L	0.056	1	671	6657	0
|	**Zn**	**67**	**6.261**	ug/L	0.110	1	127	1365	1
|	**Zn**	**68**	**6.533**	ug/L	0.168	2	2543	7692	0
|	**As-1**	**75**	**3.080**	ug/L	0.020	0	34	3589	1
|	**As**	**75**	**3.370**	ug/L	0.036	1	5075	8291	0
|	**Se**	**82**	**2.185**	ug/L	0.026	1	5	307	0
|	**Se**	**78**	**3.239**	ug/L	0.147	4	5176	5633	0
⌊	**Mo**	**98**	**31.585**	ug/L	0.216	0	105	129046	0
	Y	**89**		ug/L			221819	235975	0
	Kr	**83**		ug/L			55	65	4
⌈>	**In**	**115**		ug/L			279471	234918	0
|	**Ag**	**107**	**0.013**	ug/L	0.001	9	46	134	6
|	**Cd**	**111**	**0.032**	ug/L	0.021	66	237	260	15
|	**Cd**	**114**	**0.057**	ug/L	0.004	6	18	274	6
|	**Sb**	**121**	**0.767**	ug/L	0.012	1	72	5013	1
|	**Sb**	**123**	**0.751**	ug/L	0.008	1	56	3797	1
|	**Ba**	**135**	**48.299**	ug/L	0.272	0	22	78552	0
⌊	**Ba**	**137**	**47.807**	ug/L	0.254	0	38	136106	0
⌈>	**Tb**	**159**		ug/L			394483	332339	0
|	**Tl**	**205**	**0.049**	ug/L	0.004	7	77	1271	6
|	**Pb**	**208**	**1.197**	ug/L	0.019	1	785	42185	0
|	**Bi**	**209**		ug/L			347909	277419	0
|	**Th**	**232**	**1.604**	ug/L	0.019	1	387	69420	0
⌊	**U**	**238**	**5.726**	ug/L	0.075	1	52	283620	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 15:36:27
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	678346	0
[	Be	9	47.704	ug/L	0.541	1	10	32124	0
	C	13		mg/L			9055	6148	1
	Cl	37		mg/L			2835631	2987204	1
[>	Sc	45		ug/L			207649	190961	1
[	V-1	51	48.889	ug/L	0.599	1	1125	398731	1
[	V	51	49.130	ug/L	0.395	0	460	404377	1
[	Cr	52	48.148	ug/L	0.473	0	3531	342465	0
[	Cr	53	48.942	ug/L	0.340	0	186	40504	1
[	Mn	55	48.572	ug/L	0.422	0	488	563949	1
[	Co	59	47.519	ug/L	0.112	0	100	413401	1
[>	Ge	72		ug/L			228614	203486	1
[	Ni	60	48.993	ug/L	0.163	0	69	84497	1
[	Ni	62	48.920	ug/L	0.690	1	90	12478	2
[	Cu	63	49.466	ug/L	0.643	1	209	185034	2
[	Cu	65	49.161	ug/L	0.127	0	124	86990	1
[	Zn	66	49.694	ug/L	0.288	0	671	60088	1
[	Zn	67	50.558	ug/L	0.532	1	127	10327	2
[	Zn	68	51.287	ug/L	0.264	0	2543	45449	1
[	As-1	75	49.760	ug/L	0.476	0	34	58072	1
[	As	75	50.048	ug/L	0.524	1	5075	61723	1
[	Se	82	50.331	ug/L	0.099	0	5	7057	1
[	Se	78	51.443	ug/L	0.270	0	5176	21742	1
[	Mo	98	47.760	ug/L	0.212	0	105	196913	0
	Y	89		ug/L			221819	192135	0
	Kr	83		ug/L			55	70	4
[>	In	115		ug/L			279471	239228	0
[	Ag	107	50.303	ug/L	0.315	0	46	370854	0
[	Cd	111	49.287	ug/L	0.422	0	237	96146	0
[	Cd	114	49.848	ug/L	0.645	1	18	228925	1
[	Sb	121	48.955	ug/L	0.571	1	72	322105	1
[	Sb	123	48.423	ug/L	0.673	1	56	246203	1
[	Ba	135	48.734	ug/L	0.807	1	22	80713	1
[	Ba	137	48.307	ug/L	0.726	1	38	140049	1
[>	Tb	159		ug/L			394483	327130	1
[	Tl	205	50.128	ug/L	0.212	0	77	1219947	1
[	Pb	208	49.976	ug/L	0.531	1	785	1707167	1
[	Bi	209		ug/L			347909	285894	1
[	Th	232	51.448	ug/L	0.251	0	387	2181234	1
[	U	238	51.487	ug/L	0.334	0	52	2509891	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 15:43:55
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	689482	0
	Be	9	-0.008	ug/L	0.005	59	10	5	66
	C	13		mg/L			9055	7436	1
	Cl	37		mg/L			2835631	3057036	0
>	Sc	45		ug/L			207649	194000	0
	V-1	51	0.006	ug/L	0.010	154	1125	1104	6
	V	51	0.037	ug/L	0.001	1	460	736	1
	Cr	52	0.023	ug/L	0.024	103	3531	3465	4
	Cr	53	0.119	ug/L	0.008	6	186	273	3
	Mn	55	0.009	ug/L	0.002	24	488	557	3
	Co	59	-0.002	ug/L	0.002	104	100	78	19
>	Ge	72		ug/L			228614	205582	0
	Ni	60	0.010	ug/L	0.009	96	69	79	21
	Ni	62	-0.026	ug/L	0.023	89	90	75	7
	Cu	63	0.021	ug/L	0.002	8	209	267	3
	Cu	65	0.014	ug/L	0.006	42	124	137	7
	Zn	66	-0.060	ug/L	0.006	10	671	531	1
	Zn	67	-0.010	ug/L	0.024	231	127	112	3
	Zn	68	0.725	ug/L	0.035	4	2543	2904	0
	As-1	75	0.025	ug/L	0.020	80	34	60	39
	As	75	0.352	ug/L	0.055	15	5075	4970	0
	Se	82	-0.007	ug/L	0.061	854	5	3	239
	Se	78	1.208	ug/L	0.125	10	5176	5061	0
	Mo	98	-0.004	ug/L	0.001	25	105	77	5
	Y	89		ug/L			221819	194585	0
	Kr	83		ug/L			55	63	10
>	In	115		ug/L			279471	237235	0
	Ag	107	0.002	ug/L	0.002	96	46	54	26
	Cd	111	-0.003	ug/L	0.001	48	237	196	1
	Cd	114	0.002	ug/L	0.001	37	18	23	11
	Sb	121	0.050	ug/L	0.008	16	72	387	14
	Sb	123	0.052	ug/L	0.006	11	56	309	10
	Ba	135	0.022	ug/L	0.005	23	22	55	15
	Ba	137	0.017	ug/L	0.001	7	38	81	4
>	Tb	159		ug/L			394483	325894	0
	Tl	205	0.003	ug/L	0.001	42	77	147	24
	Pb	208	0.013	ug/L	0.002	14	785	1081	6
	Bi	209		ug/L			347909	284893	1
	Th	232	0.024	ug/L	0.003	11	387	1353	8
	U	238	0.009	ug/L	0.002	25	52	488	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:54:49
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	712095	0
[	Be	9	-0.008	ug/L	0.001	12	10	5	13
	C	13		mg/L			9055	7560	1
	Cl	37		mg/L			2835631	3014856	0
[>	Sc	45		ug/L			207649	200132	0
[	V-1	51	-0.001	ug/L	0.006	424	1125	1073	3
[	V	51	0.031	ug/L	0.002	5	460	714	1
[	Cr	52	0.012	ug/L	0.007	56	3531	3490	0
[	Cr	53	0.116	ug/L	0.016	13	186	279	4
[	Mn	55	0.169	ug/L	0.004	2	488	2521	1
[	Co	59	-0.006	ug/L	0.001	10	100	46	11
[>	Ge	72		ug/L			228614	209988	0
[	Ni	60	-0.000	ug/L	0.004	1040	69	62	10
[	Ni	62	-0.050	ug/L	0.042	83	90	70	16
[	Cu	63	0.047	ug/L	0.002	5	209	373	2
[	Cu	65	0.049	ug/L	0.010	19	124	204	8
[	Zn	66	1.054	ug/L	0.023	2	671	1918	2
[	Zn	67	0.970	ug/L	0.054	5	127	319	3
[	Zn	68	1.720	ug/L	0.066	3	2543	3831	1
[	As-1	75	0.018	ug/L	0.004	21	34	53	7
[	As	75	0.281	ug/L	0.014	4	5075	4993	0
[	Se	82	-0.028	ug/L	0.026	92	5	0	558
[	Se	78	0.987	ug/L	0.047	4	5176	5094	0
[	Mo	98	-0.013	ug/L	0.000	3	105	39	4
	Y	89		ug/L			221819	200708	0
	Kr	83		ug/L			55	66	8
[>	In	115		ug/L			279471	245386	0
[	Ag	107	-0.002	ug/L	0.001	52	46	25	31
[	Cd	111	-0.009	ug/L	0.007	77	237	189	6
[	Cd	114	0.001	ug/L	0.000	51	18	20	11
[	Sb	121	0.010	ug/L	0.003	26	72	132	13
[	Sb	123	0.009	ug/L	0.001	11	56	95	6
[	Ba	135	0.152	ug/L	0.022	14	22	277	12
[	Ba	137	0.152	ug/L	0.010	6	38	485	6
[>	Tb	159		ug/L			394483	337561	0
[	Tl	205	0.002	ug/L	0.001	31	77	114	13
[	Pb	208	-0.001	ug/L	0.001	60	785	636	3
[	Bi	209		ug/L			347909	300787	0
[	Th	232	0.009	ug/L	0.001	14	387	744	7
[	U	238	0.002	ug/L	0.000	16	52	125	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 15:58:28
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			679421	707143	0
[	**Be**	**9**	**-0.005**	ug/L	0.001	18	10	7	10
	C	**13**		mg/L			9055	7624	1
	Cl	**37**		mg/L			2835631	3026245	0
[>	**Sc**	**45**		ug/L			207649	201316	0
[	**V-1**	**51**	**0.013**	ug/L	0.003	18	1125	1206	1
[	**V**	**51**	**0.036**	ug/L	0.003	9	460	759	4
[	**Cr**	**52**	**0.039**	ug/L	0.005	13	3531	3713	1
[	**Cr**	**53**	**0.111**	ug/L	0.021	18	186	276	7
[	**Mn**	**55**	**0.161**	ug/L	0.004	2	488	2444	1
[	**Co**	**59**	**-0.005**	ug/L	0.001	17	100	49	18
[>	**Ge**	**72**		ug/L			228614	211888	0
[	**Ni**	**60**	**-0.006**	ug/L	0.008	142	69	53	26
[	**Ni**	**62**	**-0.044**	ug/L	0.038	86	90	72	13
[	**Cu**	**63**	**0.043**	ug/L	0.007	17	209	359	8
[	**Cu**	**65**	**0.030**	ug/L	0.005	17	124	171	5
[	**Zn**	**66**	**0.649**	ug/L	0.014	2	671	1430	0
[	**Zn**	**67**	**0.548**	ug/L	0.092	16	127	233	8
[	**Zn**	**68**	**1.493**	ug/L	0.063	4	2543	3666	0
[	**As-1**	**75**	**0.030**	ug/L	0.007	22	34	68	11
[	**As**	**75**	**0.291**	ug/L	0.047	16	5075	5050	1
[	**Se**	**82**	**-0.001**	ug/L	0.020	3872	5	4	62
[	**Se**	**78**	**0.961**	ug/L	0.170	17	5176	5131	1
[	**Mo**	**98**	**-0.009**	ug/L	0.002	27	105	59	17
	Y	**89**		ug/L			221819	199166	0
	Kr	**83**		ug/L			55	61	2
[>	**In**	**115**		ug/L			279471	247237	0
[	**Ag**	**107**	**-0.002**	ug/L	0.000	15	46	23	10
[	**Cd**	**111**	**-0.011**	ug/L	0.008	73	237	186	8
[	**Cd**	**114**	**0.000**	ug/L	0.000	15	18	17	1
[	**Sb**	**121**	**0.001**	ug/L	0.000	22	72	71	1
[	**Sb**	**123**	**0.001**	ug/L	0.001	105	56	56	12
[	**Ba**	**135**	**0.191**	ug/L	0.005	2	22	346	2
[	**Ba**	**137**	**0.185**	ug/L	0.014	7	38	589	6
[>	**Tb**	**159**		ug/L			394483	334214	0
[	**Tl**	**205**	**0.001**	ug/L	0.000	16	77	94	5
[	**Pb**	**208**	**-0.007**	ug/L	0.000	5	785	434	2
[	**Bi**	**209**		ug/L			347909	295684	0
[	**Th**	**232**	**-0.000**	ug/L	0.000	291	387	323	4
[	**U**	**238**	**0.000**	ug/L	0.000	34	52	60	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:05:13
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	685161	0
[	Be	9	24.771	ug/L	0.143	0	10	16854	0
	C	13		mg/L			9055	7859	0
	Cl	37		mg/L			2835631	3053397	0
[>	Sc	45		ug/L			207649	195926	1
[	V-1	51	25.806	ug/L	0.191	0	1125	216447	1
[	V	51	25.879	ug/L	0.253	0	460	218740	0
[	Cr	52	25.491	ug/L	0.057	0	3531	187611	1
[	Cr	53	25.735	ug/L	0.309	1	186	21933	0
[	Mn	55	25.979	ug/L	0.141	0	488	309672	0
[	Co	59	25.291	ug/L	0.321	1	100	225759	0
[>	Ge	72		ug/L			228614	204193	0
[	Ni	60	26.551	ug/L	0.368	1	69	45980	1
[	Ni	62	26.657	ug/L	0.386	1	90	6859	1
[	Cu	63	27.409	ug/L	0.192	0	209	102957	1
[	Cu	65	27.274	ug/L	0.203	0	124	48477	0
[	Zn	66	84.567	ug/L	0.132	0	671	102193	0
[	Zn	67	77.915	ug/L	0.392	0	127	15907	0
[	Zn	68	85.075	ug/L	0.191	0	2543	74155	0
[	As-1	75	27.955	ug/L	0.208	0	34	32749	0
[	As	75	27.399	ug/L	0.170	0	5075	35957	0
[	Se	82	83.015	ug/L	0.156	0	5	11678	0
[	Se	78	84.962	ug/L	0.204	0	5176	33021	0
[	Mo	98	-0.010	ug/L	0.003	32	105	54	24
	Y	89		ug/L			221819	194063	0
	Kr	83		ug/L			55	65	5
[>	In	115		ug/L			279471	239228	0
[	Ag	107	26.045	ug/L	0.099	0	46	192035	0
[	Cd	111	25.911	ug/L	0.158	0	237	50643	1
[	Cd	114	26.010	ug/L	0.203	0	18	119454	0
[	Sb	121	0.012	ug/L	0.001	11	72	137	5
[	Sb	123	0.009	ug/L	0.001	15	56	94	7
[	Ba	135	26.037	ug/L	0.249	0	22	43130	0
[	Ba	137	25.902	ug/L	0.069	0	38	75111	0
[>	Tb	159		ug/L			394483	324536	0
[	Tl	205	27.211	ug/L	0.285	1	77	657010	1
[	Pb	208	27.229	ug/L	0.248	0	785	923070	1
[	Bi	209		ug/L			347909	286176	1
[	Th	232	26.631	ug/L	0.154	0	387	1120271	0
[	U	238	26.666	ug/L	0.178	0	52	1289650	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:11:59
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	711379	0
[	Be	9	23.191	ug/L	0.587	2	10	16381	1
	C	13		mg/L			9055	8278	2
	Cl	37		mg/L			2835631	3016980	0
[>	Sc	45		ug/L			207649	202304	1
[	V-1	51	24.670	ug/L	0.230	0	1125	213706	1
[	V	51	24.723	ug/L	0.186	0	460	215799	0
[	Cr	52	24.485	ug/L	0.328	1	3531	186200	1
[	Cr	53	24.660	ug/L	0.200	0	186	21709	0
[	Mn	55	24.898	ug/L	0.117	0	488	306481	1
[	Co	59	24.141	ug/L	0.287	1	100	222518	1
[>	Ge	72		ug/L			228614	208722	0
[	Ni	60	25.642	ug/L	0.228	0	69	45392	1
[	Ni	62	26.124	ug/L	0.518	1	90	6873	2
[	Cu	63	26.607	ug/L	0.072	0	209	102163	0
[	Cu	65	26.710	ug/L	0.044	0	124	48529	0
[	Zn	66	78.279	ug/L	0.523	0	671	96734	0
[	Zn	67	72.147	ug/L	0.406	0	127	15064	0
[	Zn	68	78.586	ug/L	0.173	0	2543	70195	0
[	As-1	75	26.345	ug/L	0.112	0	34	31548	0
[	As	75	25.684	ug/L	0.296	1	5075	34743	0
[	Se	82	76.590	ug/L	0.347	0	5	11013	1
[	Se	78	77.874	ug/L	0.503	0	5176	31332	0
[	Mo	98	-0.009	ug/L	0.002	23	105	58	14
	Y	89		ug/L			221819	200170	0
	Kr	83		ug/L			55	69	8
[>	In	115		ug/L			279471	244305	0
[	Ag	107	25.238	ug/L	0.401	1	46	190029	1
[	Cd	111	24.871	ug/L	0.413	1	237	49648	1
[	Cd	114	24.703	ug/L	0.138	0	18	115861	0
[	Sb	121	0.009	ug/L	0.002	27	72	123	12
[	Sb	123	0.008	ug/L	0.001	10	56	90	4
[	Ba	135	25.138	ug/L	0.228	0	22	42525	0
[	Ba	137	25.040	ug/L	0.243	0	38	74150	0
[>	Tb	159		ug/L			394483	339021	1
[	Tl	205	25.680	ug/L	0.065	0	77	647714	1
[	Pb	208	25.871	ug/L	0.247	0	785	916124	0
[	Bi	209		ug/L			347909	296691	0
[	Th	232	25.414	ug/L	0.351	1	387	1116676	0
[	U	238	25.629	ug/L	0.261	1	52	1294735	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:18:47
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	696109	1
	Be	9	-0.007	ug/L	0.002	27	10	5	24
	C	13		mg/L			9055	8251	1
	Cl	37		mg/L			2835631	3029420	0
>	Sc	45		ug/L			207649	238353	0
	V-1	51	0.138	ug/L	0.003	2	1125	2693	1
	V	51	0.184	ug/L	0.007	3	460	2419	2
	Cr	52	0.269	ug/L	0.010	3	3531	6418	2
	Cr	53	0.412	ug/L	0.016	3	186	637	1
	Mn	55	18.103	ug/L	0.211	1	488	262687	0
	Co	59	0.068	ug/L	0.002	3	100	849	2
>	Ge	72		ug/L			228614	208483	0
	Ni	60	1.449	ug/L	0.022	1	69	2621	1
	Ni	62	0.647	ug/L	0.041	6	90	250	4
	Cu	63	0.557	ug/L	0.015	2	209	2321	3
	Cu	65	0.634	ug/L	0.007	1	124	1261	1
	Zn	66	1.966	ug/L	0.053	2	671	3023	2
	Zn	67	2.142	ug/L	0.038	1	127	560	2
	Zn	68	3.137	ug/L	0.161	5	2543	5027	3
	As-1	75	0.139	ug/L	0.020	14	34	197	12
	As	75	0.470	ug/L	0.026	5	5075	5179	0
	Se	82	0.119	ug/L	0.054	45	5	21	36
	Se	78	1.333	ug/L	0.014	1	5176	5175	0
	Mo	98	0.682	ug/L	0.005	0	105	2977	0
	Y	89		ug/L			221819	202203	0
	Kr	83		ug/L			55	61	2
>	In	115		ug/L			279471	243199	0
	Ag	107	0.002	ug/L	0.002	104	46	53	26
	Cd	111	0.023	ug/L	0.009	40	237	251	6
	Cd	114	0.018	ug/L	0.004	23	18	102	20
	Sb	121	0.034	ug/L	0.002	7	72	288	5
	Sb	123	0.032	ug/L	0.006	17	56	213	13
	Ba	135	13.969	ug/L	0.143	1	22	23532	1
	Ba	137	14.018	ug/L	0.094	0	38	41339	1
>	Tb	159		ug/L			394483	340049	0
	Tl	205	0.005	ug/L	0.001	16	77	200	11
	Pb	208	0.015	ug/L	0.000	3	785	1195	1
	Bi	209		ug/L			347909	294110	0
	Th	232	0.028	ug/L	0.007	25	387	1590	20
	U	238	0.017	ug/L	0.002	13	52	909	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:25:32
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	701818	1
	Be	9	-0.005	ug/L	0.007	142	10	7	60
	C	13		mg/L			9055	8186	2
	Cl	37		mg/L			2835631	3065850	0
>	Sc	45		ug/L			207649	223899	0
	V-1	51	0.765	ug/L	0.020	2	1125	8508	2
	V	51	0.774	ug/L	0.018	2	460	7961	2
	Cr	52	0.398	ug/L	0.009	2	3531	7095	1
	Cr	53	0.441	ug/L	0.029	6	186	626	3
	Mn	55	0.650	ug/L	0.008	1	488	9370	0
	Co	59	0.033	ug/L	0.003	9	100	447	7
>	Ge	72		ug/L			228614	209875	1
	Ni	60	0.833	ug/L	0.074	8	69	1544	7
	Ni	62	0.407	ug/L	0.092	22	90	190	13
	Cu	63	2.457	ug/L	0.034	1	209	9660	0
	Cu	65	2.454	ug/L	0.070	2	124	4587	2
	Zn	66	1.222	ug/L	0.011	0	671	2125	1
	Zn	67	1.351	ug/L	0.089	6	127	398	4
	Zn	68	2.236	ug/L	0.036	1	2543	4276	1
	As-1	75	0.177	ug/L	0.027	15	34	244	13
	As	75	0.586	ug/L	0.036	6	5075	5349	1
	Se	82	0.038	ug/L	0.073	194	5	10	104
	Se	78	1.534	ug/L	0.190	12	5176	5279	1
	Mo	98	0.343	ug/L	0.007	1	105	1556	1
	Y	89		ug/L			221819	203700	0
	Kr	83		ug/L			55	65	9
>	In	115		ug/L			279471	250352	1
	Ag	107	-0.000	ug/L	0.000	90	46	38	8
	Cd	111	0.010	ug/L	0.009	95	237	232	8
	Cd	114	0.003	ug/L	0.003	79	18	31	36
	Sb	121	0.143	ug/L	0.002	1	72	1050	2
	Sb	123	0.154	ug/L	0.013	8	56	867	6
	Ba	135	2.992	ug/L	0.042	1	22	5203	1
	Ba	137	2.953	ug/L	0.044	1	38	8991	2
>	Tb	159		ug/L			394483	342663	1
	Tl	205	0.003	ug/L	0.000	9	77	145	6
	Pb	208	0.007	ug/L	0.001	9	785	949	3
	Bi	209		ug/L			347909	297784	0
	Th	232	0.006	ug/L	0.002	28	387	622	11
	U	238	0.036	ug/L	0.001	1	52	1907	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:32:18
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	701777	0
[	Be	9	-0.007	ug/L	0.001	14	10	5	12
	C	13		mg/L			9055	8302	0
	Cl	37		mg/L			2835631	3004298	0
[>	Sc	45		ug/L			207649	242629	0
|	V-1	51	0.227	ug/L	0.009	3	1125	3663	1
|	V	51	0.277	ug/L	0.003	0	460	3433	0
|	Cr	52	0.104	ug/L	0.010	9	3531	5057	1
|	Cr	53	0.268	ug/L	0.017	6	186	497	4
|	Mn	55	12.116	ug/L	0.035	0	488	179165	0
[	Co	59	0.045	ug/L	0.001	1	100	610	1
[>	Ge	72		ug/L			228614	207515	0
|	Ni	60	0.839	ug/L	0.020	2	69	1537	1
|	Ni	62	0.439	ug/L	0.041	9	90	195	5
|	Cu	63	0.305	ug/L	0.006	1	209	1353	1
|	Cu	65	0.325	ug/L	0.016	4	124	698	4
|	Zn	66	1.025	ug/L	0.027	2	671	1861	2
|	Zn	67	1.207	ug/L	0.102	8	127	364	5
|	Zn	68	2.033	ug/L	0.109	5	2543	4054	1
|	As-1	75	0.124	ug/L	0.010	8	34	178	6
|	As	75	0.495	ug/L	0.050	10	5075	5183	0
|	Se	82	0.087	ug/L	0.012	14	5	17	10
|	Se	78	1.458	ug/L	0.146	9	5176	5193	0
[	Mo	98	0.222	ug/L	0.007	3	105	1029	2
	Y	89		ug/L			221819	201706	0
	Kr	83		ug/L			55	64	3
[>	In	115		ug/L			279471	246625	0
|	Ag	107	0.002	ug/L	0.000	16	46	56	5
|	Cd	111	0.018	ug/L	0.006	32	237	246	4
|	Cd	114	0.003	ug/L	0.001	31	18	31	15
|	Sb	121	0.007	ug/L	0.001	16	72	110	6
|	Sb	123	0.009	ug/L	0.002	22	56	94	10
|	Ba	135	11.147	ug/L	0.104	0	22	19047	1
[	Ba	137	10.956	ug/L	0.149	1	38	32769	1
[>	Tb	159		ug/L			394483	343255	0
|	Tl	205	0.004	ug/L	0.000	9	77	157	5
|	Pb	208	0.005	ug/L	0.001	27	785	875	6
|	Bi	209		ug/L			347909	297463	0
|	Th	232	0.006	ug/L	0.001	16	387	625	7
[	U	238	0.003	ug/L	0.000	3	52	185	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:39:04
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			679421	692201	0
	Be	**9**	**-0.005**	ug/L	0.004	76	10	7	36
	C	**13**		mg/L			9055	7853	1
	Cl	**37**		mg/L			2835631	2969537	0
>	**Sc**	**45**		ug/L			207649	237102	0
	V-1	**51**	**0.138**	ug/L	0.011	8	1125	2682	4
	V	**51**	**0.188**	ug/L	0.003	1	460	2448	1
	Cr	**52**	**0.035**	ug/L	0.002	5	3531	4335	0
	Cr	**53**	**0.198**	ug/L	0.031	15	186	415	7
	Mn	**55**	**22.713**	ug/L	0.133	0	488	327731	1
	Co	**59**	**0.177**	ug/L	0.002	1	100	2029	0
>	**Ge**	**72**		ug/L			228614	209086	0
	Ni	**60**	**0.860**	ug/L	0.025	2	69	1585	2
	Ni	**62**	**0.577**	ug/L	0.047	8	90	233	5
	Cu	**63**	**1.314**	ug/L	0.019	1	209	5234	1
	Cu	**65**	**1.300**	ug/L	0.029	2	124	2473	2
	Zn	**66**	**1.008**	ug/L	0.035	3	671	1853	2
	Zn	**67**	**1.235**	ug/L	0.043	3	127	373	2
	Zn	**68**	**2.043**	ug/L	0.013	0	2543	4094	0
	As-1	**75**	**0.125**	ug/L	0.005	4	34	181	3
	As	**75**	**0.380**	ug/L	0.031	8	5075	5088	0
	Se	**82**	**0.166**	ug/L	0.082	49	5	28	41
	Se	**78**	**1.078**	ug/L	0.101	9	5176	5103	0
	Mo	**98**	**0.025**	ug/L	0.007	25	105	202	13
	Y	**89**		ug/L			221819	200234	0
	Kr	**83**		ug/L			55	55	8
>	**In**	**115**		ug/L			279471	246863	0
	Ag	**107**	**-0.001**	ug/L	0.001	97	46	33	20
	Cd	**111**	**0.006**	ug/L	0.007	119	237	221	6
	Cd	**114**	**0.009**	ug/L	0.002	22	18	57	16
	Sb	**121**	**0.004**	ug/L	0.002	44	72	92	14
	Sb	**123**	**0.003**	ug/L	0.001	36	56	65	9
	Ba	**135**	**8.243**	ug/L	0.120	1	22	14103	0
	Ba	**137**	**8.203**	ug/L	0.039	0	38	24570	1
>	**Tb**	**159**		ug/L			394483	337403	1
	Tl	**205**	**0.004**	ug/L	0.001	15	77	170	8
	Pb	**208**	**0.004**	ug/L	0.001	14	785	819	1
	Bi	**209**		ug/L			347909	298381	0
	Th	**232**	**0.003**	ug/L	0.000	10	387	451	3
	U	**238**	**0.001**	ug/L	0.000	18	52	102	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:45:50
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	697322	1
⌊	Be	9	-0.004	ug/L	0.007	174	10	7	63
	C	13		mg/L			9055	7758	0
	Cl	37		mg/L			2835631	2946203	0
⌈>	Sc	45		ug/L			207649	234905	0
|	V-1	51	0.178	ug/L	0.009	4	1125	3050	2
|	V	51	0.232	ug/L	0.001	0	460	2864	0
|	Cr	52	0.241	ug/L	0.005	2	3531	6080	0
|	Cr	53	0.411	ug/L	0.023	5	186	627	4
|	Mn	55	1.661	ug/L	0.002	0	488	24250	0
⌊	Co	59	0.019	ug/L	0.002	8	100	312	5
⌈>	Ge	72		ug/L			228614	208949	0
|	Ni	60	0.544	ug/L	0.002	0	69	1025	0
|	Ni	62	0.315	ug/L	0.097	30	90	165	15
|	Cu	63	0.291	ug/L	0.008	2	209	1309	2
|	Cu	65	0.291	ug/L	0.023	7	124	641	6
|	Zn	66	6.299	ug/L	0.051	0	671	8356	0
|	Zn	67	5.721	ug/L	0.289	5	127	1303	4
|	Zn	68	7.058	ug/L	0.101	1	2543	8427	0
|	As-1	75	0.045	ug/L	0.004	8	34	85	5
|	As	75	0.394	ug/L	0.047	11	5075	5100	0
|	Se	82	0.037	ug/L	0.020	52	5	10	27
|	Se	78	1.323	ug/L	0.157	11	5176	5183	0
⌊	Mo	98	0.027	ug/L	0.001	3	105	210	2
	Y	89		ug/L			221819	199486	0
	Kr	83		ug/L			55	63	7
⌈>	In	115		ug/L			279471	248636	0
|	Ag	107	-0.002	ug/L	0.001	37	46	22	33
|	Cd	111	0.001	ug/L	0.011	1691	237	212	10
|	Cd	114	0.012	ug/L	0.001	5	18	74	3
|	Sb	121	0.009	ug/L	0.002	24	72	127	11
|	Sb	123	0.010	ug/L	0.003	28	56	103	14
|	Ba	135	4.295	ug/L	0.052	1	22	7411	0
⌊	Ba	137	4.325	ug/L	0.100	2	38	13062	1
⌈>	Tb	159		ug/L			394483	342686	0
|	Tl	205	0.003	ug/L	0.000	13	77	151	7
|	Pb	208	-0.004	ug/L	0.001	30	785	532	8
|	Bi	209		ug/L			347909	300225	0
|	Th	232	-0.001	ug/L	0.000	29	387	292	4
⌊	U	238	0.001	ug/L	0.000	8	52	73	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 16:57:02
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	696607	0
[	Be	9	-0.008	ug/L	0.002	26	10	5	26
	C	13		mg/L			9055	8107	1
	Cl	37		mg/L			2835631	2916993	0
[>	Sc	45		ug/L			207649	238590	1
|	V-1	51	0.211	ug/L	0.012	5	1125	3433	2
|	V	51	0.266	ug/L	0.007	2	460	3260	2
|	Cr	52	0.292	ug/L	0.013	4	3531	6626	1
|	Cr	53	0.465	ug/L	0.023	5	186	693	4
|	Mn	55	5.532	ug/L	0.059	1	488	80742	0
[	Co	59	0.076	ug/L	0.003	3	100	946	1
[>	Ge	72		ug/L			228614	208583	0
|	Ni	60	0.713	ug/L	0.021	2	69	1322	2
|	Ni	62	0.376	ug/L	0.028	7	90	180	3
|	Cu	63	0.183	ug/L	0.008	4	209	892	2
|	Cu	65	0.186	ug/L	0.005	2	124	450	1
|	Zn	66	1.160	ug/L	0.056	4	671	2035	2
|	Zn	67	1.145	ug/L	0.051	4	127	353	3
|	Zn	68	2.125	ug/L	0.156	7	2543	4154	2
|	As-1	75	0.065	ug/L	0.017	25	34	109	17
|	As	75	0.376	ug/L	0.025	6	5075	5071	0
|	Se	82	0.141	ug/L	0.029	20	5	24	17
|	Se	78	1.281	ug/L	0.118	9	5176	5160	1
[	Mo	98	0.012	ug/L	0.005	37	105	148	13
	Y	89		ug/L			221819	200763	1
	Kr	83		ug/L			55	60	10
[>	In	115		ug/L			279471	247848	0
|	Ag	107	-0.002	ug/L	0.001	25	46	23	18
|	Cd	111	0.007	ug/L	0.009	128	237	224	7
|	Cd	114	0.007	ug/L	0.003	37	18	50	24
|	Sb	121	0.002	ug/L	0.001	38	72	75	5
|	Sb	123	0.002	ug/L	0.002	84	56	61	16
|	Ba	135	4.439	ug/L	0.126	2	22	7634	2
[	Ba	137	4.424	ug/L	0.044	0	38	13317	0
[>	Tb	159		ug/L			394483	341985	0
|	Tl	205	0.003	ug/L	0.000	6	77	155	3
|	Pb	208	-0.003	ug/L	0.001	15	785	565	3
|	Bi	209		ug/L			347909	299360	1
|	Th	232	-0.001	ug/L	0.001	88	387	296	11
[	U	238	0.001	ug/L	0.000	9	52	91	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 16:59:34
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	664796	1
[	Be	9	48.860	ug/L	1.387	2	10	32238	1
	C	13		mg/L			9055	6132	1
	Cl	37		mg/L			2835631	3197207	2
[>	Sc	45		ug/L			207649	196511	1
[	V-1	51	49.149	ug/L	0.256	0	1125	412521	0
[	V	51	49.161	ug/L	0.073	0	460	416423	1
[	Cr	52	48.809	ug/L	0.635	1	3531	357205	0
[	Cr	53	48.859	ug/L	0.326	0	186	41612	1
[	Mn	55	48.547	ug/L	0.199	0	488	580025	0
[	Co	59	48.163	ug/L	0.473	0	100	431160	1
[>	Ge	72		ug/L			228614	211946	0
[	Ni	60	49.080	ug/L	0.292	0	69	88166	1
[	Ni	62	48.421	ug/L	0.399	0	90	12864	0
[	Cu	63	49.169	ug/L	0.673	1	209	191559	1
[	Cu	65	49.143	ug/L	0.510	1	124	90574	1
[	Zn	66	49.762	ug/L	0.664	1	671	62674	1
[	Zn	67	50.482	ug/L	0.061	0	127	10739	0
[	Zn	68	50.469	ug/L	0.597	1	2543	46619	1
[	As-1	75	49.156	ug/L	0.186	0	34	59748	0
[	As	75	49.588	ug/L	0.259	0	5075	63737	0
[	Se	82	49.410	ug/L	0.148	0	5	7216	0
[	Se	78	50.999	ug/L	0.198	0	5176	22492	0
[	Mo	98	47.650	ug/L	0.229	0	105	204634	0
	Y	89		ug/L			221819	199506	0
	Kr	83		ug/L			55	74	7
[>	In	115		ug/L			279471	245297	0
[	Ag	107	50.752	ug/L	0.078	0	46	383660	0
[	Cd	111	49.603	ug/L	0.113	0	237	99217	0
[	Cd	114	50.142	ug/L	0.266	0	18	236114	0
[	Sb	121	49.627	ug/L	0.191	0	72	334801	0
[	Sb	123	49.096	ug/L	0.474	0	56	255954	1
[	Ba	135	48.997	ug/L	0.243	0	22	83209	1
[	Ba	137	48.522	ug/L	0.523	1	38	144237	0
[>	Tb	159		ug/L			394483	335325	0
[	Tl	205	50.790	ug/L	0.314	0	77	1267014	0
[	Pb	208	50.248	ug/L	0.170	0	785	1759465	0
[	Bi	209		ug/L			347909	292683	1
[	Th	232	51.737	ug/L	0.471	0	387	2248369	0
[	U	238	51.299	ug/L	0.622	1	52	2563336	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 17:07:03
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	667520	1
[	Be	9	-0.004	ug/L	0.002	47	10	7	16
	C	13		mg/L			9055	7313	0
	Cl	37		mg/L			2835631	3255938	0
[>	Sc	45		ug/L			207649	200886	1
[	V-1	51	-0.005	ug/L	0.011	214	1125	1044	7
[	V	51	0.017	ug/L	0.003	16	460	589	2
[	Cr	52	0.012	ug/L	0.012	102	3531	3503	2
[	Cr	53	0.081	ug/L	0.028	34	186	250	10
[	Mn	55	0.008	ug/L	0.002	22	488	575	3
[	Co	59	-0.002	ug/L	0.001	72	100	78	16
[>	Ge	72		ug/L			228614	213259	0
[	Ni	60	0.018	ug/L	0.012	64	69	97	21
[	Ni	62	0.035	ug/L	0.026	74	90	94	8
[	Cu	63	0.015	ug/L	0.002	17	209	252	4
[	Cu	65	0.010	ug/L	0.005	49	124	135	7
[	Zn	66	-0.054	ug/L	0.013	24	671	558	3
[	Zn	67	-0.016	ug/L	0.045	275	127	115	7
[	Zn	68	0.791	ug/L	0.030	3	2543	3070	0
[	As-1	75	0.034	ug/L	0.002	6	34	73	3
[	As	75	0.444	ug/L	0.035	7	5075	5267	1
[	Se	82	-0.046	ug/L	0.050	110	5	-1	394
[	Se	78	1.493	ug/L	0.127	8	5176	5350	1
[	Mo	98	-0.002	ug/L	0.001	55	105	88	5
	Y	89		ug/L			221819	201577	0
	Kr	83		ug/L			55	70	6
[>	In	115		ug/L			279471	249111	0
[	Ag	107	0.003	ug/L	0.000	9	46	65	3
[	Cd	111	0.008	ug/L	0.002	30	237	227	1
[	Cd	114	0.003	ug/L	0.001	33	18	33	16
[	Sb	121	0.053	ug/L	0.014	27	72	425	23
[	Sb	123	0.052	ug/L	0.010	20	56	325	17
[	Ba	135	0.019	ug/L	0.012	60	22	52	37
[	Ba	137	0.015	ug/L	0.004	23	38	79	13
[>	Tb	159		ug/L			394483	335232	0
[	Tl	205	0.004	ug/L	0.002	52	77	167	32
[	Pb	208	0.013	ug/L	0.002	13	785	1113	5
[	Bi	209		ug/L			347909	297181	1
[	Th	232	0.027	ug/L	0.002	6	387	1513	4
[	U	238	0.012	ug/L	0.006	46	52	649	42

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 MB SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:14:25
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	715324	0
[	Be	9	-0.009	ug/L	0.001	10	10	4	15
	C	13		mg/L			9055	23035	2
	Cl	37		mg/L			2835631	3216346	0
[>	Sc	45		ug/L			207649	211041	0
|	V-1	51	0.057	ug/L	0.008	14	1125	1655	4
|	V	51	0.011	ug/L	0.002	16	460	569	2
|	Cr	52	0.210	ug/L	0.007	3	3531	5223	0
|	Cr	53	0.059	ug/L	0.024	40	186	242	9
|	Mn	55	0.045	ug/L	0.003	6	488	1068	3
[	Co	59	-0.004	ug/L	0.001	20	100	59	14
[>	Ge	72		ug/L			228614	222040	0
|	Ni	60	-0.015	ug/L	0.002	14	69	39	10
|	Ni	62	-0.009	ug/L	0.036	423	90	85	11
|	Cu	63	0.091	ug/L	0.004	3	209	574	2
|	Cu	65	0.095	ug/L	0.016	16	124	304	9
|	Zn	66	2.234	ug/L	0.076	3	671	3570	2
|	Zn	67	1.947	ug/L	0.147	7	127	553	5
|	Zn	68	3.094	ug/L	0.044	1	2543	5313	1
|	As-1	75	0.024	ug/L	0.006	24	34	63	11
|	As	75	0.287	ug/L	0.040	14	5075	5287	0
|	Se	82	0.005	ug/L	0.032	629	5	5	85
|	Se	78	0.993	ug/L	0.109	10	5176	5388	0
[	Mo	98	-0.015	ug/L	0.002	13	105	33	27
	Y	89		ug/L			221819	211581	0
	Kr	83		ug/L			55	66	3
[>	In	115		ug/L			279471	258946	0
|	Ag	107	-0.000	ug/L	0.000	155	46	40	9
|	Cd	111	-0.001	ug/L	0.009	1621	237	218	7
|	Cd	114	-0.001	ug/L	0.000	43	18	12	17
|	Sb	121	0.009	ug/L	0.002	19	72	129	9
|	Sb	123	0.008	ug/L	0.001	7	56	96	3
|	Ba	135	0.634	ug/L	0.026	4	22	1157	4
[	Ba	137	0.638	ug/L	0.006	0	38	2036	1
[>	Tb	159		ug/L			394483	353945	1
|	Tl	205	0.000	ug/L	0.000	27	77	82	3
|	Pb	208	-0.010	ug/L	0.000	4	785	335	5
|	Bi	209		ug/L			347909	317063	0
|	Th	232	0.019	ug/L	0.001	6	387	1221	5
[	U	238	0.001	ug/L	0.000	19	52	120	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 MBSPK REN
Sample Dil Factor: 20
Comments: Sum 1-12-10
Sample Date/Time: Monday, January 11, 2010 17:21:04
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			679421	707999	1
[	**Be**	**9**	**23.419**	ug/L	0.145	0	10	16466	0
	C	**13**		mg/L			9055	11607	0
	Cl	**37**		mg/L			2835631	3212270	0
[>	**Sc**	**45**		ug/L			207649	209178	0
[	**V-1**	**51**	**24.026**	ug/L	0.163	0	1125	215234	0
[	**V**	**51**	**24.059**	ug/L	0.238	0	460	217150	0
[	**Cr**	**52**	**24.149**	ug/L	0.080	0	3531	189937	0
[	**Cr**	**53**	**24.249**	ug/L	0.419	1	186	22075	0
[	**Mn**	**55**	**24.226**	ug/L	0.194	0	488	308340	0
[	**Co**	**59**	**24.061**	ug/L	0.244	1	100	229330	0
[>	**Ge**	**72**		ug/L			228614	221360	0
[	**Ni**	**60**	**24.999**	ug/L	0.302	1	69	46932	0
[	**Ni**	**62**	**24.972**	ug/L	0.752	3	90	6971	2
[	**Cu**	**63**	**25.837**	ug/L	0.234	0	209	105215	0
[	**Cu**	**65**	**25.751**	ug/L	0.381	1	124	49621	0
[	**Zn**	**66**	**79.332**	ug/L	0.246	0	671	103966	0
[	**Zn**	**67**	**73.530**	ug/L	1.301	1	127	16279	0
[	**Zn**	**68**	**79.359**	ug/L	0.419	0	2543	75152	0
[	**As-1**	**75**	**25.961**	ug/L	0.189	0	34	32971	0
[	**As**	**75**	**25.216**	ug/L	0.476	1	5075	36263	0
[	**Se**	**82**	**76.678**	ug/L	0.156	0	5	11693	0
[	**Se**	**78**	**77.728**	ug/L	0.888	1	5176	33175	0
[	**Mo**	**98**	**22.625**	ug/L	0.123	0	105	101529	0
	Y	**89**		ug/L			221819	211359	0
	Kr	**83**		ug/L			55	76	3
[>	**In**	**115**		ug/L			279471	259259	1
[	**Ag**	**107**	**24.403**	ug/L	0.167	0	46	194988	0
[	**Cd**	**111**	**24.250**	ug/L	0.323	1	237	51374	0
[	**Cd**	**114**	**24.537**	ug/L	0.178	0	18	122122	0
[	**Sb**	**121**	**23.709**	ug/L	0.424	1	72	169068	0
[	**Sb**	**123**	**23.467**	ug/L	0.154	0	56	129329	0
[	**Ba**	**135**	**25.653**	ug/L	0.396	1	22	46049	0
[	**Ba**	**137**	**25.243**	ug/L	0.421	1	38	79319	0
[>	**Tb**	**159**		ug/L			394483	352802	0
[	**Tl**	**205**	**25.201**	ug/L	0.311	1	77	661444	0
[	**Pb**	**208**	**25.115**	ug/L	0.139	0	785	925609	0
[	**Bi**	**209**		ug/L			347909	316831	0
[	**Th**	**232**	**24.690**	ug/L	0.215	0	387	1129073	0
[	**U**	**238**	**24.848**	ug/L	0.086	0	52	1306373	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 ADUP SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:27:55
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	707485	1
[	Be	9	0.334	ug/L	0.016	4	10	245	3
	C	13		mg/L			9055	14327	2
	Cl	37		mg/L			2835631	3133792	0
[>	Sc	45		ug/L			207649	266272	0
[	V-1	51	42.695	ug/L	0.325	0	1125	485788	1
[	V	51	42.392	ug/L	0.334	0	460	486649	1
[	Cr	52	13.488	ug/L	0.028	0	3531	137040	0
[	Cr	53	13.507	ug/L	0.060	0	186	15760	1
[	Mn	55	213.511	ug/L	1.585	0	488	3454405	0
[	Co	59	7.298	ug/L	0.081	1	100	88631	0
[>	Ge	72		ug/L			228614	216607	0
[	Ni	60	16.706	ug/L	0.103	0	69	30713	1
[	Ni	62	26.755	ug/L	0.325	1	90	7303	1
[	Cu	63	20.203	ug/L	0.144	0	209	80552	0
[	Cu	65	21.136	ug/L	0.213	1	124	39875	0
[	Zn	66	69.662	ug/L	0.986	1	671	89404	0
[	Zn	67	68.629	ug/L	0.349	0	127	14877	0
[	Zn	68	69.284	ug/L	0.382	0	2543	64507	0
[	As-1	75	1.985	ug/L	0.033	1	34	2496	0
[	As	75	2.138	ug/L	0.056	2	5075	7410	0
[	Se	82	-0.132	ug/L	0.066	49	5	-14	65
[	Se	78	0.687	ug/L	0.086	12	5176	5148	0
[	Mo	98	0.096	ug/L	0.004	4	105	521	3
	Y	89		ug/L			221819	365686	0
	Kr	83		ug/L			55	114	6
[>	In	115		ug/L			279471	252112	1
[	Ag	107	0.173	ug/L	0.001	0	46	1383	1
[	Cd	111	0.762	ug/L	0.051	6	237	1776	4
[	Cd	114	0.088	ug/L	0.002	1	18	443	3
[	Sb	121	0.017	ug/L	0.004	21	72	183	15
[	Sb	123	0.016	ug/L	0.000	3	56	134	1
[	Ba	135	92.987	ug/L	1.717	1	22	162252	0
[	Ba	137	92.189	ug/L	1.787	1	38	281586	0
[>	Tb	159		ug/L			394483	356381	1
[	Tl	205	0.056	ug/L	0.001	1	77	1563	2
[	Pb	208	7.251	ug/L	0.054	0	785	270456	1
[	Bi	209		ug/L			347909	305307	0
[	Th	232	1.489	ug/L	0.010	0	387	69137	1
[	U	238	0.329	ug/L	0.003	0	52	17507	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 A SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:34:45
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: C:\Elandata\Caldata\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	700213	1
[	Be	9	0.226	ug/L	0.028	12	10	167	10
	C	13		mg/L			9055	15592	0
	Cl	37		mg/L			2835631	3108286	0
[>	Sc	45		ug/L			207649	235910	1
[	V-1	51	38.279	ug/L	0.344	0	1125	385968	1
[	V	51	37.990	ug/L	0.342	0	460	386397	1
[	Cr	52	10.764	ug/L	0.213	1	3531	97682	0
[	Cr	53	10.772	ug/L	0.236	2	186	11175	0
[	Mn	55	154.738	ug/L	2.988	1	488	2217773	0
[	Co	59	5.800	ug/L	0.148	2	100	62415	0
[>	Ge	72		ug/L			228614	213253	0
[	Ni	60	19.665	ug/L	0.157	0	69	35582	0
[	Ni	62	25.575	ug/L	0.226	0	90	6877	1
[	Cu	63	13.404	ug/L	0.129	0	209	52681	0
[	Cu	65	14.087	ug/L	0.093	0	124	26206	1
[	Zn	66	58.798	ug/L	0.191	0	671	74396	0
[	Zn	67	106.036	ug/L	0.087	0	127	22566	0
[	Zn	68	98.525	ug/L	0.812	0	2543	89310	0
[	As-1	75	1.720	ug/L	0.076	4	34	2134	3
[	As	75	1.875	ug/L	0.142	7	5075	6980	1
[	Se	82	0.048	ug/L	0.043	89	5	11	52
[	Se	78	0.696	ug/L	0.229	32	5176	5071	1
[	Mo	98	0.150	ug/L	0.004	2	105	744	1
	Y	89		ug/L			221819	302560	0
	Kr	83		ug/L			55	83	7
[>	In	115		ug/L			279471	245985	0
[	Ag	107	0.150	ug/L	0.002	1	46	1175	1
[	Cd	111	0.510	ug/L	0.015	2	237	1228	2
[	Cd	114	0.086	ug/L	0.003	3	18	420	3
[	Sb	121	0.009	ug/L	0.001	14	72	122	7
[	Sb	123	0.009	ug/L	0.001	14	56	96	7
[	Ba	135	2364.280	ug/L	15.865	0	22	4025402	0
[	Ba	137	2341.826	ug/L	8.627	0	38	6979553	0
[>	Tb	159		ug/L			394483	348799	0
[	Tl	205	0.118	ug/L	0.003	2	77	3122	2
[	Pb	208	5.399	ug/L	0.069	1	785	197278	1
[	Bi	209		ug/L			347909	302179	1
[	Th	232	1.421	ug/L	0.015	1	387	64556	0
[	U	238	0.217	ug/L	0.002	0	52	11345	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 ASPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:41:35
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	706115	0
	Be	9	24.422	ug/L	0.277	1	10	17124	0
	C	13		mg/L			9055	7841	2
	Cl	37		mg/L			2835631	3061536	0
>	Sc	45		ug/L			207649	258803	0
	V-1	51	61.405	ug/L	0.531	0	1125	678402	0
	V	51	61.231	ug/L	0.615	1	460	682886	0
	Cr	52	31.841	ug/L	0.148	0	3531	308447	0
	Cr	53	32.286	ug/L	0.434	1	186	36288	0
	Mn	55	246.926	ug/L	2.837	1	488	3882775	0
	Co	59	25.876	ug/L	0.168	0	100	305137	0
>	Ge	72		ug/L			228614	213153	1
	Ni	60	41.727	ug/L	0.292	0	69	75389	0
	Ni	62	50.102	ug/L	1.082	2	90	13382	1
	Cu	63	44.819	ug/L	0.478	1	209	175608	1
	Cu	65	45.499	ug/L	0.390	0	124	84335	0
	Zn	66	147.378	ug/L	0.812	0	671	185438	0
	Zn	67	140.693	ug/L	1.000	0	127	29887	0
	Zn	68	146.264	ug/L	2.465	1	2543	131361	0
	As-1	75	26.234	ug/L	0.226	0	34	32083	1
	As	75	25.407	ug/L	0.089	0	5075	35150	1
	Se	82	74.100	ug/L	0.833	1	5	10881	0
	Se	78	74.951	ug/L	0.878	1	5176	30975	0
	Mo	98	16.308	ug/L	0.296	1	105	70490	0
	Y	89		ug/L			221819	362498	0
	Kr	83		ug/L			55	112	7
>	In	115		ug/L			279471	243082	1
	Ag	107	23.645	ug/L	0.373	1	46	177120	0
	Cd	111	25.959	ug/L	0.096	0	237	51551	1
	Cd	114	25.314	ug/L	0.208	0	18	118125	0
	Sb	121	1.229	ug/L	0.024	1	72	8274	0
	Sb	123	1.220	ug/L	0.042	3	56	6348	2
	Ba	135	120.319	ug/L	2.368	1	22	202415	0
	Ba	137	119.550	ug/L	2.213	1	38	352067	0
>	Tb	159		ug/L			394483	347194	0
	Tl	205	24.651	ug/L	0.207	0	77	636733	0
	Pb	208	36.887	ug/L	0.271	0	785	1337474	0
	Bi	209		ug/L			347909	296302	0
	Th	232	26.115	ug/L	0.327	1	387	1175211	0
	U	238	25.092	ug/L	0.199	0	52	1298269	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 B SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:54:12
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	712034	0
[	Be	9	0.302	ug/L	0.020	6	10	224	6
	C	13		mg/L			9055	9382	0
	Cl	37		mg/L			2835631	3076735	0
[>	Sc	45		ug/L			207649	253375	1
[	V-1	51	42.175	ug/L	0.138	0	1125	456610	1
[	V	51	41.898	ug/L	0.152	0	460	457662	1
[	Cr	52	13.707	ug/L	0.132	0	3531	132444	1
[	Cr	53	13.788	ug/L	0.182	1	186	15302	1
[	Mn	55	222.972	ug/L	1.637	0	488	3432702	1
[	Co	59	7.582	ug/L	0.088	1	100	87617	1
[>	Ge	72		ug/L			228614	214802	0
[	Ni	60	16.958	ug/L	0.110	0	69	30915	0
[	Ni	62	24.449	ug/L	0.314	1	90	6625	1
[	Cu	63	18.799	ug/L	0.227	1	209	74347	1
[	Cu	65	19.386	ug/L	0.152	0	124	36280	1
[	Zn	66	65.652	ug/L	0.589	0	671	83600	1
[	Zn	67	64.632	ug/L	1.275	1	127	13902	2
[	Zn	68	65.624	ug/L	0.176	0	2543	60718	0
[	As-1	75	1.848	ug/L	0.021	1	34	2307	1
[	As	75	2.024	ug/L	0.062	3	5075	7211	1
[	Se	82	-0.093	ug/L	0.027	28	5	-8	44
[	Se	78	0.759	ug/L	0.151	19	5176	5130	1
[	Mo	98	0.159	ug/L	0.005	3	105	789	2
	Y	89		ug/L			221819	365868	0
	Kr	83		ug/L			55	105	4
[>	In	115		ug/L			279471	246420	0
[	Ag	107	0.155	ug/L	0.001	0	46	1218	0
[	Cd	111	0.686	ug/L	0.098	14	237	1585	12
[	Cd	114	0.085	ug/L	0.002	2	18	419	2
[	Sb	121	-0.000	ug/L	0.001	936	72	62	15
[	Sb	123	0.000	ug/L	0.002	2233	56	50	21
[	Ba	135	91.718	ug/L	0.727	0	22	156453	0
[	Ba	137	90.432	ug/L	0.412	0	38	270033	0
[>	Tb	159		ug/L			394483	350015	1
[	Tl	205	0.053	ug/L	0.001	2	77	1446	0
[	Pb	208	6.379	ug/L	0.128	1	785	233723	0
[	Bi	209		ug/L			347909	300214	0
[	Th	232	1.412	ug/L	0.049	3	387	64381	1
[	U	238	0.350	ug/L	0.006	1	52	18281	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 C SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 17:56:51
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	734540	1
[	Be	9	0.385	ug/L	0.006	1	10	292	0
	C	13		mg/L			9055	17146	1
	Cl	37		mg/L			2835631	3041643	0
[>	Sc	45		ug/L			207649	272090	1
|	V-1	51	48.991	ug/L	0.327	0	1125	569381	1
|	V	51	48.640	ug/L	0.340	0	460	570493	1
|	Cr	52	15.708	ug/L	0.122	0	3531	162326	1
|	Cr	53	15.715	ug/L	0.140	0	186	18698	2
|	Mn	55	224.961	ug/L	2.295	1	488	3718922	0
[	Co	59	8.297	ug/L	0.110	1	100	102939	0
[>	Ge	72		ug/L			228614	218714	0
|	Ni	60	19.792	ug/L	0.239	1	69	36726	0
|	Ni	62	29.144	ug/L	0.763	2	90	8026	3
|	Cu	63	23.539	ug/L	0.168	0	209	94738	1
|	Cu	65	24.126	ug/L	0.248	1	124	45945	1
|	Zn	66	78.115	ug/L	0.236	0	671	101156	0
|	Zn	67	77.454	ug/L	1.130	1	127	16938	1
|	Zn	68	78.199	ug/L	0.301	0	2543	73205	0
|	As-1	75	2.172	ug/L	0.022	1	34	2755	0
|	As	75	2.320	ug/L	0.043	1	5075	7705	0
|	Se	82	-0.162	ug/L	0.048	29	5	-19	37
|	Se	78	0.648	ug/L	0.092	14	5176	5184	0
[	Mo	98	0.126	ug/L	0.001	0	105	661	1
	Y	89		ug/L			221819	399733	1
	Kr	83		ug/L			55	118	6
[>	In	115		ug/L			279471	253249	0
|	Ag	107	0.188	ug/L	0.006	3	46	1506	3
|	Cd	111	0.851	ug/L	0.013	1	237	1967	1
|	Cd	114	0.092	ug/L	0.005	5	18	461	4
|	Sb	121	-0.001	ug/L	0.001	210	72	61	13
|	Sb	123	-0.000	ug/L	0.002	2088	56	50	21
|	Ba	135	109.560	ug/L	0.545	0	22	192066	0
[	Ba	137	107.717	ug/L	0.864	0	38	330549	0
[>	Tb	159		ug/L			394483	357562	0
|	Tl	205	0.063	ug/L	0.001	1	77	1751	0
|	Pb	208	8.419	ug/L	0.054	0	785	314953	1
|	Bi	209		ug/L			347909	306164	1
|	Th	232	1.657	ug/L	0.003	0	387	77105	1
[	U	238	0.385	ug/L	0.011	2	52	20542	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 D SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 18:02:16
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	730226	0
	Be	9	0.325	ug/L	0.015	4	10	246	4
	C	13		mg/L			9055	10000	0
	Cl	37		mg/L			2835631	3102232	0
>	Sc	45		ug/L			207649	262903	0
	V-1	51	43.725	ug/L	0.688	1	1125	491144	1
	V	51	43.464	ug/L	0.621	1	460	492609	1
	Cr	52	13.630	ug/L	0.211	1	3531	136688	1
	Cr	53	13.818	ug/L	0.076	0	186	15914	1
	Mn	55	245.746	ug/L	2.964	1	488	3925587	1
	Co	59	7.737	ug/L	0.041	0	100	92778	1
>	Ge	72		ug/L			228614	217746	1
	Ni	60	17.846	ug/L	0.005	0	69	32976	1
	Ni	62	26.130	ug/L	0.330	1	90	7171	0
	Cu	63	19.796	ug/L	0.120	0	209	79345	0
	Cu	65	20.246	ug/L	0.139	0	124	38402	0
	Zn	66	69.367	ug/L	0.826	1	671	89495	0
	Zn	67	68.768	ug/L	0.867	1	127	14986	1
	Zn	68	70.398	ug/L	0.425	0	2543	65852	1
	As-1	75	1.880	ug/L	0.028	1	34	2379	2
	As	75	2.093	ug/L	0.007	0	5075	7394	1
	Se	82	-0.130	ug/L	0.042	32	5	-14	43
	Se	78	0.877	ug/L	0.123	13	5176	5242	0
	Mo	98	0.085	ug/L	0.007	7	105	474	5
	Y	89		ug/L			221819	374508	0
	Kr	83		ug/L			55	111	1
>	In	115		ug/L			279471	248139	1
	Ag	107	0.158	ug/L	0.004	2	46	1246	3
	Cd	111	0.706	ug/L	0.026	3	237	1635	2
	Cd	114	0.086	ug/L	0.006	6	18	427	5
	Sb	121	-0.001	ug/L	0.001	191	72	59	17
	Sb	123	0.002	ug/L	0.007	289	56	62	58
	Ba	135	96.605	ug/L	0.438	0	22	165937	1
	Ba	137	96.033	ug/L	0.478	0	38	288745	0
>	Tb	159		ug/L			394483	355477	1
	Tl	205	0.054	ug/L	0.001	1	77	1497	2
	Pb	208	7.607	ug/L	0.085	1	785	282952	0
	Bi	209		ug/L			347909	306442	1
	Th	232	1.423	ug/L	0.036	2	387	65865	1
	U	238	0.327	ug/L	0.006	1	52	17383	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC75 E SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Monday, January 11, 2010 18:09:08
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	710865	1
[	Be	9	0.388	ug/L	0.018	4	10	284	3
	C	13		mg/L			9055	8067	0
	Cl	37		mg/L			2835631	3074774	0
[>	Sc	45		ug/L			207649	265129	1
[	V-1	51	47.798	ug/L	0.202	0	1125	541319	1
[	V	51	47.535	ug/L	0.168	0	460	543266	1
[	Cr	52	14.821	ug/L	0.067	0	3531	149494	0
[	Cr	53	15.101	ug/L	0.154	1	186	17515	0
[	Mn	55	247.386	ug/L	2.481	1	488	3985434	1
[	Co	59	8.791	ug/L	0.051	0	100	106285	1
[>	Ge	72		ug/L			228614	217672	1
[	Ni	60	19.916	ug/L	0.341	1	69	36779	1
[	Ni	62	28.697	ug/L	0.432	1	90	7865	2
[	Cu	63	20.807	ug/L	0.315	1	209	83354	0
[	Cu	65	21.660	ug/L	0.222	1	124	41062	1
[	Zn	66	73.288	ug/L	0.172	0	671	94492	1
[	Zn	67	72.110	ug/L	0.727	1	127	15703	1
[	Zn	68	73.433	ug/L	0.668	0	2543	68558	0
[	As-1	75	2.001	ug/L	0.035	1	34	2528	0
[	As	75	2.176	ug/L	0.065	2	5075	7491	0
[	Se	82	-0.114	ug/L	0.064	56	5	-12	79
[	Se	78	0.779	ug/L	0.143	18	5176	5206	0
[	Mo	98	0.073	ug/L	0.004	6	105	423	4
	Y	89		ug/L			221819	390263	0
	Kr	83		ug/L			55	115	6
[>	In	115		ug/L			279471	248052	1
[	Ag	107	0.151	ug/L	0.003	1	46	1198	3
[	Cd	111	0.773	ug/L	0.022	2	237	1770	3
[	Cd	114	0.089	ug/L	0.003	3	18	442	4
[	Sb	121	-0.002	ug/L	0.001	30	72	52	5
[	Sb	123	-0.001	ug/L	0.001	114	56	43	15
[	Ba	135	109.762	ug/L	0.830	0	22	188465	1
[	Ba	137	108.887	ug/L	1.577	1	38	327244	0
[>	Tb	159		ug/L			394483	353454	0
[	Tl	205	0.058	ug/L	0.002	3	77	1589	3
[	Pb	208	6.843	ug/L	0.063	0	785	253179	0
[	Bi	209		ug/L			347909	302202	0
[	Th	232	1.660	ug/L	0.007	0	387	76385	0
[	U	238	0.361	ug/L	0.001	0	52	19050	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 18:15:48
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	692229	0
[	Be	9	48.741	ug/L	0.460	0	10	33496	0
	C	13		mg/L			9055	6185	1
	Cl	37		mg/L			2835631	3187082	0
[>	Sc	45		ug/L			207649	204153	1
[	V-1	51	48.858	ug/L	0.512	1	1125	426030	1
[	V	51	49.025	ug/L	0.426	0	460	431405	1
[	Cr	52	48.372	ug/L	0.485	1	3531	367818	0
[	Cr	53	48.920	ug/L	0.297	0	186	43282	0
[	Mn	55	48.010	ug/L	0.609	1	488	595879	0
[	Co	59	47.336	ug/L	0.572	1	100	440212	0
[>	Ge	72		ug/L			228614	214653	0
[	Ni	60	49.029	ug/L	0.251	0	69	89197	0
[	Ni	62	49.930	ug/L	0.435	0	90	13433	1
[	Cu	63	50.151	ug/L	0.201	0	209	197868	0
[	Cu	65	49.635	ug/L	0.590	1	124	92651	2
[	Zn	66	50.228	ug/L	0.167	0	671	64063	1
[	Zn	67	49.687	ug/L	0.978	1	127	10707	2
[	Zn	68	50.832	ug/L	0.456	0	2543	47538	1
[	As-1	75	49.923	ug/L	0.348	0	34	61455	0
[	As	75	50.426	ug/L	0.362	0	5075	65562	0
[	Se	82	50.126	ug/L	0.037	0	5	7414	0
[	Se	78	51.942	ug/L	0.130	0	5176	23110	0
[	Mo	98	48.303	ug/L	0.519	1	105	210083	1
	Y	89		ug/L			221819	203421	1
	Kr	83		ug/L			55	73	7
[>	In	115		ug/L			279471	248666	1
[	Ag	107	50.563	ug/L	0.220	0	46	387462	1
[	Cd	111	48.931	ug/L	0.208	0	237	99215	1
[	Cd	114	49.834	ug/L	0.543	1	18	237875	1
[	Sb	121	49.211	ug/L	0.178	0	72	336562	1
[	Sb	123	48.562	ug/L	0.881	1	56	256627	1
[	Ba	135	48.643	ug/L	0.924	1	22	83725	0
[	Ba	137	47.939	ug/L	0.627	1	38	144452	0
[>	Tb	159		ug/L			394483	338408	1
[	Tl	205	50.275	ug/L	0.929	1	77	1265550	0
[	Pb	208	50.456	ug/L	0.985	1	785	1782746	1
[	Bi	209		ug/L			347909	295486	0
[	Th	232	51.600	ug/L	1.073	2	387	2262719	1
[	U	238	51.625	ug/L	0.695	1	52	2603181	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 18:23:16
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	689862	0
[	Be	9	-0.003	ug/L	0.009	273	10	8	75
	C	13		mg/L			9055	7200	0
	Cl	37		mg/L			2835631	3176771	0
[>	Sc	45		ug/L			207649	203446	1
[	V-1	51	0.010	ug/L	0.004	45	1125	1187	2
[	V	51	0.009	ug/L	0.001	15	460	527	2
[	Cr	52	0.006	ug/L	0.008	121	3531	3506	0
[	Cr	53	0.003	ug/L	0.006	197	186	185	3
[	Mn	55	0.007	ug/L	0.003	43	488	560	5
[	Co	59	-0.004	ug/L	0.001	15	100	60	10
[>	Ge	72		ug/L			228614	214510	0
[	Ni	60	0.013	ug/L	0.008	62	69	88	17
[	Ni	62	-0.049	ug/L	0.011	22	90	72	3
[	Cu	63	0.020	ug/L	0.003	15	209	274	3
[	Cu	65	0.014	ug/L	0.002	15	124	142	3
[	Zn	66	-0.086	ug/L	0.019	21	671	520	3
[	Zn	67	-0.082	ug/L	0.032	38	127	102	6
[	Zn	68	0.760	ug/L	0.106	13	2543	3061	2
[	As-1	75	0.034	ug/L	0.012	35	34	74	21
[	As	75	0.426	ug/L	0.077	18	5075	5274	1
[	Se	82	0.017	ug/L	0.014	81	5	7	28
[	Se	78	1.430	ug/L	0.265	18	5176	5358	1
[	Mo	98	-0.004	ug/L	0.005	155	105	84	28
	Y	89		ug/L			221819	200396	0
	Kr	83		ug/L			55	62	9
[>	In	115		ug/L			279471	246421	0
[	Ag	107	0.005	ug/L	0.002	36	46	77	16
[	Cd	111	-0.011	ug/L	0.008	72	237	187	7
[	Cd	114	0.002	ug/L	0.002	69	18	28	28
[	Sb	121	0.051	ug/L	0.003	6	72	406	5
[	Sb	123	0.050	ug/L	0.014	27	56	311	22
[	Ba	135	0.024	ug/L	0.005	20	22	60	14
[	Ba	137	0.021	ug/L	0.003	11	38	97	7
[>	Tb	159		ug/L			394483	334364	0
[	Tl	205	0.003	ug/L	0.000	3	77	151	2
[	Pb	208	0.013	ug/L	0.001	9	785	1127	4
[	Bi	209		ug/L			347909	299028	0
[	Th	232	0.020	ug/L	0.003	13	387	1197	9
[	U	238	0.009	ug/L	0.003	34	52	497	30

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 18:30:41
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	722152	1
[	Be	9	-0.008	ug/L	0.003	37	10	5	43
	C	13		mg/L			9055	7343	1
	Cl	37		mg/L			2835631	3133024	0
[>	Sc	45		ug/L			207649	207105	0
[	V-1	51	0.001	ug/L	0.007	638	1125	1132	5
[	V	51	0.008	ug/L	0.001	17	460	530	2
[	Cr	52	0.017	ug/L	0.011	65	3531	3651	2
[	Cr	53	0.038	ug/L	0.012	32	186	220	5
[	Mn	55	0.068	ug/L	0.002	3	488	1340	2
[	Co	59	0.001	ug/L	0.001	47	100	111	5
[>	Ge	72		ug/L			228614	215751	1
[	Ni	60	0.022	ug/L	0.009	43	69	105	15
[	Ni	62	-0.034	ug/L	0.014	41	90	76	4
[	Cu	63	1.164	ug/L	0.011	0	209	4810	1
[	Cu	65	1.161	ug/L	0.030	2	124	2292	3
[	Zn	66	0.592	ug/L	0.022	3	671	1385	2
[	Zn	67	0.491	ug/L	0.106	21	127	225	9
[	Zn	68	1.296	ug/L	0.073	5	2543	3557	0
[	As-1	75	0.022	ug/L	0.015	69	34	59	31
[	As	75	0.372	ug/L	0.043	11	5075	5240	0
[	Se	82	0.040	ug/L	0.006	15	5	10	9
[	Se	78	1.334	ug/L	0.144	10	5176	5356	0
[	Mo	98	-0.011	ug/L	0.002	19	105	50	19
	Y	89		ug/L			221819	205312	0
	Kr	83		ug/L			55	65	4
[>	In	115		ug/L			279471	251530	0
[	Ag	107	0.002	ug/L	0.001	52	46	57	15
[	Cd	111	-0.011	ug/L	0.005	42	237	191	5
[	Cd	114	0.000	ug/L	0.001	293	18	18	28
[	Sb	121	0.010	ug/L	0.002	16	72	132	7
[	Sb	123	0.009	ug/L	0.001	11	56	96	6
[	Ba	135	0.079	ug/L	0.004	5	22	156	4
[	Ba	137	0.081	ug/L	0.002	1	38	280	1
[>	Tb	159		ug/L			394483	344922	0
[	Tl	205	0.001	ug/L	0.001	106	77	84	20
[	Pb	208	0.004	ug/L	0.001	15	785	828	2
[	Bi	209		ug/L			347909	308419	1
[	Th	232	0.005	ug/L	0.001	10	387	575	4
[	U	238	0.002	ug/L	0.001	30	52	135	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 18:37:25
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	711046	0
⌊	Be	9	23.576	ug/L	0.144	0	10	16648	0
	C	13		mg/L			9055	7946	1
	Cl	37		mg/L			2835631	3132048	0
⌈>	Sc	45		ug/L			207649	203996	1
|	V-1	51	24.744	ug/L	0.141	0	1125	216148	1
|	V	51	24.751	ug/L	0.080	0	460	217861	1
|	Cr	52	24.590	ug/L	0.118	0	3531	188552	1
|	Cr	53	24.619	ug/L	0.397	1	186	21853	1
|	Mn	55	24.665	ug/L	0.352	1	488	306112	0
⌊	Co	59	24.390	ug/L	0.121	0	100	226704	1
⌈>	Ge	72		ug/L			228614	212217	0
|	Ni	60	25.770	ug/L	0.098	0	69	46381	0
|	Ni	62	25.517	ug/L	0.317	1	90	6828	1
|	Cu	63	26.490	ug/L	0.179	0	209	103423	1
|	Cu	65	26.515	ug/L	0.418	1	124	48982	1
|	Zn	66	79.485	ug/L	0.578	0	671	99862	0
|	Zn	67	73.299	ug/L	0.277	0	127	15559	0
|	Zn	68	79.095	ug/L	0.854	1	2543	71816	0
|	As-1	75	26.398	ug/L	0.392	1	34	32141	1
|	As	75	25.785	ug/L	0.179	0	5075	35446	0
|	Se	82	77.110	ug/L	1.144	1	5	11273	1
|	Se	78	78.600	ug/L	0.303	0	5176	32109	0
⌊	Mo	98	-0.005	ug/L	0.003	53	105	77	14
	Y	89		ug/L			221819	201678	0
	Kr	83		ug/L			55	72	7
⌈>	In	115		ug/L			279471	247078	1
|	Ag	107	25.016	ug/L	0.088	0	46	190499	0
|	Cd	111	24.723	ug/L	0.026	0	237	49915	1
|	Cd	114	24.837	ug/L	0.225	0	18	117805	0
|	Sb	121	0.015	ug/L	0.002	15	72	165	10
|	Sb	123	0.015	ug/L	0.002	10	56	129	6
|	Ba	135	24.973	ug/L	0.190	0	22	42725	0
⌊	Ba	137	24.612	ug/L	0.302	1	38	73708	0
⌈>	Tb	159		ug/L			394483	340991	1
|	Tl	205	25.770	ug/L	0.334	1	77	653715	0
|	Pb	208	25.879	ug/L	0.417	1	785	921735	0
|	Bi	209		ug/L			347909	303445	0
|	Th	232	25.491	ug/L	0.379	1	387	1126571	0
⌊	U	238	25.516	ug/L	0.149	0	52	1296543	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 18:44:10
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	700285	0
⌊	**Be**	**9**	**-0.004**	ug/L	0.004	92	10	7	32
	C	**13**		mg/L			9055	8058	1
	Cl	**37**		mg/L			2835631	3281545	0
⌈>	**Sc**	**45**		ug/L			207649	213394	0
|	**V-1**	**51**	**0.231**	ug/L	0.023	9	1125	3260	6
|	**V**	**51**	**0.273**	ug/L	0.009	3	460	2977	2
|	**Cr**	**52**	**0.636**	ug/L	0.018	2	3531	8635	1
|	**Cr**	**53**	**0.754**	ug/L	0.038	5	186	885	4
|	**Mn**	**55**	**13.064**	ug/L	0.184	1	488	169862	1
⌊	**Co**	**59**	**0.089**	ug/L	0.002	2	100	963	1
⌈>	**Ge**	**72**		ug/L			228614	220493	0
|	**Ni**	**60**	**1.363**	ug/L	0.020	1	69	2611	1
|	**Ni**	**62**	**1.136**	ug/L	0.037	3	90	399	2
|	**Cu**	**63**	**4.919**	ug/L	0.104	2	209	20115	1
|	**Cu**	**65**	**4.932**	ug/L	0.055	1	124	9565	1
|	**Zn**	**66**	**57.848**	ug/L	1.275	2	671	75687	2
|	**Zn**	**67**	**50.860**	ug/L	0.805	1	127	11255	1
|	**Zn**	**68**	**58.105**	ug/L	1.104	1	2543	55466	1
|	**As-1**	**75**	**0.414**	ug/L	0.011	2	34	556	2
|	**As**	**75**	**0.822**	ug/L	0.090	10	5075	5913	1
|	**Se**	**82**	**0.090**	ug/L	0.017	19	5	18	14
|	**Se**	**78**	**1.568**	ug/L	0.283	18	5176	5558	1
⌊	**Mo**	**98**	**0.652**	ug/L	0.015	2	105	3011	2
	Y	**89**		ug/L			221819	206660	0
	Kr	**83**		ug/L			55	68	1
⌈>	**In**	**115**		ug/L			279471	254126	0
|	**Ag**	**107**	**0.002**	ug/L	0.002	100	46	55	23
|	**Cd**	**111**	**0.070**	ug/L	0.002	3	237	360	1
|	**Cd**	**114**	**0.076**	ug/L	0.007	9	18	385	8
|	**Sb**	**121**	**0.767**	ug/L	0.017	2	72	5422	1
|	**Sb**	**123**	**0.768**	ug/L	0.010	1	56	4198	1
|	**Ba**	**135**	**16.404**	ug/L	0.152	0	22	28873	1
⌊	**Ba**	**137**	**16.256**	ug/L	0.164	1	38	50086	0
⌈>	**Tb**	**159**		ug/L			394483	345326	0
|	**Tl**	**205**	**0.012**	ug/L	0.001	9	77	369	7
|	**Pb**	**208**	**0.336**	ug/L	0.002	0	785	12786	0
|	**Bi**	**209**		ug/L			347909	307282	0
|	**Th**	**232**	**0.021**	ug/L	0.002	7	387	1293	5
⌊	**U**	**238**	**0.008**	ug/L	0.002	24	52	444	21

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 18:55:37
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	693810	0
[	Be	9	-0.005	ug/L	0.000	1	10	7	0
	C	13		mg/L			9055	8155	0
	Cl	37		mg/L			2835631	3156052	0
[>	Sc	45		ug/L			207649	208704	0
|	V-1	51	0.197	ug/L	0.010	5	1125	2879	2
|	V	51	0.208	ug/L	0.006	2	460	2327	1
|	Cr	52	0.254	ug/L	0.007	2	3531	5503	1
|	Cr	53	0.287	ug/L	0.025	8	186	445	5
|	Mn	55	0.837	ug/L	0.007	0	488	11105	1
[	Co	59	0.009	ug/L	0.001	5	100	191	2
[>	Ge	72		ug/L			228614	219429	0
|	Ni	60	0.306	ug/L	0.012	3	69	635	3
|	Ni	62	0.201	ug/L	0.081	40	90	142	14
|	Cu	63	1.758	ug/L	0.029	1	209	7284	1
|	Cu	65	1.788	ug/L	0.041	2	124	3526	1
|	Zn	66	7.548	ug/L	0.122	1	671	10388	1
|	Zn	67	6.659	ug/L	0.109	1	127	1573	1
|	Zn	68	8.444	ug/L	0.152	1	2543	10107	0
|	As-1	75	0.339	ug/L	0.014	4	34	458	3
|	As	75	0.768	ug/L	0.034	4	5075	5818	0
|	Se	82	0.053	ug/L	0.042	79	5	12	48
|	Se	78	1.612	ug/L	0.090	5	5176	5547	0
[	Mo	98	0.146	ug/L	0.001	0	105	752	1
	Y	89		ug/L			221819	206793	0
	Kr	83		ug/L			55	68	7
[>	In	115		ug/L			279471	254313	0
|	Ag	107	0.000	ug/L	0.001	27788	46	42	16
|	Cd	111	0.057	ug/L	0.002	2	237	334	1
|	Cd	114	0.060	ug/L	0.004	6	18	308	6
|	Sb	121	0.128	ug/L	0.002	1	72	958	0
|	Sb	123	0.123	ug/L	0.001	0	56	717	0
|	Ba	135	1.609	ug/L	0.006	0	22	2852	0
[	Ba	137	1.628	ug/L	0.051	3	38	5052	2
[>	Tb	159		ug/L			394483	348258	0
|	Tl	205	0.002	ug/L	0.001	58	77	111	23
|	Pb	208	0.106	ug/L	0.003	2	785	4559	2
|	Bi	209		ug/L			347909	306420	1
|	Th	232	0.006	ug/L	0.001	17	387	594	6
[	U	238	0.003	ug/L	0.000	10	52	183	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 18:59:11
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	679779	0
⌊	**Be**	**9**	**0.016**	ug/L	0.006	40	10	21	20
	C	**13**		mg/L			9055	8175	1
	Cl	**37**		mg/L			2835631	3151014	0
⌈>	**Sc**	**45**		ug/L			207649	219858	0
|	**V-1**	**51**	**2.938**	ug/L	0.060	2	1125	28706	1
|	**V**	**51**	**2.990**	ug/L	0.044	1	460	28796	1
|	**Cr**	**52**	**3.310**	ug/L	0.075	2	3531	30591	1
|	**Cr**	**53**	**3.466**	ug/L	0.064	1	186	3485	1
|	**Mn**	**55**	**43.438**	ug/L	0.679	1	488	580707	1
⌊	**Co**	**59**	**0.631**	ug/L	0.009	1	100	6420	1
⌈>	**Ge**	**72**		ug/L			228614	213448	1
|	**Ni**	**60**	**3.397**	ug/L	0.061	1	69	6204	0
|	**Ni**	**62**	**3.761**	ug/L	0.180	4	90	1084	5
|	**Cu**	**63**	**13.523**	ug/L	0.063	0	209	53196	1
|	**Cu**	**65**	**13.584**	ug/L	0.097	0	124	25296	0
|	**Zn**	**66**	**94.789**	ug/L	1.561	1	671	119647	0
|	**Zn**	**67**	**85.465**	ug/L	0.291	0	127	18228	1
|	**Zn**	**68**	**95.009**	ug/L	0.774	0	2543	86287	0
|	**As-1**	**75**	**0.966**	ug/L	0.017	1	34	1214	2
|	**As**	**75**	**1.437**	ug/L	0.057	3	5075	6461	0
|	**Se**	**82**	**0.090**	ug/L	0.059	65	5	18	48
|	**Se**	**78**	**1.757**	ug/L	0.221	12	5176	5446	0
⌊	**Mo**	**98**	**0.934**	ug/L	0.014	1	105	4134	2
	Y	**89**		ug/L			221819	212254	0
	Kr	**83**		ug/L			55	68	6
⌈>	**In**	**115**		ug/L			279471	249275	1
|	**Ag**	**107**	**0.024**	ug/L	0.004	15	46	222	11
|	**Cd**	**111**	**0.157**	ug/L	0.010	6	237	530	3
|	**Cd**	**114**	**0.132**	ug/L	0.002	1	18	648	1
|	**Sb**	**121**	**1.549**	ug/L	0.004	0	72	10681	0
|	**Sb**	**123**	**1.539**	ug/L	0.032	2	56	8198	1
|	**Ba**	**135**	**28.373**	ug/L	0.398	1	22	48968	0
⌊	**Ba**	**137**	**28.175**	ug/L	0.560	1	38	85120	1
⌈>	**Tb**	**159**		ug/L			394483	343134	0
|	**Tl**	**205**	**0.035**	ug/L	0.002	4	77	952	3
|	**Pb**	**208**	**10.903**	ug/L	0.112	1	785	391181	0
|	**Bi**	**209**		ug/L			347909	299607	0
|	**Th**	**232**	**0.092**	ug/L	0.002	1	387	4439	1
⌊	**U**	**238**	**0.028**	ug/L	0.001	3	52	1454	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:04:35
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	686156	0
	Be	9	-0.006	ug/L	0.006	98	10	6	57
	C	13		mg/L			9055	8248	2
	Cl	37		mg/L			2835631	3087611	0
>	Sc	45		ug/L			207649	205570	0
	V-1	51	0.645	ug/L	0.008	1	1125	6762	0
	V	51	0.653	ug/L	0.007	1	460	6236	1
	Cr	52	1.167	ug/L	0.011	0	3531	12349	0
	Cr	53	1.175	ug/L	0.036	3	186	1227	3
	Mn	55	7.976	ug/L	0.073	0	488	100087	0
	Co	59	0.099	ug/L	0.002	2	100	1024	1
>	Ge	72		ug/L			228614	214407	0
	Ni	60	0.524	ug/L	0.019	3	69	1016	3
	Ni	62	0.525	ug/L	0.009	1	90	225	1
	Cu	63	12.866	ug/L	0.176	1	209	50847	1
	Cu	65	12.911	ug/L	0.136	1	124	24156	0
	Zn	66	12.960	ug/L	0.060	0	671	16977	1
	Zn	67	11.694	ug/L	0.495	4	127	2609	4
	Zn	68	13.829	ug/L	0.184	1	2543	14655	1
	As-1	75	0.460	ug/L	0.018	3	34	598	3
	As	75	0.884	ug/L	0.038	4	5075	5824	0
	Se	82	0.005	ug/L	0.019	387	5	5	50
	Se	78	1.542	ug/L	0.152	9	5176	5395	0
	Mo	98	0.212	ug/L	0.002	0	105	1017	1
	Y	89		ug/L			221819	205511	0
	Kr	83		ug/L			55	68	5
>	In	115		ug/L			279471	249105	0
	Ag	107	0.002	ug/L	0.001	28	46	59	7
	Cd	111	0.139	ug/L	0.016	11	237	493	6
	Cd	114	0.132	ug/L	0.003	2	18	647	2
	Sb	121	0.187	ug/L	0.004	2	72	1344	1
	Sb	123	0.186	ug/L	0.004	2	56	1033	1
	Ba	135	3.033	ug/L	0.029	0	22	5249	0
	Ba	137	2.979	ug/L	0.030	1	38	9025	0
>	Tb	159		ug/L			394483	340823	1
	Tl	205	0.003	ug/L	0.000	14	77	133	7
	Pb	208	2.554	ug/L	0.037	1	785	91528	0
	Bi	209		ug/L			347909	300727	0
	Th	232	0.017	ug/L	0.001	7	387	1076	4
	U	238	0.007	ug/L	0.000	4	52	417	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:11:24
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	691739	0
[	Be	9	-0.009	ug/L	0.001	11	10	4	15
	C	13		mg/L			9055	7710	2
	Cl	37		mg/L			2835631	2938560	0
[>	Sc	45		ug/L			207649	231787	0
[	V-1	51	0.172	ug/L	0.009	5	1125	2959	2
[	V	51	0.195	ug/L	0.005	2	460	2455	1
[	Cr	52	0.456	ug/L	0.018	3	3531	7842	1
[	Cr	53	0.517	ug/L	0.013	2	186	725	1
[	Mn	55	4.439	ug/L	0.105	2	488	63052	1
[	Co	59	0.021	ug/L	0.002	10	100	334	6
[>	Ge	72		ug/L			228614	211198	0
[	Ni	60	0.644	ug/L	0.057	8	69	1215	8
[	Ni	62	0.316	ug/L	0.031	9	90	167	4
[	Cu	63	0.347	ug/L	0.011	3	209	1537	3
[	Cu	65	0.348	ug/L	0.019	5	124	753	4
[	Zn	66	3.795	ug/L	0.074	1	671	5335	2
[	Zn	67	3.498	ug/L	0.201	5	127	851	4
[	Zn	68	4.753	ug/L	0.225	4	2543	6503	2
[	As-1	75	0.037	ug/L	0.005	13	34	76	7
[	As	75	0.468	ug/L	0.005	1	5075	5243	0
[	Se	82	0.029	ug/L	0.068	237	5	8	110
[	Se	78	1.604	ug/L	0.055	3	5176	5336	0
[	Mo	98	0.012	ug/L	0.005	40	105	148	13
	Y	89		ug/L			221819	201379	0
	Kr	83		ug/L			55	65	3
[>	In	115		ug/L			279471	246069	0
[	Ag	107	-0.001	ug/L	0.001	100	46	33	20
[	Cd	111	-0.009	ug/L	0.005	57	237	189	5
[	Cd	114	0.007	ug/L	0.001	12	18	49	8
[	Sb	121	-0.001	ug/L	0.001	94	72	55	13
[	Sb	123	-0.001	ug/L	0.002	155	56	43	19
[	Ba	135	3.424	ug/L	0.023	0	22	5850	0
[	Ba	137	3.359	ug/L	0.017	0	38	10048	0
[>	Tb	159		ug/L			394483	337981	0
[	Tl	205	0.003	ug/L	0.001	45	77	130	21
[	Pb	208	0.011	ug/L	0.001	10	785	1072	4
[	Bi	209		ug/L			347909	296917	0
[	Th	232	0.003	ug/L	0.000	11	387	473	3
[	U	238	0.002	ug/L	0.000	9	52	145	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:18:02
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	691135	0
⌊	Be	9	-0.006	ug/L	0.004	66	10	6	39
	C	13		mg/L			9055	7403	1
	Cl	37		mg/L			2835631	2914493	0
⌈>	Sc	45		ug/L			207649	229301	2
⌈	V-1	51	0.182	ug/L	0.001	0	1125	3024	2
⌊	V	51	0.226	ug/L	0.003	1	460	2739	1
⌈	Cr	52	0.204	ug/L	0.004	1	3531	5627	2
⌊	Cr	53	0.343	ug/L	0.012	3	186	545	2
⌈	Mn	55	1.990	ug/L	0.060	3	488	28252	0
⌊	Co	59	0.049	ug/L	0.002	5	100	622	2
⌈>	Ge	72		ug/L			228614	206395	0
⌈	Ni	60	0.621	ug/L	0.021	3	69	1148	3
⌊	Ni	62	0.286	ug/L	0.085	29	90	155	13
⌈	Cu	63	0.458	ug/L	0.014	3	209	1922	2
⌊	Cu	65	0.452	ug/L	0.020	4	124	921	3
⌈	Zn	66	1.036	ug/L	0.032	3	671	1863	1
⌊	Zn	67	0.954	ug/L	0.073	7	127	310	5
⌈	Zn	68	2.014	ug/L	0.094	4	2543	4016	1
⌈	As-1	75	0.106	ug/L	0.015	14	34	156	12
⌊	As	75	0.542	ug/L	0.043	7	5075	5211	0
⌈	Se	82	0.070	ug/L	0.019	27	5	14	19
⌊	Se	78	1.665	ug/L	0.175	10	5176	5235	0
⌊	Mo	98	0.013	ug/L	0.004	32	105	151	11
	Y	89		ug/L			221819	197551	1
	Kr	83		ug/L			55	63	9
⌈>	In	115		ug/L			279471	243953	0
⌈	Ag	107	-0.002	ug/L	0.001	21	46	22	16
⌈	Cd	111	-0.018	ug/L	0.006	35	237	171	7
⌊	Cd	114	0.005	ug/L	0.002	42	18	41	26
⌈	Sb	121	0.005	ug/L	0.001	14	72	95	5
⌊	Sb	123	0.006	ug/L	0.002	26	56	80	9
⌈	Ba	135	3.812	ug/L	0.074	1	22	6454	1
⌊	Ba	137	3.730	ug/L	0.043	1	38	11058	0
⌈>	Tb	159		ug/L			394483	333984	1
⌈	Tl	205	0.002	ug/L	0.001	37	77	115	15
⌊	Pb	208	-0.003	ug/L	0.001	35	785	556	6
⌈	Bi	209		ug/L			347909	291866	0
⌈	Th	232	-0.002	ug/L	0.000	22	387	250	6
⌊	U	238	0.001	ug/L	0.000	39	52	95	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:24:50
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	692722	1
[	Be	9	-0.012	ug/L	0.002	15	10	2	50
	C	13		mg/L			9055	7554	1
	Cl	37		mg/L			2835631	2876049	0
[>	Sc	45		ug/L			207649	227348	1
|	V-1	51	0.174	ug/L	0.014	7	1125	2921	5
|	V	51	0.221	ug/L	0.002	0	460	2666	1
|	Cr	52	0.148	ug/L	0.001	0	3531	5104	1
|	Cr	53	0.297	ug/L	0.039	12	186	495	6
|	Mn	55	27.845	ug/L	0.369	1	488	385122	1
[	Co	59	0.169	ug/L	0.002	1	100	1858	0
[>	Ge	72		ug/L			228614	207118	0
|	Ni	60	0.798	ug/L	0.012	1	69	1462	1
|	Ni	62	0.531	ug/L	0.033	6	90	219	3
|	Cu	63	0.370	ug/L	0.015	3	209	1597	3
|	Cu	65	0.363	ug/L	0.008	2	124	766	1
|	Zn	66	1.362	ug/L	0.016	1	671	2267	0
|	Zn	67	1.252	ug/L	0.079	6	127	373	4
|	Zn	68	2.351	ug/L	0.023	0	2543	4319	0
|	As-1	75	0.065	ug/L	0.018	27	34	108	19
|	As	75	0.450	ug/L	0.094	20	5075	5121	1
|	Se	82	0.108	ug/L	0.045	42	5	20	31
|	Se	78	1.484	ug/L	0.308	20	5176	5192	1
[	Mo	98	0.042	ug/L	0.006	15	105	271	8
	Y	89		ug/L			221819	197634	1
	Kr	83		ug/L			55	57	5
[>	In	115		ug/L			279471	240409	1
|	Ag	107	-0.003	ug/L	0.001	32	46	17	40
|	Cd	111	-0.011	ug/L	0.008	72	237	181	7
|	Cd	114	0.009	ug/L	0.001	12	18	56	9
|	Sb	121	0.008	ug/L	0.001	8	72	114	4
|	Sb	123	0.007	ug/L	0.003	38	56	83	14
|	Ba	135	4.974	ug/L	0.058	1	22	8295	1
[	Ba	137	4.973	ug/L	0.036	0	38	14520	1
[>	Tb	159		ug/L			394483	333633	0
|	Tl	205	0.002	ug/L	0.000	3	77	112	1
|	Pb	208	-0.002	ug/L	0.000	18	785	595	2
|	Bi	209		ug/L			347909	292151	0
|	Th	232	-0.002	ug/L	0.001	29	387	253	9
[	U	238	0.000	ug/L	0.000	59	52	61	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QC99 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:31:38
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	709130	0
⌊	**Be**	**9**	**0.693**	ug/L	0.008	1	10	498	1
	C	**13**		mg/L			9055	8388	1
	Cl	**37**		mg/L			2835631	2520898	1
⌈>	**Sc**	**45**		ug/L			207649	465568	1
|	**V-1**	**51**	**50.674**	ug/L	1.174	2	1125	1007340	1
|	**V**	**51**	**50.534**	ug/L	1.211	2	460	1013809	1
|	**Cr**	**52**	**25.050**	ug/L	0.519	2	3531	438117	0
|	**Cr**	**53**	**25.470**	ug/L	0.607	2	186	51576	0
|	**Mn**	**55**	**463.128**	ug/L	10.275	2	488	13096794	0
⌊	**Co**	**59**	**9.951**	ug/L	0.130	1	100	211196	0
⌈>	**Ge**	**72**		ug/L			228614	211415	0
|	**Ni**	**60**	**45.972**	ug/L	0.153	0	69	82378	0
|	**Ni**	**62**	**57.913**	ug/L	0.870	1	90	15331	1
|	**Cu**	**63**	**76.465**	ug/L	0.272	0	209	297035	0
|	**Cu**	**65**	**77.718**	ug/L	0.157	0	124	142809	0
|	**Zn**	**66**	**91.720**	ug/L	0.670	0	671	114703	0
|	**Zn**	**67**	**93.711**	ug/L	1.421	1	127	19784	1
|	**Zn**	**68**	**92.799**	ug/L	0.628	0	2543	83532	0
|	**As-1**	**75**	**5.328**	ug/L	0.036	0	34	6487	0
|	**As**	**75**	**5.319**	ug/L	0.036	0	5075	11009	0
|	**Se**	**82**	**0.045**	ug/L	0.053	117	5	11	68
|	**Se**	**78**	**0.335**	ug/L	0.128	38	5176	4902	0
⌊	**Mo**	**98**	**0.420**	ug/L	0.013	3	105	1894	2
	Y	**89**		ug/L			221819	643052	0
	Kr	**83**		ug/L			55	145	2
⌈>	**In**	**115**		ug/L			279471	239080	1
|	**Ag**	**107**	**0.358**	ug/L	0.014	3	46	2677	2
|	**Cd**	**111**	**0.385**	ug/L	0.018	4	237	952	2
|	**Cd**	**114**	**0.171**	ug/L	0.005	3	18	798	2
|	**Sb**	**121**	**0.073**	ug/L	0.005	7	72	540	5
|	**Sb**	**123**	**0.069**	ug/L	0.003	3	56	399	4
|	**Ba**	**135**	**185.971**	ug/L	1.914	1	22	307737	0
⌊	**Ba**	**137**	**181.769**	ug/L	1.661	0	38	526533	0
⌈>	**Tb**	**159**		ug/L			394483	361155	0
|	**Tl**	**205**	**0.071**	ug/L	0.002	2	77	1990	2
|	**Pb**	**208**	**17.202**	ug/L	0.263	1	785	649171	0
|	**Bi**	**209**		ug/L			347909	290479	0
|	**Th**	**232**	**2.111**	ug/L	0.030	1	387	99158	0
⌊	**U**	**238**	**0.423**	ug/L	0.001	0	52	22812	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 19:38:27
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	671317	0
	Be	9	47.243	ug/L	0.618	1	10	31485	1
	C	13		mg/L			9055	6055	0
	Cl	37		mg/L			2835631	2734836	2
>	Sc	45		ug/L			207649	188791	1
	V-1	51	48.324	ug/L	0.821	1	1125	389660	1
	V	51	48.438	ug/L	0.633	1	460	394153	1
	Cr	52	47.545	ug/L	0.400	0	3531	334395	1
	Cr	53	47.933	ug/L	0.197	0	186	39223	1
	Mn	55	47.605	ug/L	0.283	0	488	546463	1
	Co	59	46.480	ug/L	0.681	1	100	399710	0
>	Ge	72		ug/L			228614	200312	1
	Ni	60	48.236	ug/L	0.528	1	69	81887	0
	Ni	62	48.447	ug/L	0.147	0	90	12164	0
	Cu	63	49.063	ug/L	0.158	0	209	180649	1
	Cu	65	48.611	ug/L	0.321	0	124	84678	1
	Zn	66	49.015	ug/L	0.360	0	671	58353	1
	Zn	67	47.700	ug/L	0.504	1	127	9596	1
	Zn	68	50.390	ug/L	0.741	1	2543	43998	2
	As-1	75	49.265	ug/L	0.070	0	34	56594	0
	As	75	49.769	ug/L	0.094	0	5075	60443	1
	Se	82	49.814	ug/L	0.384	0	5	6876	1
	Se	78	51.708	ug/L	0.123	0	5176	21490	1
	Mo	98	47.164	ug/L	0.144	0	105	191431	1
	Y	89		ug/L			221819	187125	1
	Kr	83		ug/L			55	75	4
>	In	115		ug/L			279471	228576	0
	Ag	107	50.821	ug/L	0.539	1	46	357986	1
	Cd	111	48.989	ug/L	0.413	0	237	91310	0
	Cd	114	49.885	ug/L	0.718	1	18	218888	1
	Sb	121	49.366	ug/L	0.679	1	72	310341	1
	Sb	123	48.578	ug/L	0.996	2	56	235983	1
	Ba	135	49.445	ug/L	0.351	0	22	78243	0
	Ba	137	49.007	ug/L	0.797	1	38	135746	1
>	Tb	159		ug/L			394483	317223	1
	Tl	205	49.735	ug/L	0.258	0	77	1173689	0
	Pb	208	49.932	ug/L	0.177	0	785	1654032	1
	Bi	209		ug/L			347909	275920	1
	Th	232	51.290	ug/L	0.287	0	387	2108594	0
	U	238	51.593	ug/L	0.856	1	52	2438641	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 19:45:54
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	674901	0
⌊	Be	9	-0.004	ug/L	0.003	76	10	7	28
	C	13		mg/L			9055	6827	2
	Cl	37		mg/L			2835631	2751682	0
⌈>	Sc	45		ug/L			207649	186758	0
|	V-1	51	-0.002	ug/L	0.003	179	1125	1000	1
|	V	51	0.024	ug/L	0.006	23	460	604	6
|	Cr	52	-0.002	ug/L	0.009	418	3531	3162	2
|	Cr	53	0.079	ug/L	0.013	16	186	230	4
|	Mn	55	0.018	ug/L	0.001	5	488	643	2
⌊	Co	59	-0.002	ug/L	0.001	86	100	76	15
⌈>	Ge	72		ug/L			228614	197471	0
|	Ni	60	0.009	ug/L	0.011	128	69	74	25
|	Ni	62	-0.126	ug/L	0.017	13	90	47	9
|	Cu	63	0.024	ug/L	0.004	17	209	268	5
|	Cu	65	0.009	ug/L	0.005	54	124	122	6
|	Zn	66	-0.071	ug/L	0.023	32	671	497	5
|	Zn	67	-0.011	ug/L	0.023	207	127	108	4
|	Zn	68	0.842	ug/L	0.066	7	2543	2885	2
|	As-1	75	0.030	ug/L	0.023	77	34	64	41
|	As	75	0.455	ug/L	0.028	6	5075	4889	0
|	Se	82	-0.056	ug/L	0.033	58	5	-3	143
|	Se	78	1.565	ug/L	0.075	4	5176	4977	0
⌊	Mo	98	-0.005	ug/L	0.004	84	105	70	24
	Y	89		ug/L			221819	183150	0
	Kr	83		ug/L			55	69	5
⌈>	In	115		ug/L			279471	227806	0
|	Ag	107	0.004	ug/L	0.002	51	46	68	23
|	Cd	111	-0.033	ug/L	0.004	13	237	132	5
|	Cd	114	0.002	ug/L	0.001	52	18	23	17
|	Sb	121	0.054	ug/L	0.009	17	72	400	14
|	Sb	123	0.049	ug/L	0.006	12	56	283	10
|	Ba	135	0.027	ug/L	0.006	23	22	61	16
⌊	Ba	137	0.017	ug/L	0.007	39	38	79	23
⌈>	Tb	159		ug/L			394483	311259	1
|	Tl	205	0.002	ug/L	0.000	11	77	118	4
|	Pb	208	0.012	ug/L	0.003	21	785	1012	6
|	Bi	209		ug/L			347909	277502	0
|	Th	232	0.025	ug/L	0.003	12	387	1321	8
⌊	U	238	0.009	ug/L	0.003	33	52	446	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:56:19
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			679421	701714	0
⌊	**Be**	**9**	**-0.009**	ug/L	0.002	24	10	4	31
	C	**13**		mg/L			9055	7056	1
	Cl	**37**		mg/L			2835631	2704738	0
⌈>	**Sc**	**45**		ug/L			207649	190721	0
|	**V-1**	**51**	**-0.005**	ug/L	0.004	97	1125	996	3
|	**V**	**51**	**0.018**	ug/L	0.003	17	460	572	4
|	**Cr**	**52**	**-0.003**	ug/L	0.012	410	3531	3222	2
|	**Cr**	**53**	**0.070**	ug/L	0.006	9	186	228	2
|	**Mn**	**55**	**0.071**	ug/L	0.004	5	488	1274	3
⌊	**Co**	**59**	**-0.005**	ug/L	0.001	19	100	45	21
⌈>	**Ge**	**72**		ug/L			228614	197783	0
|	**Ni**	**60**	**-0.019**	ug/L	0.001	5	69	28	6
|	**Ni**	**62**	**-0.123**	ug/L	0.025	20	90	48	12
|	**Cu**	**63**	**0.235**	ug/L	0.018	7	209	1034	6
|	**Cu**	**65**	**0.220**	ug/L	0.010	4	124	486	3
|	**Zn**	**66**	**0.452**	ug/L	0.040	8	671	1106	4
|	**Zn**	**67**	**0.349**	ug/L	0.099	28	127	179	11
|	**Zn**	**68**	**1.242**	ug/L	0.055	4	2543	3217	1
|	**As-1**	**75**	**0.019**	ug/L	0.012	62	34	51	26
|	**As**	**75**	**0.374**	ug/L	0.018	4	5075	4806	0
|	**Se**	**82**	**-0.043**	ug/L	0.055	126	5	-1	513
|	**Se**	**78**	**1.350**	ug/L	0.063	4	5176	4915	0
⌊	**Mo**	**98**	**-0.013**	ug/L	0.001	4	105	40	4
	Y	**89**		ug/L			221819	187868	0
	Kr	**83**		ug/L			55	71	8
⌈>	**In**	**115**		ug/L			279471	230478	0
|	**Ag**	**107**	**-0.000**	ug/L	0.001	198	46	35	18
|	**Cd**	**111**	**-0.032**	ug/L	0.003	10	237	134	4
|	**Cd**	**114**	**-0.001**	ug/L	0.000	21	18	8	16
|	**Sb**	**121**	**0.008**	ug/L	0.003	39	72	107	17
|	**Sb**	**123**	**0.007**	ug/L	0.003	44	56	80	18
|	**Ba**	**135**	**0.050**	ug/L	0.011	21	22	98	17
⌊	**Ba**	**137**	**0.054**	ug/L	0.002	4	38	182	2
⌈>	**Tb**	**159**		ug/L			394483	319981	0
|	**Tl**	**205**	**-0.000**	ug/L	0.000	834	77	62	13
|	**Pb**	**208**	**-0.010**	ug/L	0.000	2	785	310	1
|	**Bi**	**209**		ug/L			347909	283031	0
|	**Th**	**232**	**0.007**	ug/L	0.001	13	387	603	6
⌊	**U**	**238**	**0.001**	ug/L	0.000	34	52	103	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 19:59:58
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	695066	1
[	Be	9	22.695	ug/L	0.563	2	10	15662	0
	C	13		mg/L			9055	7475	0
	Cl	37		mg/L			2835631	2717124	0
[>	Sc	45		ug/L			207649	187183	1
[	V-1	51	24.142	ug/L	0.253	1	1125	193516	0
[	V	51	24.184	ug/L	0.298	1	460	195323	0
[	Cr	52	24.021	ug/L	0.253	1	3531	169074	0
[	Cr	53	24.162	ug/L	0.357	1	186	19683	0
[	Mn	55	24.145	ug/L	0.225	0	488	274995	0
[	Co	59	23.751	ug/L	0.378	1	100	202556	0
[>	Ge	72		ug/L			228614	196397	1
[	Ni	60	24.800	ug/L	0.794	3	69	41302	2
[	Ni	62	24.936	ug/L	0.391	1	90	6176	0
[	Cu	63	25.891	ug/L	0.064	0	209	93549	1
[	Cu	65	25.691	ug/L	0.285	1	124	43926	1
[	Zn	66	78.807	ug/L	0.258	0	671	91635	1
[	Zn	67	72.197	ug/L	1.093	1	127	14184	1
[	Zn	68	78.475	ug/L	1.190	1	2543	65952	0
[	As-1	75	26.506	ug/L	0.211	0	34	29865	0
[	As	75	25.628	ug/L	0.167	0	5075	32629	0
[	Se	82	78.328	ug/L	0.522	0	5	10597	0
[	Se	78	79.002	ug/L	0.407	0	5176	29844	0
[	Mo	98	0.004	ug/L	0.003	75	105	105	10
	Y	89		ug/L			221819	185444	0
	Kr	83		ug/L			55	68	4
[>	In	115		ug/L			279471	228066	0
[	Ag	107	24.681	ug/L	0.210	0	46	173481	0
[	Cd	111	24.445	ug/L	0.054	0	237	45559	0
[	Cd	114	24.533	ug/L	0.208	0	18	107414	0
[	Sb	121	0.012	ug/L	0.001	11	72	133	5
[	Sb	123	0.011	ug/L	0.003	26	56	96	14
[	Ba	135	24.712	ug/L	0.458	1	22	39024	1
[	Ba	137	24.421	ug/L	0.340	1	38	67508	0
[>	Tb	159		ug/L			394483	315921	0
[	Tl	205	25.159	ug/L	0.140	0	77	591324	0
[	Pb	208	25.332	ug/L	0.128	0	785	836009	0
[	Bi	209		ug/L			347909	280714	0
[	Th	232	25.019	ug/L	0.208	0	387	1024521	0
[	U	238	24.945	ug/L	0.220	0	52	1174392	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:07:05
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	677025	0
	Be	9	0.001	ug/L	0.008	568	10	11	44
	C	13		mg/L			9055	8425	1
	Cl	37		mg/L			2835631	2860183	0
>	Sc	45		ug/L			207649	193230	1
	V-1	51	0.172	ug/L	0.027	15	1125	2462	10
	V	51	0.292	ug/L	0.016	5	460	2856	6
	Cr	52	0.854	ug/L	0.018	2	3531	9372	2
	Cr	53	1.214	ug/L	0.041	3	186	1185	1
	Mn	55	16.268	ug/L	0.281	1	488	191388	0
	Co	59	0.139	ug/L	0.004	3	100	1313	3
>	Ge	72		ug/L			228614	199687	0
	Ni	60	1.656	ug/L	0.071	4	69	2860	4
	Ni	62	1.333	ug/L	0.150	11	90	410	9
	Cu	63	5.928	ug/L	0.037	0	209	21917	1
	Cu	65	5.906	ug/L	0.063	1	124	10351	1
	Zn	66	72.312	ug/L	0.448	0	671	85542	1
	Zn	67	65.366	ug/L	0.698	1	127	13069	1
	Zn	68	72.788	ug/L	0.910	1	2543	62367	1
	As-1	75	0.471	ug/L	0.016	3	34	568	3
	As	75	0.880	ug/L	0.030	3	5075	5420	0
	Se	82	0.099	ug/L	0.086	86	5	18	65
	Se	78	1.611	ug/L	0.066	4	5176	5048	0
	Mo	98	0.914	ug/L	0.025	2	105	3790	3
	Y	89		ug/L			221819	189129	1
	Kr	83		ug/L			55	66	7
>	In	115		ug/L			279471	230370	0
	Ag	107	0.001	ug/L	0.002	140	46	47	26
	Cd	111	0.070	ug/L	0.009	12	237	326	4
	Cd	114	0.100	ug/L	0.010	9	18	459	8
	Sb	121	1.139	ug/L	0.019	1	72	7275	1
	Sb	123	1.131	ug/L	0.005	0	56	5582	0
	Ba	135	23.310	ug/L	0.230	0	22	37185	0
	Ba	137	23.334	ug/L	0.187	0	38	65162	0
>	Tb	159		ug/L			394483	320209	1
	Tl	205	0.013	ug/L	0.000	3	77	373	2
	Pb	208	0.298	ug/L	0.005	1	785	10597	0
	Bi	209		ug/L			347909	280702	1
	Th	232	0.027	ug/L	0.002	7	387	1439	5
	U	238	0.008	ug/L	0.003	37	52	423	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:13:51
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	683618	1
[	Be	9	-0.011	ug/L	0.001	9	10	2	24
	C	13		mg/L			9055	8435	1
	Cl	37		mg/L			2835631	2895748	0
[>	Sc	45		ug/L			207649	196637	0
|	V-1	51	0.142	ug/L	0.019	13	1125	2257	7
|	V	51	0.309	ug/L	0.013	4	460	3049	4
|	Cr	52	0.840	ug/L	0.024	2	3531	9439	2
|	Cr	53	1.348	ug/L	0.003	0	186	1320	0
|	Mn	55	16.349	ug/L	0.110	0	488	195769	1
[	Co	59	0.141	ug/L	0.003	2	100	1356	2
[>	Ge	72		ug/L			228614	204494	0
|	Ni	60	1.604	ug/L	0.057	3	69	2839	2
|	Ni	62	1.344	ug/L	0.069	5	90	423	3
|	Cu	63	6.466	ug/L	0.013	0	209	24466	1
|	Cu	65	6.448	ug/L	0.083	1	124	11561	0
|	Zn	66	72.076	ug/L	0.089	0	671	87315	0
|	Zn	67	64.235	ug/L	0.334	0	127	13153	0
|	Zn	68	73.091	ug/L	0.689	0	2543	64124	1
|	As-1	75	0.491	ug/L	0.017	3	34	605	3
|	As	75	0.888	ug/L	0.031	3	5075	5559	0
|	Se	82	0.102	ug/L	0.052	50	5	18	38
|	Se	78	1.603	ug/L	0.160	9	5176	5166	0
[	Mo	98	0.898	ug/L	0.010	1	105	3813	0
	Y	89		ug/L			221819	193634	0
	Kr	83		ug/L			55	71	10
[>	In	115		ug/L			279471	235798	0
|	Ag	107	-0.001	ug/L	0.001	244	46	34	30
|	Cd	111	0.077	ug/L	0.017	22	237	349	10
|	Cd	114	0.098	ug/L	0.004	4	18	457	3
|	Sb	121	1.120	ug/L	0.006	0	72	7323	1
|	Sb	123	1.115	ug/L	0.016	1	56	5633	0
|	Ba	135	23.314	ug/L	0.072	0	22	38070	1
[	Ba	137	23.184	ug/L	0.099	0	38	66267	0
[>	Tb	159		ug/L			394483	327180	0
|	Tl	205	0.011	ug/L	0.000	3	77	336	2
|	Pb	208	0.300	ug/L	0.004	1	785	10893	1
|	Bi	209		ug/L			347909	286152	0
|	Th	232	0.008	ug/L	0.001	14	387	659	8
[	U	238	0.003	ug/L	0.000	14	52	179	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:20:41
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	686446	1
[	Be	9	24.007	ug/L	0.504	2	10	16362	0
	C	13		mg/L			9055	8104	1
	Cl	37		mg/L			2835631	2932152	0
[>	Sc	45		ug/L			207649	195495	1
[	V-1	51	25.071	ug/L	0.138	0	1125	209864	1
[	V	51	25.297	ug/L	0.200	0	460	213377	1
[	Cr	52	25.301	ug/L	0.280	1	3531	185835	1
[	Cr	53	26.014	ug/L	0.074	0	186	22122	1
[	Mn	55	41.332	ug/L	0.307	0	488	491342	1
[	Co	59	24.493	ug/L	0.041	0	100	218190	1
[>	Ge	72		ug/L			228614	205050	0
[	Ni	60	27.332	ug/L	0.311	1	69	47529	1
[	Ni	62	27.119	ug/L	0.403	1	90	7006	1
[	Cu	63	31.890	ug/L	0.129	0	209	120258	0
[	Cu	65	32.133	ug/L	0.243	0	124	57334	1
[	Zn	66	154.941	ug/L	1.224	0	671	187524	1
[	Zn	67	141.483	ug/L	2.365	1	127	28914	2
[	Zn	68	155.014	ug/L	2.029	1	2543	133812	1
[	As-1	75	27.492	ug/L	0.250	0	34	32342	0
[	As	75	27.009	ug/L	0.135	0	5075	35660	0
[	Se	82	79.796	ug/L	0.730	0	5	11272	0
[	Se	78	81.838	ug/L	0.477	0	5176	32112	0
[	Mo	98	0.932	ug/L	0.003	0	105	3967	0
	Y	89		ug/L			221819	195461	0
	Kr	83		ug/L			55	70	1
[>	In	115		ug/L			279471	241477	0
[	Ag	107	23.093	ug/L	0.185	0	46	171867	0
[	Cd	111	24.781	ug/L	0.344	1	237	48893	0
[	Cd	114	25.289	ug/L	0.134	0	18	117241	1
[	Sb	121	1.147	ug/L	0.022	1	72	7679	2
[	Sb	123	1.128	ug/L	0.017	1	56	5833	0
[	Ba	135	48.377	ug/L	0.355	0	22	80875	0
[	Ba	137	48.109	ug/L	0.421	0	38	140789	1
[>	Tb	159		ug/L			394483	329596	1
[	Tl	205	26.071	ug/L	0.211	0	77	639267	0
[	Pb	208	26.369	ug/L	0.218	0	785	907838	0
[	Bi	209		ug/L			347909	287567	0
[	Th	232	25.920	ug/L	0.203	0	387	1107322	0
[	U	238	26.066	ug/L	0.172	0	52	1280248	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 DDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:27:33
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: C:\Elandata\Caldata\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			679421	681094	0
[	Be	9	0.026	ug/L	0.004	16	10	27	9
	C	13		mg/L			9055	8392	0
	Cl	37		mg/L			2835631	2890330	0
[>	Sc	45		ug/L			207649	209231	0
[	V-1	51	4.478	ug/L	0.065	1	1125	41046	1
[	V	51	4.605	ug/L	0.068	1	460	41949	1
[	Cr	52	5.161	ug/L	0.028	0	3531	43404	0
[	Cr	53	5.544	ug/L	0.128	2	186	5193	2
[	Mn	55	55.181	ug/L	0.067	0	488	701913	0
[	Co	59	1.008	ug/L	0.014	1	100	9706	1
[>	Ge	72		ug/L			228614	202652	0
[	Ni	60	5.212	ug/L	0.060	1	69	9006	0
[	Ni	62	5.691	ug/L	0.203	3	90	1516	3
[	Cu	63	20.623	ug/L	0.198	0	209	76926	0
[	Cu	65	20.886	ug/L	0.090	0	124	36868	0
[	Zn	66	136.895	ug/L	1.195	0	671	163804	0
[	Zn	67	123.717	ug/L	1.972	1	127	24999	0
[	Zn	68	136.319	ug/L	1.687	1	2543	116559	0
[	As-1	75	1.275	ug/L	0.027	2	34	1511	2
[	As	75	1.720	ug/L	0.022	1	5075	6456	0
[	Se	82	0.112	ug/L	0.100	89	5	20	69
[	Se	78	1.715	ug/L	0.145	8	5176	5157	1
[	Mo	98	1.360	ug/L	0.016	1	105	5676	0
	Y	89		ug/L			221819	203069	0
	Kr	83		ug/L			55	70	7
[>	In	115		ug/L			279471	235322	0
[	Ag	107	0.027	ug/L	0.002	7	46	237	6
[	Cd	111	0.236	ug/L	0.013	5	237	652	3
[	Cd	114	0.211	ug/L	0.006	2	18	969	2
[	Sb	121	2.299	ug/L	0.040	1	72	14936	1
[	Sb	123	2.310	ug/L	0.015	0	56	11596	0
[	Ba	135	45.633	ug/L	0.310	0	22	74346	0
[	Ba	137	44.941	ug/L	0.347	0	38	128168	0
[>	Tb	159		ug/L			394483	326966	0
[	Tl	205	0.048	ug/L	0.002	3	77	1224	3
[	Pb	208	19.477	ug/L	0.164	0	785	665377	0
[	Bi	209		ug/L			347909	289488	0
[	Th	232	0.143	ug/L	0.005	3	387	6387	2
[	U	238	0.044	ug/L	0.003	6	52	2187	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:34:20
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	693910	1
	Be	9	0.026	ug/L	0.005	20	10	28	12
	C	13		mg/L			9055	8201	1
	Cl	37		mg/L			2835631	2875837	0
>	Sc	45		ug/L			207649	208330	1
	V-1	51	4.362	ug/L	0.051	1	1125	39838	1
	V	51	4.531	ug/L	0.022	0	460	41105	1
	Cr	52	4.983	ug/L	0.046	0	3531	41842	0
	Cr	53	5.501	ug/L	0.138	2	186	5133	3
	Mn	55	53.906	ug/L	0.440	0	488	682706	0
	Co	59	0.976	ug/L	0.009	0	100	9364	1
>	Ge	72		ug/L			228614	202203	1
	Ni	60	4.994	ug/L	0.039	0	69	8612	0
	Ni	62	5.626	ug/L	0.153	2	90	1496	2
	Cu	63	20.096	ug/L	0.300	1	209	74787	0
	Cu	65	20.228	ug/L	0.180	0	124	35634	2
	Zn	66	132.640	ug/L	1.056	0	671	158374	0
	Zn	67	119.225	ug/L	2.462	2	127	24040	1
	Zn	68	133.667	ug/L	1.120	0	2543	114081	0
	As-1	75	1.226	ug/L	0.009	0	34	1451	1
	As	75	1.657	ug/L	0.061	3	5075	6370	0
	Se	82	0.114	ug/L	0.068	59	5	20	45
	Se	78	1.666	ug/L	0.219	13	5176	5129	0
	Mo	98	1.345	ug/L	0.029	2	105	5599	1
	Y	89		ug/L			221819	204073	0
	Kr	83		ug/L			55	69	2
>	In	115		ug/L			279471	236506	1
	Ag	107	0.020	ug/L	0.002	7	46	182	6
	Cd	111	0.203	ug/L	0.018	8	237	591	6
	Cd	114	0.193	ug/L	0.008	4	18	894	4
	Sb	121	2.262	ug/L	0.019	0	72	14774	0
	Sb	123	2.262	ug/L	0.025	1	56	11417	0
	Ba	135	44.150	ug/L	0.424	0	22	72290	1
	Ba	137	43.511	ug/L	0.222	0	38	124713	1
>	Tb	159		ug/L			394483	332469	0
	Tl	205	0.047	ug/L	0.003	5	77	1226	5
	Pb	208	18.461	ug/L	0.040	0	785	641327	0
	Bi	209		ug/L			347909	292231	0
	Th	232	0.109	ug/L	0.003	2	387	5035	3
	U	238	0.036	ug/L	0.001	1	52	1819	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: QD71 DSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Monday, January 11, 2010 20:41:04
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			679421	686824	1
⌊	Be	9	24.520	ug/L	0.385	1	10	16722	0
	C	13		mg/L			9055	8251	1
	Cl	37		mg/L			2835631	2886819	1
⌈>	Sc	45		ug/L			207649	211385	0
|	V-1	51	27.631	ug/L	0.330	1	1125	249991	1
|	V	51	27.832	ug/L	0.365	1	460	253811	2
|	Cr	52	28.197	ug/L	0.483	1	3531	223513	1
|	Cr	53	28.817	ug/L	0.481	1	186	26478	1
|	Mn	55	79.338	ug/L	2.447	3	488	1019323	3
⌊	Co	59	23.737	ug/L	0.286	1	100	228631	1
⌈>	Ge	72		ug/L			228614	202187	1
|	Ni	60	31.186	ug/L	0.353	1	69	53459	0
|	Ni	62	32.023	ug/L	0.362	1	90	8144	1
|	Cu	63	47.874	ug/L	0.772	1	209	177912	1
|	Cu	65	47.545	ug/L	0.511	1	124	83600	2
|	Zn	66	217.064	ug/L	1.678	0	671	258804	1
|	Zn	67	196.867	ug/L	2.109	1	127	39623	1
|	Zn	68	215.095	ug/L	1.550	0	2543	182205	1
|	As-1	75	28.425	ug/L	0.209	0	34	32974	1
|	As	75	27.786	ug/L	0.209	0	5075	36044	1
|	Se	82	79.369	ug/L	0.322	0	5	11056	1
|	Se	78	80.777	ug/L	0.376	0	5176	31311	0
⌊	Mo	98	1.389	ug/L	0.025	1	105	5781	1
	Y	89		ug/L			221819	205636	1
	Kr	83		ug/L			55	68	5
⌈>	In	115		ug/L			279471	236437	1
|	Ag	107	21.698	ug/L	0.187	0	46	158110	0
|	Cd	111	25.846	ug/L	0.519	2	237	49917	0
|	Cd	114	25.624	ug/L	0.386	1	18	116297	0
|	Sb	121	2.339	ug/L	0.016	0	72	15267	1
|	Sb	123	2.350	ug/L	0.018	0	56	11852	1
|	Ba	135	72.544	ug/L	0.514	0	22	118730	0
⌊	Ba	137	72.273	ug/L	1.373	1	38	207037	0
⌈>	Tb	159		ug/L			394483	331405	0
|	Tl	205	26.269	ug/L	0.201	0	77	647676	1
|	Pb	208	45.920	ug/L	0.342	0	785	1589210	1
|	Bi	209		ug/L			347909	290013	1
|	Th	232	23.953	ug/L	0.127	0	387	1028992	0
⌊	U	238	26.383	ug/L	0.343	1	52	1302938	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 20:53:42
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	683996	0
	Be	9	47.549	ug/L	0.757	1	10	32287	1
	C	13		mg/L			9055	5943	0
	Cl	37		mg/L			2835631	2899842	0
>	Sc	45		ug/L			207649	189205	1
	V-1	51	48.795	ug/L	1.015	2	1125	394358	2
	V	51	48.871	ug/L	0.801	1	460	398585	2
	Cr	52	48.473	ug/L	0.942	1	3531	341622	2
	Cr	53	48.727	ug/L	0.434	0	186	39954	0
	Mn	55	48.061	ug/L	0.742	1	488	552844	1
	Co	59	47.398	ug/L	0.776	1	100	408543	1
>	Ge	72		ug/L			228614	200653	0
	Ni	60	49.345	ug/L	0.850	1	69	83920	1
	Ni	62	49.401	ug/L	0.244	0	90	12424	0
	Cu	63	49.836	ug/L	0.371	0	209	183804	0
	Cu	65	49.463	ug/L	0.252	0	124	86301	0
	Zn	66	49.713	ug/L	0.156	0	671	59276	0
	Zn	67	49.988	ug/L	0.824	1	127	10068	1
	Zn	68	51.287	ug/L	0.183	0	2543	44815	0
	As-1	75	49.757	ug/L	0.298	0	34	57257	0
	As	75	50.291	ug/L	0.277	0	5075	61136	0
	Se	82	49.989	ug/L	0.331	0	5	6912	0
	Se	78	52.004	ug/L	0.320	0	5176	21624	0
	Mo	98	47.886	ug/L	0.476	0	105	194694	1
	Y	89		ug/L			221819	189556	0
	Kr	83		ug/L			55	80	3
>	In	115		ug/L			279471	234291	0
	Ag	107	50.756	ug/L	0.613	1	46	366474	1
	Cd	111	49.453	ug/L	0.244	0	237	94479	0
	Cd	114	49.729	ug/L	0.328	0	18	223668	0
	Sb	121	49.098	ug/L	0.449	0	72	316375	0
	Sb	123	48.598	ug/L	0.669	1	56	241994	1
	Ba	135	49.356	ug/L	0.463	0	22	80055	0
	Ba	137	48.500	ug/L	0.121	0	38	137709	0
>	Tb	159		ug/L			394483	324118	0
	Tl	205	50.280	ug/L	0.613	1	77	1212316	0
	Pb	208	50.543	ug/L	0.647	1	785	1710555	0
	Bi	209		ug/L			347909	284153	1
	Th	232	52.177	ug/L	0.931	1	387	2191548	0
	U	238	51.721	ug/L	0.774	1	52	2497917	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Monday, January 11, 2010 20:58:10
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\011110.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			679421	684025	0
	Be	9	-0.002	ug/L	0.006	282	10	9	41
	C	13		mg/L			9055	6476	0
	Cl	37		mg/L			2835631	2928531	0
>	Sc	45		ug/L			207649	187837	0
	V-1	51	0.010	ug/L	0.009	90	1125	1094	6
	V	51	0.036	ug/L	0.003	7	460	704	2
	Cr	52	0.004	ug/L	0.011	256	3531	3223	2
	Cr	53	0.088	ug/L	0.020	23	186	239	7
	Mn	55	0.004	ug/L	0.003	70	488	492	7
	Co	59	-0.002	ug/L	0.002	82	100	71	23
>	Ge	72		ug/L			228614	199558	0
	Ni	60	0.007	ug/L	0.004	55	69	72	9
	Ni	62	-0.022	ug/L	0.048	215	90	73	15
	Cu	63	0.018	ug/L	0.003	16	209	249	4
	Cu	65	0.003	ug/L	0.008	249	124	114	13
	Zn	66	-0.061	ug/L	0.025	41	671	514	5
	Zn	67	0.006	ug/L	0.086	1399	127	112	15
	Zn	68	0.808	ug/L	0.002	0	2543	2888	0
	As-1	75	0.020	ug/L	0.014	72	34	52	30
	As	75	0.454	ug/L	0.041	9	5075	4938	0
	Se	82	-0.069	ug/L	0.022	32	5	-4	61
	Se	78	1.560	ug/L	0.107	6	5176	5028	0
	Mo	98	-0.001	ug/L	0.003	313	105	88	13
	Y	89		ug/L			221819	188000	1
	Kr	83		ug/L			55	67	4
>	In	115		ug/L			279471	233127	0
	Ag	107	0.004	ug/L	0.002	50	46	65	21
	Cd	111	-0.022	ug/L	0.003	12	237	156	3
	Cd	114	0.003	ug/L	0.002	73	18	27	30
	Sb	121	0.053	ug/L	0.010	17	72	400	15
	Sb	123	0.051	ug/L	0.010	19	56	297	17
	Ba	135	0.020	ug/L	0.004	17	22	51	10
	Ba	137	0.020	ug/L	0.004	21	38	88	14
>	Tb	159		ug/L			394483	321506	0
	Tl	205	0.003	ug/L	0.002	45	77	145	25
	Pb	208	0.013	ug/L	0.001	8	785	1075	3
	Bi	209		ug/L			347909	287574	0
	Th	232	0.033	ug/L	0.007	19	387	1711	16
	U	238	0.011	ug/L	0.003	30	52	562	28

end pkg

Metals Analysis
Prep Logs

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: MH

Date: 01/05/10

Final Volume 25

Final Volume (Hg): _____

Sample ID QD71 ASPK, MBSPK, DSPK, MB2SPK
QD61 MB2SPK
QD26 MB2SPK

		Prepcode:		
		Spike Solution:	ICP Routine	ICP No GFA	GFA
		Standard No.:			
		Vol Added (mL):			
STOCK CONCENTRATION	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	
	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	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2645-4		
	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.

QD71 : QD128

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: MH Date: 01/05/10

Matrix: Water Block Temp: 90°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
QD71 A	5	—	50.0	25.0			
" ADUP	5	—					
" ASPK	5	—					
" B	5	—					Filtered
" C	5	—					in Lab
" MB1	—	—					
" MB1SPK	—	—					
" D	1	✓					
" DDUP	1	✓					
" DSPK	1	✓					
" E	1	✓					
" F	1	✓					
" MB2	—	✓					
" MB2SPK	—	✓					
QD61 B	1	✓					
" MB2	—	✓					
" MB2SPK	—	✓	50.0	25.0			

MH 01/05/10

Chemical/Reagent ID:

HNO_3: MP1809 I5110 HCl: — H_2O_2: I5135 Tube Lot #: A905LS269

General Chemistry Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

REPLICATE RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: 12/31/09
Date Received: 01/02/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QD71A Client ID: CB31A123109COMP					
Total Suspended Solids	01/05/10	mg/L	59.0	59.7	1.2%

LAB CONTROL RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	LCS	Spike Added	Recovery
Total Suspended Solids	01/05/10 14:22	mg/L	49.5	50.0	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
QD71-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 01/07/10

Project: Lora Lakes Apts
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date/Time	Units	Blank
Total Suspended Solids	01/05/10 14:22	mg/L	< 1.0 U

General Chemistry Analysis
Sample Data

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
Total Suspended Solids by Method EPA 160.2

Data Release Authorized:
Reported: 01/07/10
Date Received: 01/02/10
Page 1 of 1

QC Report No: QD71-Floyd-Snider
Project: Lora Lakes Apts
POS-LLA

Client/ ARI ID	Date Sampled	Matrix	Analysis Date & Batch	RL	Result
CB31A123109COMP QD71A 10-14	12/31/09	Water	01/05/10 14:22 010510#1	3.3	59.0
CB4857123109COMP QD71B 10-15	12/31/09	Water	01/05/10 14:22 010510#1	1.7	33.3
CB1123109COMP QD71C 10-16	12/31/09	Water	01/05/10 14:22 010510#1	1.0	9.2

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 Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

W
1-6-10

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 1/5/2009
ANALYST: CDE 14:22

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				1/5/10 16:22	1/5/10 17:55										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1116	0.1116	0.1116	STOP		0.0	< 1						
LCS # 541-7		1000	0.1131	0.1626	0.1625	STOP		49.4	**49.4**	98.8%	% Recovery				
QD42 A5		930	0.1115	0.1188	0.1186	STOP		7.1	**7.6**						
QD42 B5		25	0.1101	0.2186	0.2184	STOP		108.3	**4332.0**						
QD42 B5 dup		25	0.1114	0.2418	0.2416	STOP		130.2	**5208.0**						
								RPD =	*18.4%*					*RPD =*	*NA*
QD42 C5		300	0.1090	0.1431	0.1430	STOP		34.0	**113.3**						
QD42 D5		950	0.1124	0.1281	0.1280	STOP		15.6	**16.4**						
QD42 E5		960	0.1112	0.1147	0.1146	STOP		3.4	**3.5**						
QD42 F5		930	0.1115	0.1390	0.1390	STOP		27.5	**29.6**						
QD68 A4		320	0.1134	0.1298	0.1297	STOP		16.3	**50.9**						
QD68 A4 dup		320	0.1116	0.1297	0.1296	STOP		18.0	**56.3**						
								RPD =	*10.1%*					*RPD =*	*NA*
QD68 B3		250	0.1123	0.1305	0.1303	STOP		18.0	**72.0**						
QD68 C3		355	0.1121	0.1368	0.1366	STOP		24.5	**69.0**						
QD71 A6		300	0.1106	0.1284	0.1283	STOP		17.7	**59.0**						
QD71 B6		600	0.1122	0.1324	0.1322	STOP		20.0	**33.3**						
QD71 C6		1000	0.1127	0.1220	0.1219	STOP		9.2	**9.2**						
QD75 A3		410	0.1113	0.1256	0.1257	STOP		14.3	**34.9**						
QD75 A3 dup		410	0.1115	0.1265	0.1265	STOP		15.0	**36.6**						
								RPD =	*4.8%*					*RPD =*	*NA*

JAN 5 2009 TSS-VSS1

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 1/5/2009
ANALYST: CDE 14:22

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)
QD79 C1		400	0.1130	0.1244	0.1243	STOP		11.3	**28.3**						
QD79 C1 dup		400	0.1110	0.1225	0.1224	STOP		11.4	**28.5**						
								RPD =	*0.7%*					*RPD =*	*NA*
QD84 A1		460	0.1107	0.1133	0.1132	STOP		2.5	**5.4**						
QD84 A1 dup		460	0.1109	0.1135	0.1134	STOP		2.5	**5.4**						
								RPD =	*0.0%*					*RPD =*	*NA*
QD87 A2		935	0.1116	0.1184	0.1184	STOP		6.8	**7.3**						
QD87 B2		950	0.1108	0.1195	0.1193	STOP		8.5	**8.9**						
QD71 A6 dup		300	0.1109	0.1288	0.1288	STOP		17.9	**59.7**						
								RPD =	*1.2%*					*RPD =*	*NA*

QD71 : 09458

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 1/5/10
ANALYST: [signature]

Instrumentation — **Drying Ovens:** [signature] **Analytical Balance:** ______
Muffle Furnace:

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															
record weights to 4 places															
~~BLANK~~ QD71 B⁶	P2757	600	0.1122	0.1324	0.1322										
~~LCS #~~ ↓ C⁶	P2758	1000	0.1127	0.1220	0.1219					% Recovery					
QD75 A³	P2759	410	0.1113	0.1256	0.1257										
↓ DF A³	P2760	↓	0.1115	0.1265	0.1265										
QD79 C¹	P2761	400	0.1130	0.1244	0.1243										
↓ of C¹	P2762	↓	0.1110	0.1225	0.1224										
QD84 A¹	P2763	460	0.1107	0.1133	0.1132										
↓ DF A¹	P2764	↓	0.1109	0.1135	0.1134										
QD87 A²	P2765	935	0.1116	0.1184	0.1184										
~~↓ of A²~~	~~P2715~~		~~0.1116~~	~~Insuficent Volume for a QC QMRL~~											
↓ B²	P2716	950	0.1108	0.1195	0.1193										
QD71 A⁶ DF	P0757	300	0.1109	0.1288	0.1288										

1/5/10 [initials]

Page 2 of 2

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS)

DATE: 1/5/10 14:22

ANALYST: CMC

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*** | 0.0500 | 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				1/5/10 am	1/5/10 am										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				16:22	17:55										
BLANK	P2742	1000	0.1116	0.1116	0.1116										
LCS #541-7	P2744	↓	0.1131	0.1626	0.1625					% Recovery					
QD42 A5	P2745	930	0.1115	0.1188	0.1186										
B5	P2746	25	0.1101	0.2186	0.2184										
dp B5	P2747	↓	0.1114	0.2418	0.2416										
C5	P2748	300	0.1090	0.1431	0.1430										
D5	P2749	950	0.1124	0.1281	0.1280										
↓ E5	P2750	960	0.1112	0.1147	0.1146										
F5	P2751	930	0.1115	0.1390	0.1390										
QD68 A4	P2752	320	0.1134	0.1298	0.1297										
dp A4	P2753	↓	0.1116	0.1297	0.1296										
↓ B3	P2754	250	0.1123	0.1305	0.1303										
↓ C3	P2755	355	0.1121	0.1368	0.1366										
QD71 A6	P2756	300	0.1106	0.1284	0.1283										

Subcontracted Results
Dioxin/Furans 1613(Sub) Analyzed by Frontier Analytical Laboratory

prepared
for

Floyd-Snider

Project: Lora Lakes Apts, POS-LLA

ARI JOB NO: QD71

prepared
by

Analytical Resources, Inc.

FRONTIER
ANALYTICAL LABORATORY

January 15, 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 **5904**. This corresponds to your **Lora Lakes Apts** project under ARI project number **QD71**. Three aqueous samples were received on 1/5/2010 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 **5904**.

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 **5904**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

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

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **5904**

Received on: **01/05/2010** Project Due: **01/27/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time
5904-001-SA	0	QD71	CB31A123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	10:37 pm
5904-002-SA	0	QD71	CB4857123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	11:57 pm
5904-003-SA	0	QD71	CB1123109COMP	EPA 1613 D/F	Aqueous	12/31/2009	09:37 pm

FAL Sample ID	Notes
5904-001-SA	Using hand written sample ID from COC per Ms. Dunnihoo to Gabby. GN 1-6-10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.918		-	0.320				
1,2,3,7,8-PeCDD	ND	0.717		-	0.491				
1,2,3,4,7,8-HxCDD	ND	0.966		-	0.483				
1,2,3,6,7,8-HxCDD	ND	1.16		-	0.665	Total TCDD	ND	0.918	
1,2,3,7,8,9-HxCDD	ND	1.05		-	0.650	Total PeCDD	ND	0.717	
1,2,3,4,6,7,8-HpCDD	ND	1.79		-	0.985	Total HxCDD	ND	1.16	
OCDD	ND	3.31		-	1.93	Total HpCDD	ND	1.79	
2,3,7,8-TCDF	ND	0.398		-	0.305				
1,2,3,7,8-PeCDF	ND	0.551		-	0.340				
2,3,4,7,8-PeCDF	ND	0.587		-	0.441				
1,2,3,4,7,8-HxCDF	ND	0.734		-	0.317				
1,2,3,6,7,8-HxCDF	ND	0.797		-	0.346				
2,3,4,6,7,8-HxCDF	ND	0.788		-	0.292				
1,2,3,7,8,9-HxCDF	ND	1.00		-	0.474	Total TCDF	ND	0.398	
1,2,3,4,6,7,8-HpCDF	ND	0.889		-	0.497	Total PeCDF	ND	0.587	
1,2,3,4,7,8,9-HpCDF	ND	1.06		-	0.587	Total HxCDF	ND	1.00	
OCDF	ND	2.07		-	1.32	Total HpCDF	ND	1.06	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	79.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	71.1	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	78.3	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	74.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	73.2	23.0 - 140	
13C-OCDD	77.7	17.0 - 157	
13C-2,3,7,8-TCDF	83.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	74.5	24.0 - 185	
13C-2,3,4,7,8-PeCDF	73.2	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	77.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	75.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	77.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	71.0	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	68.4	26.0 - 138	
13C-OCDF	70.1	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	84.7	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 01-14-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.77	6.70 - 15.8	
1,2,3,7,8-PeCDD	49.6	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.5	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	50.0	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	50.2	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	50.9	35.0 - 70.0	
OCDD	95.8	78.0 - 144	
2,3,7,8-TCDF	9.98	7.50 - 15.8	
1,2,3,7,8-PeCDF	51.4	40.0 - 67.0	
2,3,4,7,8-PeCDF	52.0	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	51.0	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	49.8	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	50.3	35.0 - 78.0	
1,2,3,7,8,9-HxCDF	50.1	39.0 - 65.0	
1,2,3,4,6,7,8-HpCDF	51.7	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	50.4	39.0 - 69.0	
OCDF	99.9	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	64.8	20.0 - 175	
13C-1,2,3,7,8-PeCDD	58.6	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	65.6	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	63.2	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	64.3	26.0 - 166	
13C-OCDD	95.4	13.0 - 198	
13C-2,3,7,8-TCDF	66.0	22.0 - 152	
13C-1,2,3,7,8-PeCDF	57.9	21.0 - 192	
13C-2,3,4,7,8-PeCDF	56.8	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	69.6	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	66.4	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	66.8	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	64.1	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	62.4	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	75.9	20.0 - 186	
13C-OCDF	85.5	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	71.0	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-001-SA
Client ID: CB31A123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.012 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 13.8

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.765		-	0.320				
1,2,3,7,8-PeCDD	2.17	-	J	2.17	0.491				
1,2,3,4,7,8-HxCDD	4.24	-	J	0.424	0.483				
1,2,3,6,7,8-HxCDD	12.5	-	J	1.25	0.665	Total TCDD	ND	0.765	
1,2,3,7,8,9-HxCDD	8.19	-	J	0.819	0.650	Total PeCDD	6.25	-	J
1,2,3,4,6,7,8-HpCDD	405	-		4.05	0.985	Total HxCDD	64.2	-	
OCDD	4540	-		1.36	1.93	Total HpCDD	684	-	
2,3,7,8-TCDF	ND	0.694		-	0.305				
1,2,3,7,8-PeCDF	ND	1.32		-	0.340				
2,3,4,7,8-PeCDF	ND	1.34		-	0.441				
1,2,3,4,7,8-HxCDF	11.8	-	J	1.18	0.317				
1,2,3,6,7,8-HxCDF	9.12	-	J	0.912	0.346				
2,3,4,6,7,8-HxCDF	5.19	-	J	0.519	0.292				
1,2,3,7,8,9-HxCDF	1.46	-	J	0.146	0.474	Total TCDF	25.4	-	D,M
1,2,3,4,6,7,8-HpCDF	82.2	-		0.822	0.497	Total PeCDF	60.5	-	D,M
1,2,3,4,7,8,9-HpCDF	7.34	-	J	0.0734	0.587	Total HxCDF	217	-	D,M
OCDF	252	-		0.0756	1.32	Total HpCDF	261	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	97.2	25.0 - 164	
13C-1,2,3,7,8-PeCDD	132	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	89.4	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.8	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	88.6	23.0 - 140	
13C-OCDD	88.3	17.0 - 157	
13C-2,3,7,8-TCDF	94.4	24.0 - 169	
13C-1,2,3,7,8-PeCDF	133	24.0 - 185	
13C-2,3,4,7,8-PeCDF	137	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	85.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	82.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	86.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	87.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	80.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	84.4	26.0 - 138	
13C-OCDF	77.5	17.0 - 157	

Cleanup Surrogate

37Cl-2,3,7,8-TCDD	108	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-002-SA
Client ID: CB4857123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.015 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 6.48

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.599		-	0.320				
1,2,3,7,8-PeCDD	ND	1.62		-	0.491				
1,2,3,4,7,8-HxCDD	2.71	-	J	0.271	0.483				
1,2,3,6,7,8-HxCDD	6.81	-	J	0.681	0.665	Total TCDD	ND	0.599	
1,2,3,7,8,9-HxCDD	4.83	-	J	0.483	0.650	Total PeCDD	ND	1.62	
1,2,3,4,6,7,8-HpCDD	212	-		2.12	0.985	Total HxCDD	38.5	-	
OCDD	2380	-		0.714	1.93	Total HpCDD	369	-	
2,3,7,8-TCDF	ND	0.611		-	0.305				
1,2,3,7,8-PeCDF	ND	0.866		-	0.340				
2,3,4,7,8-PeCDF	ND	0.947		-	0.441				
1,2,3,4,7,8-HxCDF	7.21	-	J	0.721	0.317				
1,2,3,6,7,8-HxCDF	6.41	-	J	0.641	0.346				
2,3,4,6,7,8-HxCDF	3.15	-	J	0.315	0.292				
1,2,3,7,8,9-HxCDF	ND	0.992		-	0.474	Total TCDF	17.0	-	D,M
1,2,3,4,6,7,8-HpCDF	45.8	-		0.458	0.497	Total PeCDF	47.5	-	D,M
1,2,3,4,7,8,9-HpCDF	4.30	-	J	0.0430	0.587	Total HxCDF	129	-	D,M
OCDF	122	-		0.0366	1.32	Total HpCDF	146	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	82.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	78.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	78.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	75.1	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.5	23.0 - 140	
13C-OCDD	76.0	17.0 - 157	
13C-2,3,7,8-TCDF	83.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	82.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	77.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	75.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	72.0	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	75.2	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	75.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	72.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	73.2	26.0 - 138	
13C-OCDF	68.4	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	89.4	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5904-003-SA
Client ID: CB1123109COMP
Matrix: Aqueous
Batch No: X1918

Date Extracted: 01-13-2010
Date Received: 01-05-2010
Amount: 1.026 L

ICal: PCDDFAL3-11-18-09
GC Column: DB5
Units: pg/L

Acquired: 01-14-2010
2005 WHO TEQ: 0.302

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.530		-	0.320				
1,2,3,7,8-PeCDD	ND	1.01		-	0.491				
1,2,3,4,7,8-HxCDD	ND	1.17		-	0.483				
1,2,3,6,7,8-HxCDD	ND	1.38		-	0.665	Total TCDD	ND	0.530	
1,2,3,7,8,9-HxCDD	ND	1.26		-	0.650	Total PeCDD	ND	1.01	
1,2,3,4,6,7,8-HpCDD	20.4	-	J	0.204	0.985	Total HxCDD	5.97	-	J
OCDD	151	-		0.0453	1.93	Total HpCDD	39.9	-	
2,3,7,8-TCDF	ND	0.686		-	0.305				
1,2,3,7,8-PeCDF	ND	0.545		-	0.340				
2,3,4,7,8-PeCDF	ND	0.588		-	0.441				
1,2,3,4,7,8-HxCDF	ND	0.652		-	0.317				
1,2,3,6,7,8-HxCDF	ND	0.669		-	0.346				
2,3,4,6,7,8-HxCDF	ND	0.679		-	0.292				
1,2,3,7,8,9-HxCDF	ND	0.752		-	0.474	Total TCDF	ND	0.686	
1,2,3,4,6,7,8-HpCDF	4.85	-	J	0.0485	0.497	Total PeCDF	1.51	-	J
1,2,3,4,7,8,9-HpCDF	ND	0.719		-	0.587	Total HxCDF	6.13	-	J
OCDF	13.0	-	J	0.00390	1.32	Total HpCDF	11.5	-	J

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	86.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	85.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	79.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	89.5	23.0 - 140	
13C-OCDD	90.6	17.0 - 157	
13C-2,3,7,8-TCDF	89.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	90.7	24.0 - 185	
13C-2,3,4,7,8-PeCDF	87.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	82.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	77.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	81.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	82.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	81.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	84.0	26.0 - 138	
13C-OCDF	82.7	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: 1/15/10

Reviewed By: _____
Date: 1/15/10

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 01/04/10

ANALYTICAL RESOURCES INCORPORATED

ARI Project: QD71

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

Package & EDD

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

5904
0

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **01/18/10**
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
10-14-QD71A	CB31A123109COMP *	12/31/09 22:37	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-15-QD71B	CB4857123109COMP	12/31/09 23:57	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-16-QD71C	CB1123109COMP	12/31/09 21:37	Water	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					

* use sample ID from COC per Ms. Dunnihoo to Gabby. GN 1/6/10

Carrier		Airbill		Date
UPS		1Z8321695014589 0798		1/4/10
Relinquished by	Company		Date	Time
	ARI		1/4/10	1135
Received by	Company		Date	Time
	Frontier Analytical		1/5/10	1015

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **5904**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	QD71
Date Received:	01/05/2010
Time Received:	10:15 am
Received By:	GN
Logged In By:	GN
# of Samples Received:	3
Duplicates:	0
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z8326950145890798
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	Yes
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	12/31/2010
Adequate Sample Volume	Yes

Anomalies or additional comments:

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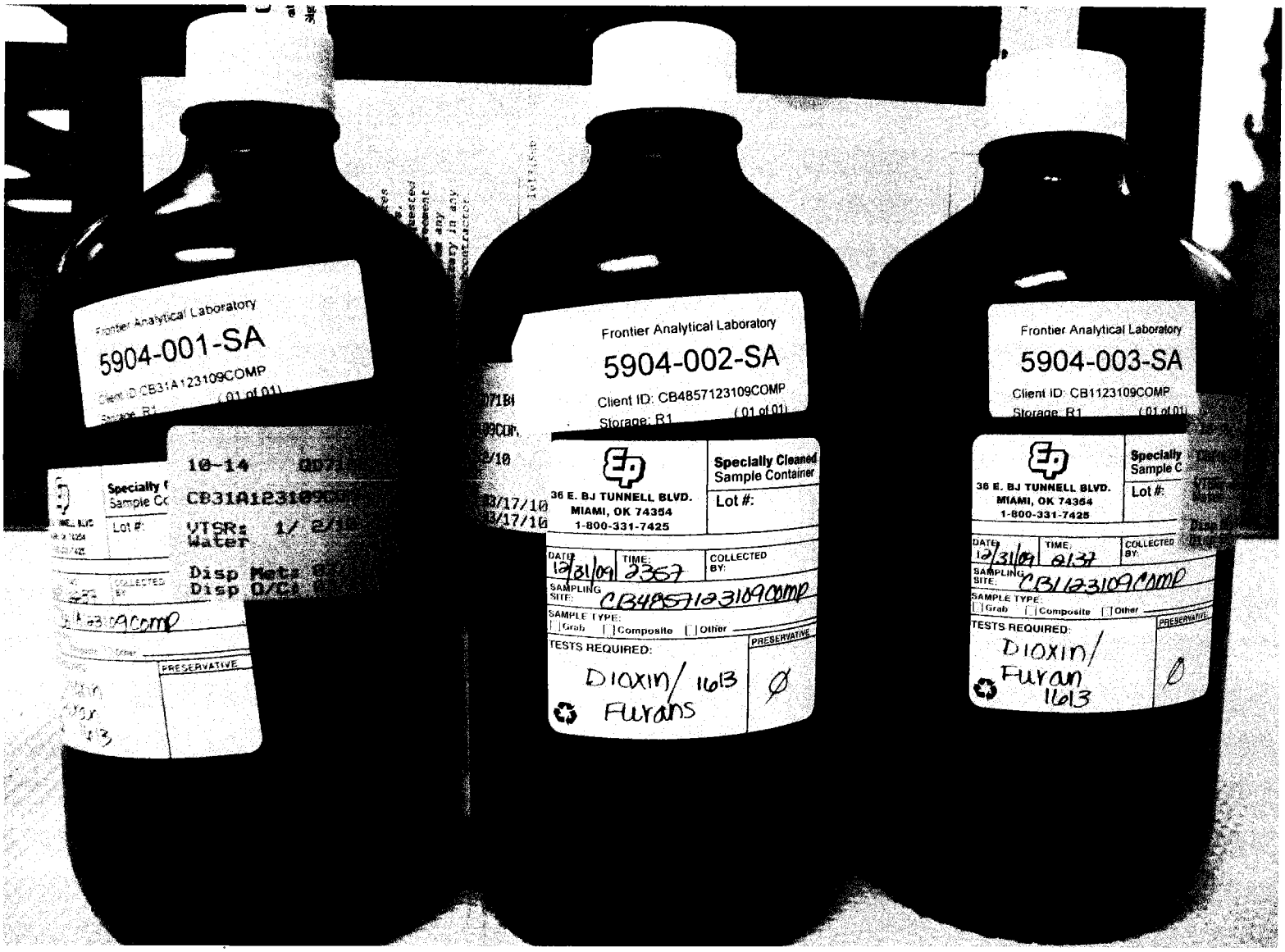

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PROJECT REQUEST SHEET

Project #:	5904	Sample #:	1 - 3	Client Manager:	BS
Client:	Analytical Resources Inc. Sue Dunnihoo			Hold Time:	12/31/2010
Matrix:	Aqueous	Extraction Batch:	1918	Due Date:	01/27/2010
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)
5904-001-0001-SA	1507.8	495.32
5904-002-0001-SA	1507.4	492.76
5904-003-0001-SA	1518.7	492.64

Results: 5904

Extract/s located in box: "Those MassSpecs Go up TO 11"

Standards: 5904

Instrument: Fal3

DB5 ____

DB225 ____

DB1 ____

Other ____

Frontier Analytical Laboratory
Percent Solids

FAL Project: 5904

	Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv
1.35	5904-001-0001-SA	GN	1/13/10	14.52	0.00	0.00	–
1.33	5904-002-0001-SA	↓	↓	11.03	0.01	0.09	–
1.36	5904-003-0001-SA	↓	↓	12.95	0.00	0.00	–

% 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

EXTRACTION SHEET

Project #: 5904 Extraction Date: 2010-01-13 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: 3 Chemist/Witness/Date	NS Amt: 10.0uL ID: 090918B Vial: 3 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 090918C Vial: 3 Chemist/Witness/Date
1918-001-0001-MB					
1918-001-0001-OPR					
5904-001-0001-SA	1.012		GN GG 1/13/10	NA	GN GG 1/14/10
5904-002-0001-SA	1.015				
5904-003-0001-SA	1.026				

5902

AX-21 Charcoal Cleaned	083109	Acetone	49260	Acid Alumina	08623DJ	Hexane	49275
Hydrochloric Acid	B08505	Methanol	095121	Methylene Chloride (DCM)	49268	Silica Gel	TA1593034
Sodium Hydroxide	9145	Sodium Sulfate	48273845	Sulfuric Acid	093621	Tetradecane	081394
Toluene	49110	Water	49273	C-18 Empore Discs	320469	Cyclohexane	48149

Comments:

CLEANUP SHEET

Project #: 5904

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 NA Chemist/Date	Cleanup 3 NA Chemist/Date	RS Amt: 10.0uL ID: 090918D Vial: 3 Chemist/Witness/Date
1918-001-0001-MB				
1918-001-0001-OPR				
5904-001-0001-SA	GN 1/14/10	NA	NA	GN 1/14/10
5904-002-0001-SA	↓	↓	↓	↓
5904-003-0001-SA	↓	↓	↓	↓

5902

Comments:

Instrument Raw Data

Sample Results

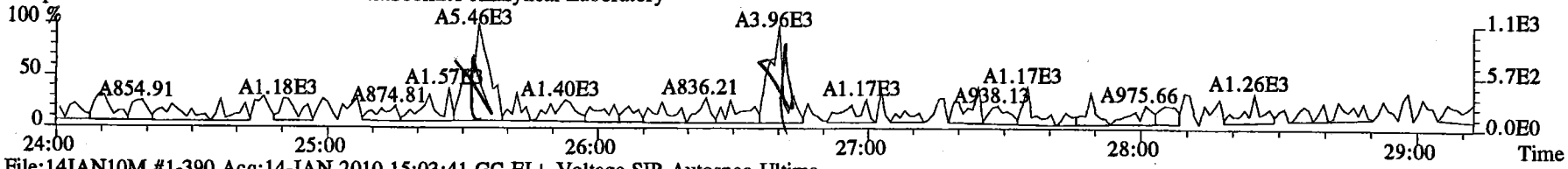
FAL ID: 1918-001-0001-MB Filename: 14JAN10M Sam:3 Acquired: 14-JAN-10 15:03:41 ICal: PCDDFAL3-11-18-09
Client ID: Method Blank ConCal: ST011410M1 EndCal: ST011410M2
Results: 1918 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00 WHO 2005 Tox: 0.00

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	373	525	0.918
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	331	195	0.717
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	340	331	0.966
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.34	*		2.50	340	331	1.16
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.37	*		2.50	340	331	1.05
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	1.17	*		2.50	350	434	1.79
OCDD	*	*	n	NotFnd	1.21	*		2.50	549	454	3.31
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	268	492	0.398
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	304	306	0.551
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	304	306	0.587
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.00	*		2.50	304	359	0.734
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	304	359	0.797
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.99	*		2.50	304	359	0.788
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	304	359	1.00
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.36	*		2.50	291	273	0.889
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.61	*		2.50	291	273	1.06
OCDF	*	*	n	NotFnd	0.84	*		2.50	284	379	2.07
											Rec
13C-2,3,7,8-TCDD	2.05e+07	0.72	y	27:24	0.94	1590					79.4
13C-1,2,3,7,8-PeCDD	1.98e+07	1.76	y	33:13	1.02	1420					71.1
13C-1,2,3,4,7,8-HxCDD	1.39e+07	1.29	y	38:36	0.98	1570					78.3
13C-1,2,3,6,7,8-HxCDD	1.26e+07	1.30	y	38:46	0.94	1490					74.7
13C-1,2,3,4,6,7,8-HpCDD	1.18e+07	1.06	y	44:12	0.90	1460					73.2
13C-OCDD	1.86e+07	1.00	y	49:47	0.67	3110					77.7
13C-2,3,7,8-TCDF	3.38e+07	0.84	y	26:39	0.88	1660					83.2
13C-1,2,3,7,8-PeCDF	3.03e+07	1.75	y	31:30	0.88	1490					74.5
13C-2,3,4,7,8-PeCDF	2.88e+07	1.73	y	32:49	0.85	1460					73.2
13C-1,2,3,4,7,8-HxCDF	2.41e+07	0.48	y	37:12	1.72	1560					77.9
13C-1,2,3,6,7,8-HxCDF	2.72e+07	0.48	y	37:24	2.00	1510					75.4
13C-2,3,4,6,7,8-HxCDF	2.42e+07	0.49	y	38:20	1.74	1550					77.5
13C-1,2,3,7,8,9-HxCDF	1.96e+07	0.48	y	39:46	1.51	1450					72.5
13C-1,2,3,4,6,7,8-HpCDF	1.40e+07	0.46	y	42:18	1.10	1420					71.0
13C-1,2,3,4,7,8,9-HpCDF	1.04e+07	0.46	y	45:08	0.85	1370					68.4
13C-OCDF	2.96e+07	0.97	y	50:09	1.17	2800					70.1
37Cl-2,3,7,8-TCDD	9.03e+06			27:25	0.97	678					84.7
13C-1,2,3,4-TCDD	2.74e+07	0.73	y	26:50	-	105					
13C-1,2,3,4-TCDF	4.63e+07	0.86	y	25:33	-	100					
13C-1,2,3,7,8,9-HxCDD	1.80e+07	1.28	y	39:13	-	87.7					

									#Hom
				Fac	Noise-1	Noise-2	DL		
Total Tetra-Dioxins	*	NotFnd	1.02	*	2.50	373	525	0.918	0
Total Penta-Dioxins	*	NotFnd	0.96	*	2.50	331	195	0.717	0
Total Hexa-Dioxins	*	NotFnd	1.36	*	2.50	340	331	1.16	0
Total Hepta-Dioxins	*	NotFnd	1.17	*	2.50	350	434	1.79	0
Total Tetra-Furans	*	NotFnd	1.29	*	2.50	268	492	0.398	0
1st Fn. Tot Penta-Furans	*	NotFnd	0.90	*	2.50	304	306	0.587 PeCDF	0
Total Penta-Furans	*	NotFnd	0.90	*	2.50	304	306	0.587 *	0
Total Hexa-Furans	*	NotFnd	0.99	*	2.50	304	359	1.00	0
Total Hepta-Furans	*	NotFnd	1.47	*	2.50	291	273	1.06	0

Analyst: _____ Date: 1/15/10

File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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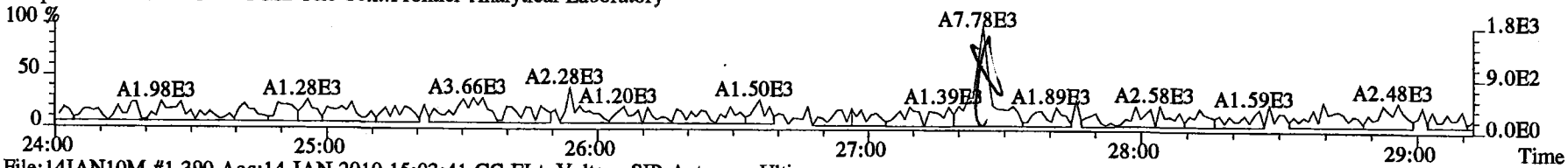

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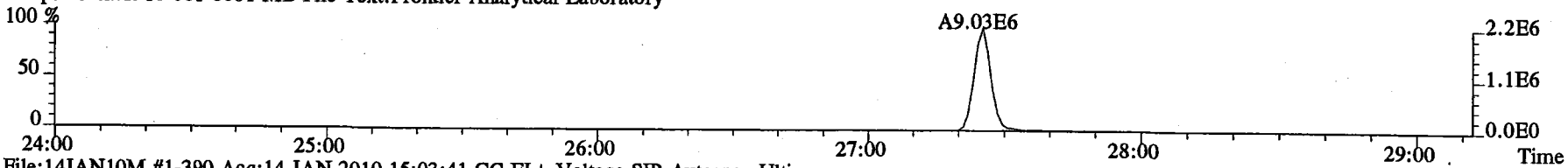
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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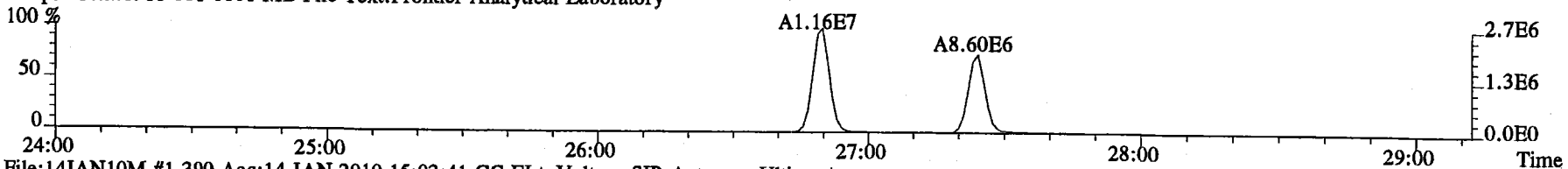
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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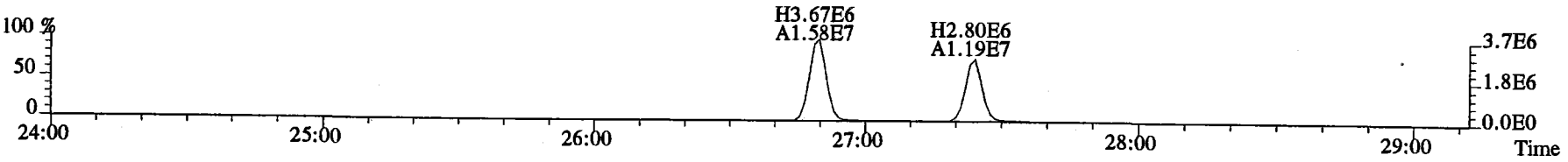

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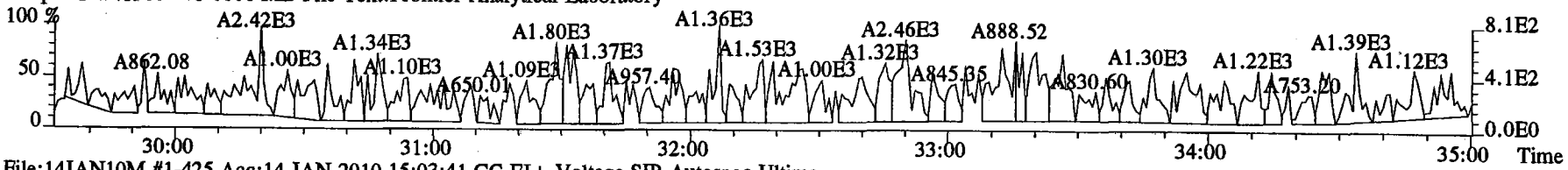

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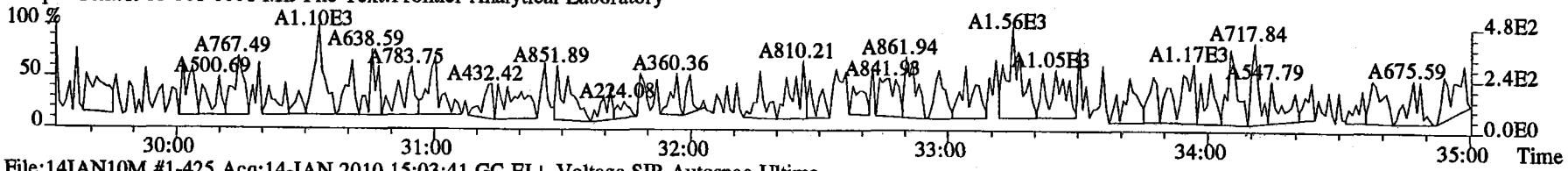

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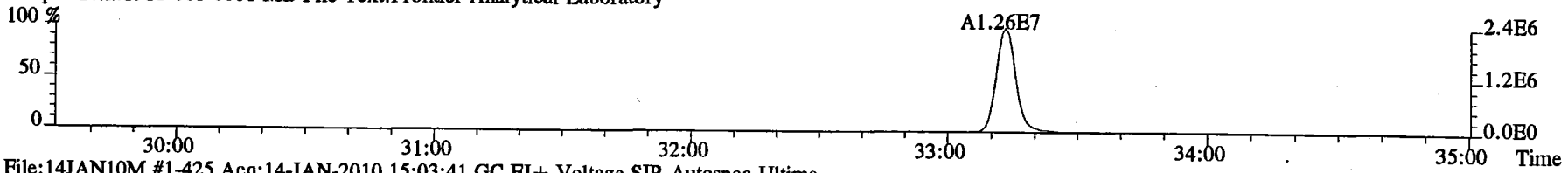
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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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
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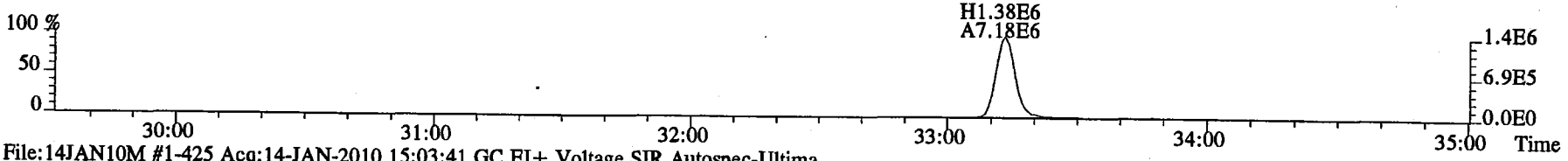
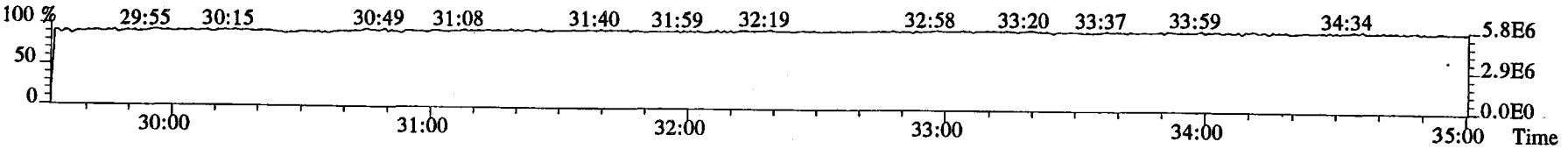
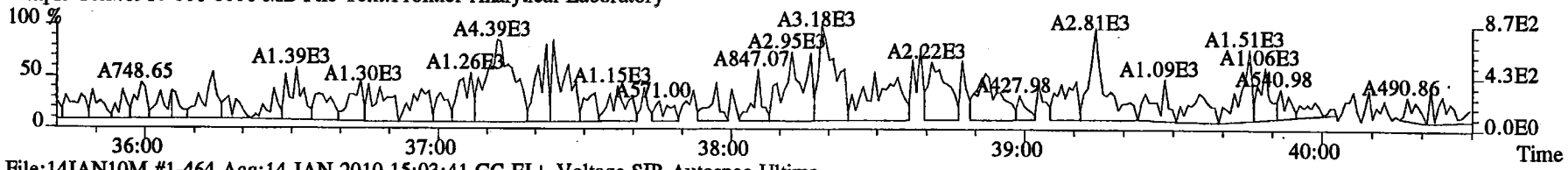


File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
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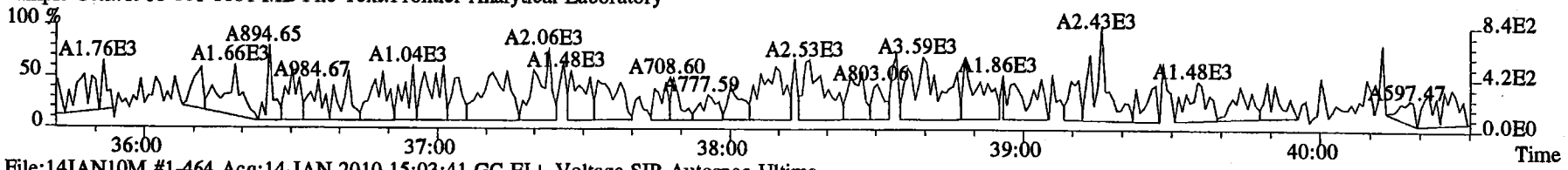
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 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
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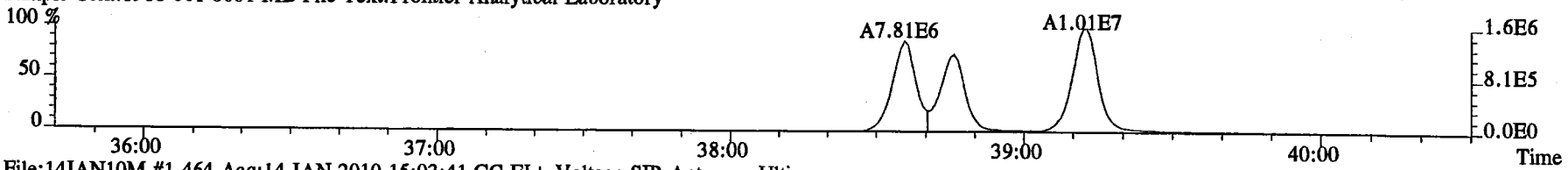
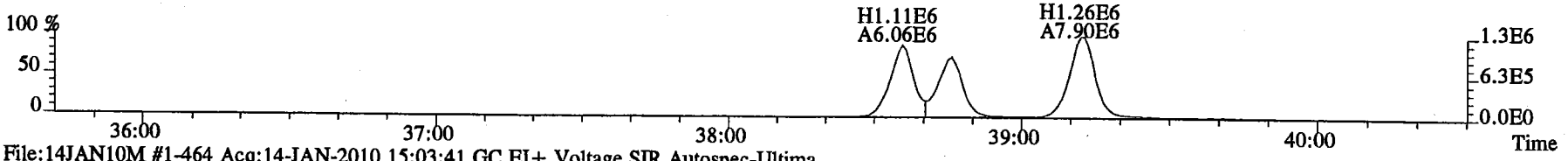
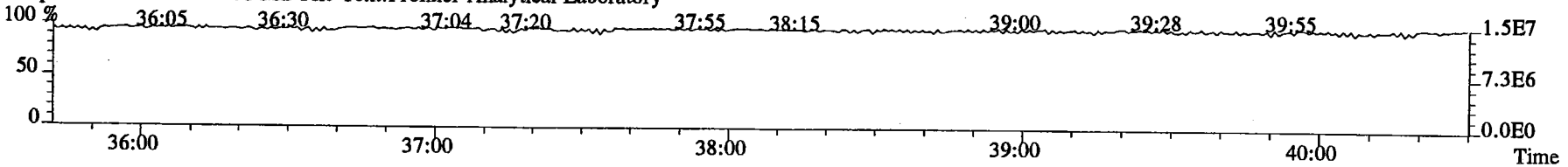


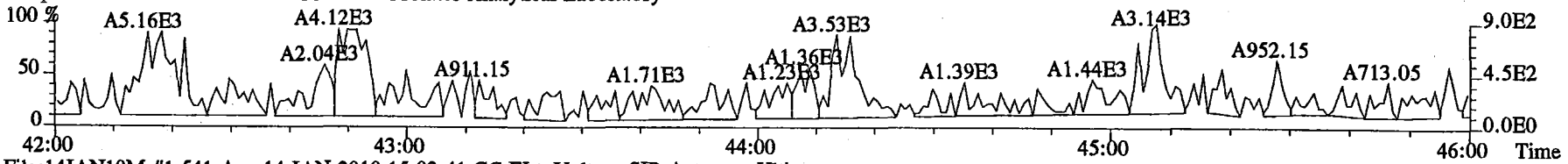
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



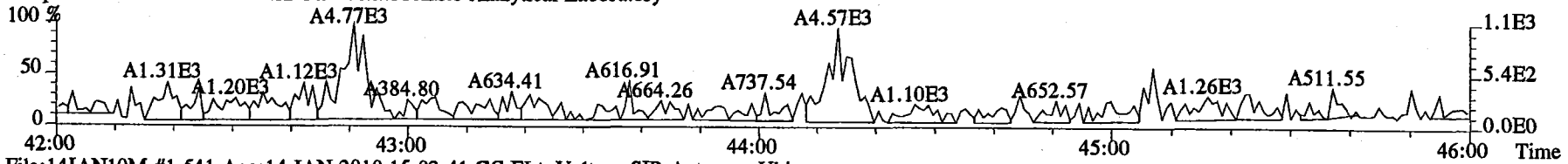
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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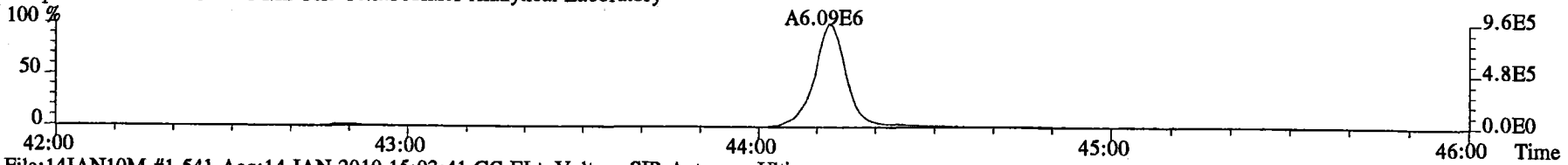
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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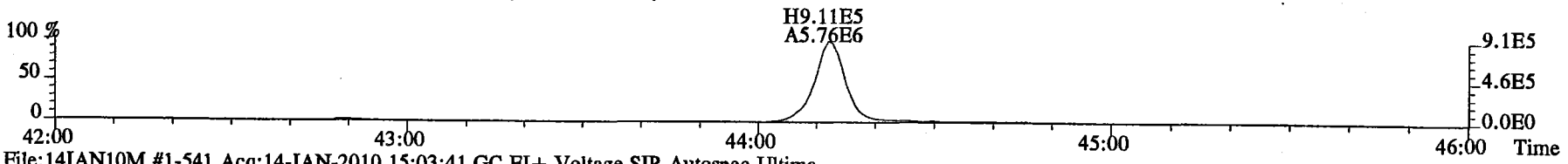
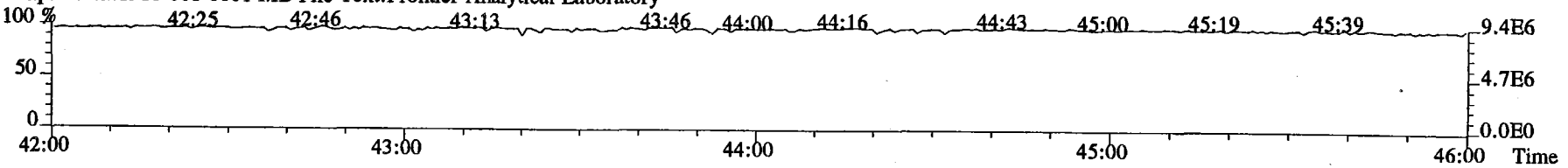
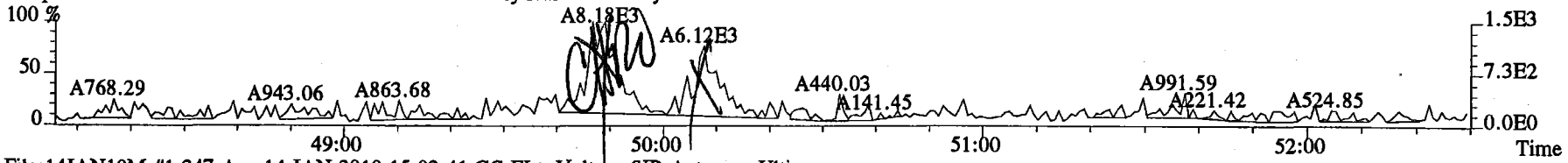
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



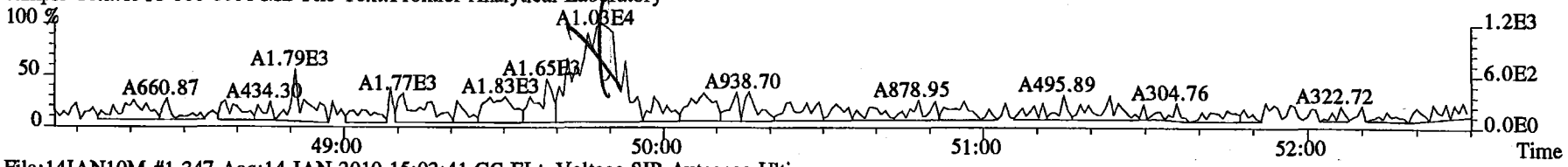
File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



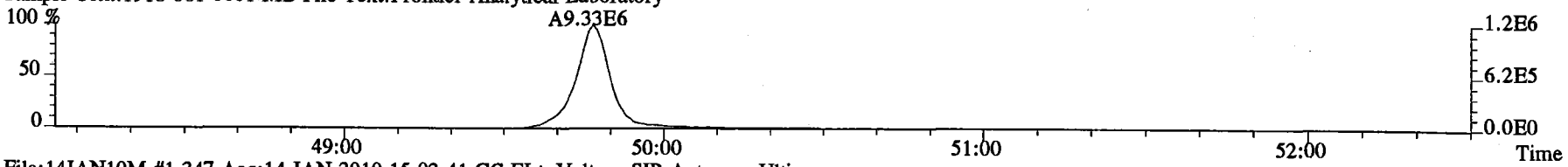
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



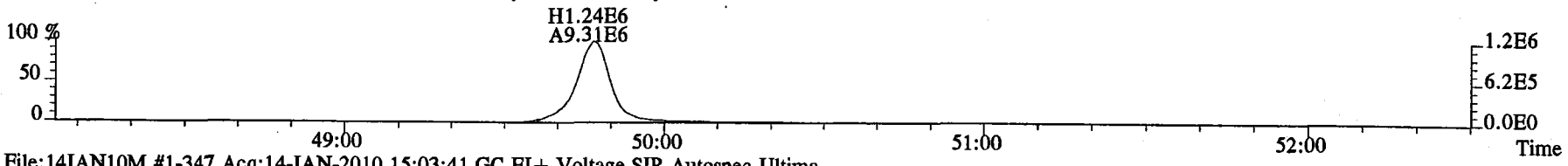
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



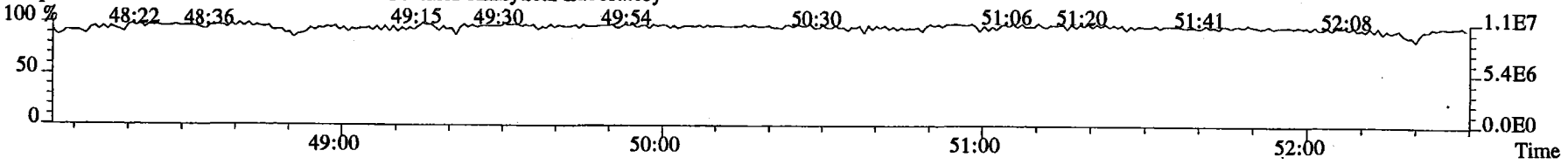
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



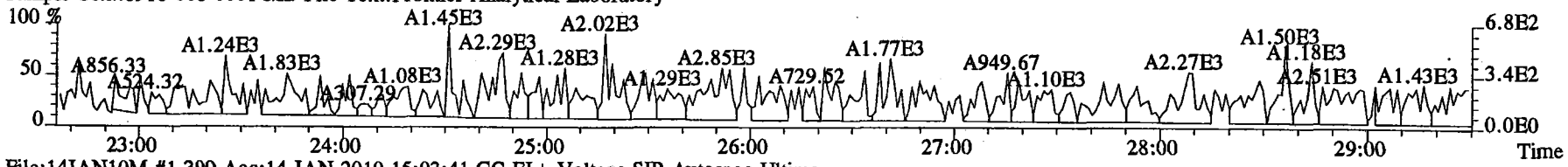
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



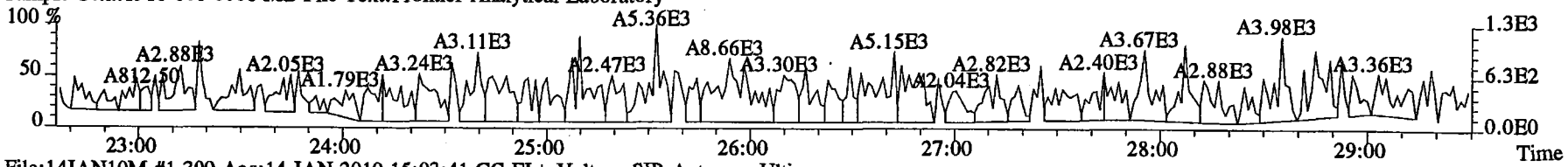
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



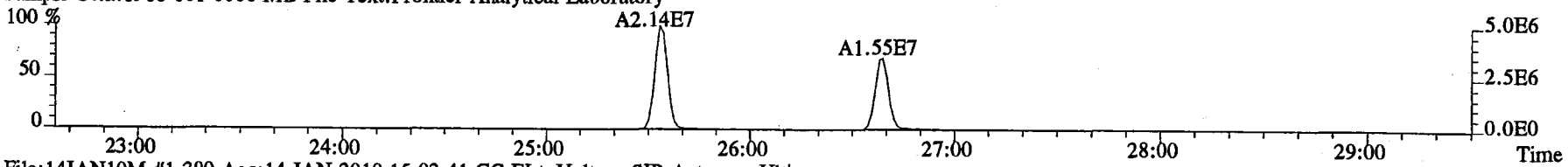
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



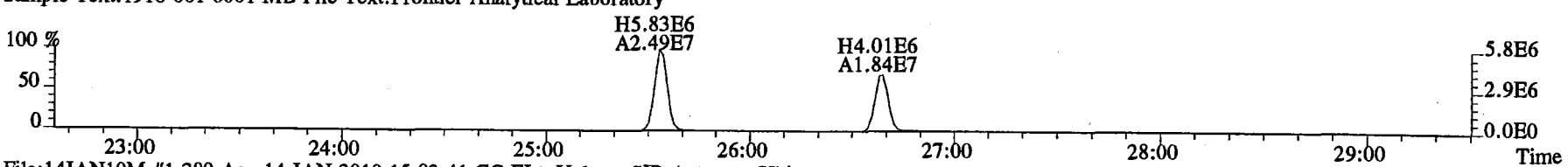
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



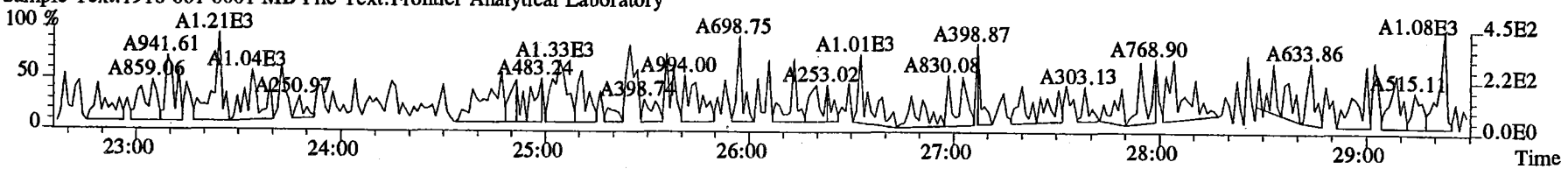
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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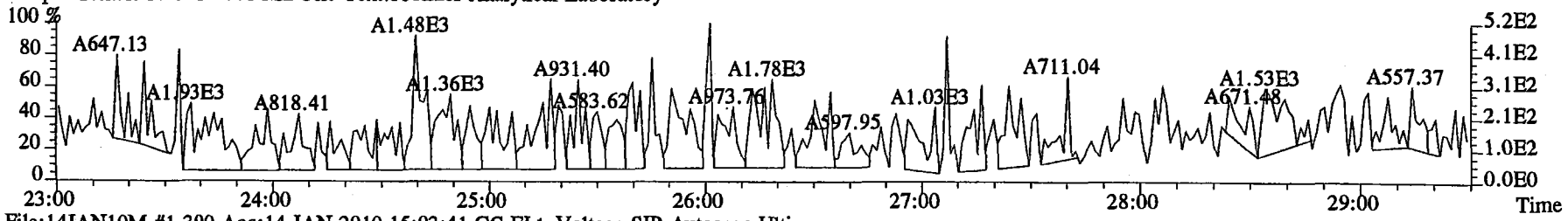
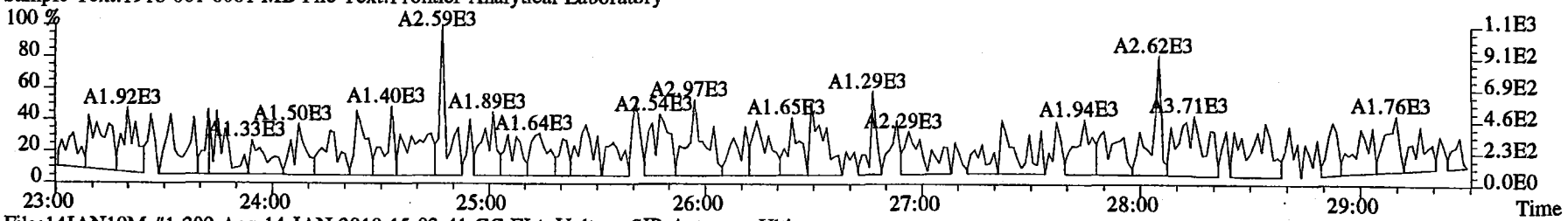
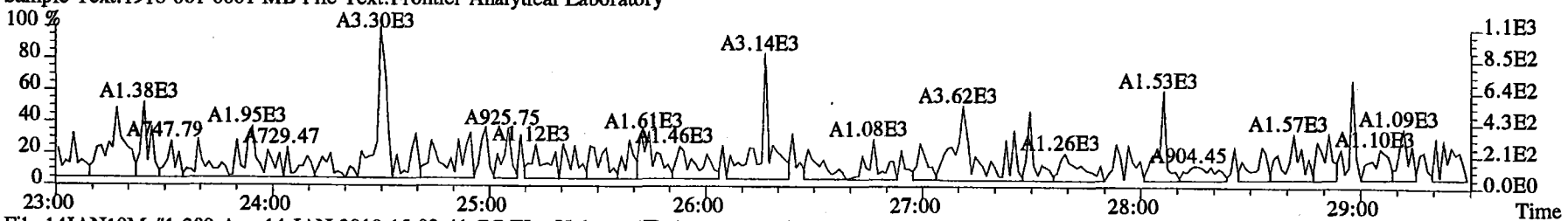
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



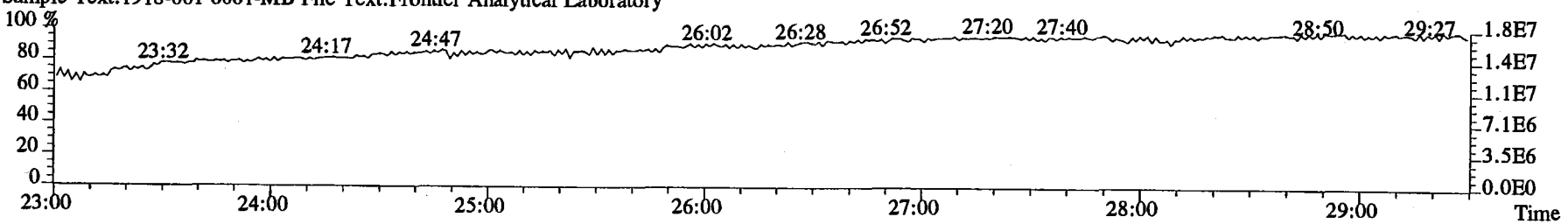
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



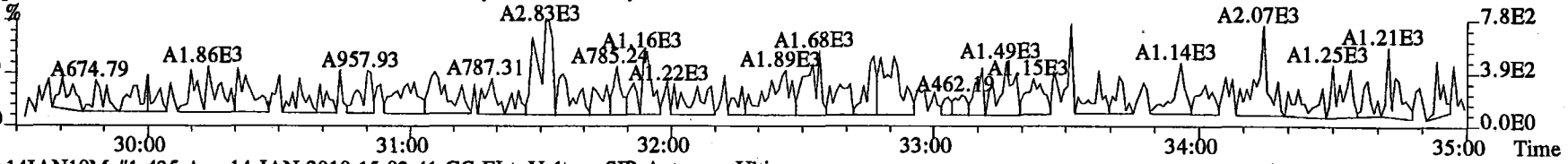
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



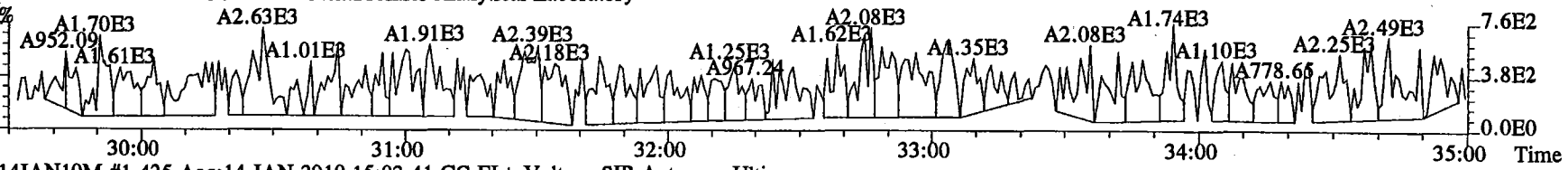
File:14JAN10M #1-390 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



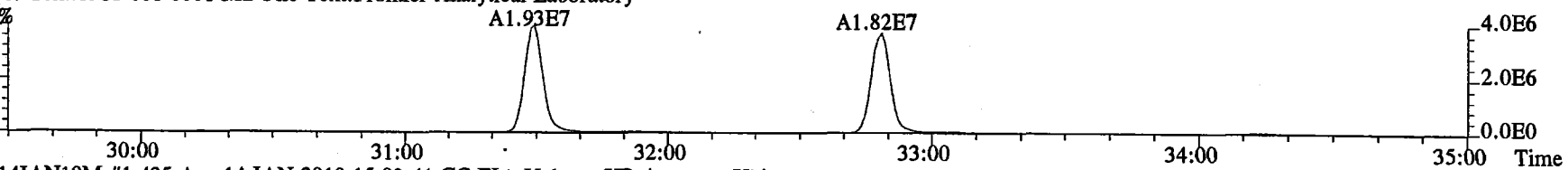
File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



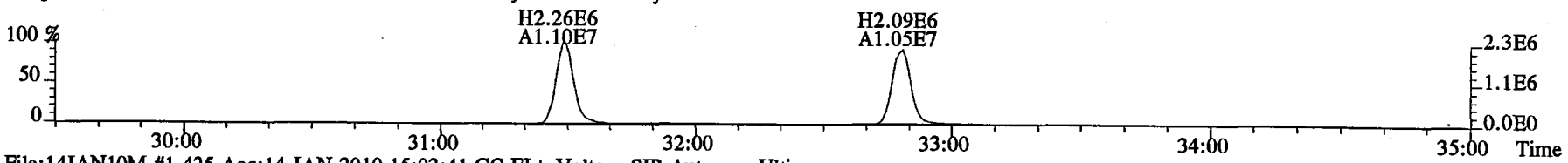
File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



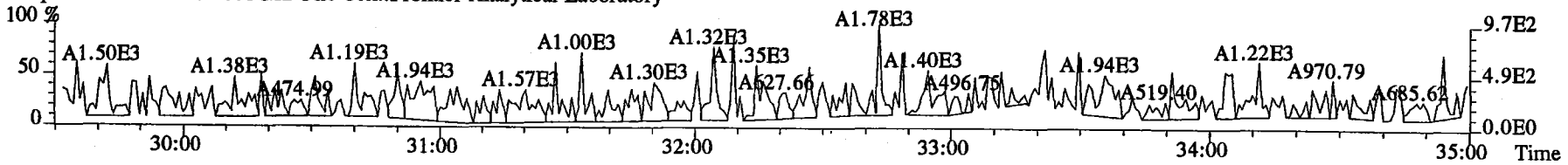
File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



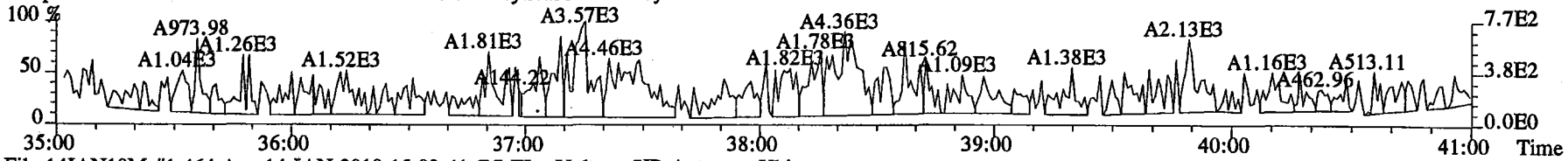
File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



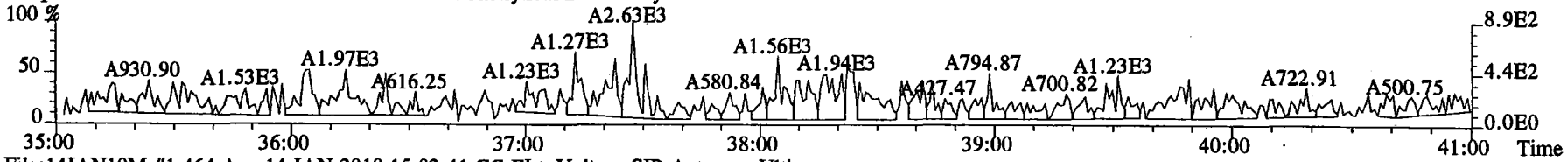
File:14JAN10M #1-425 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



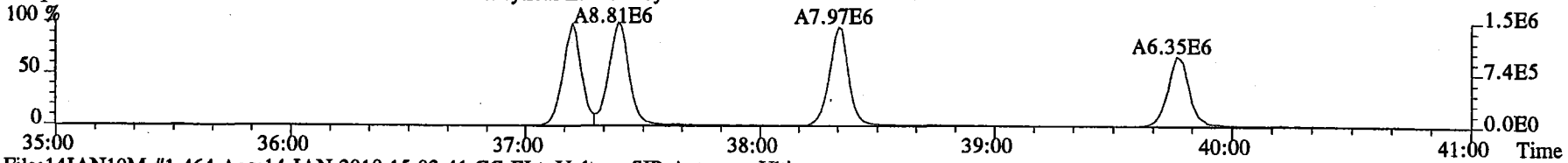
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



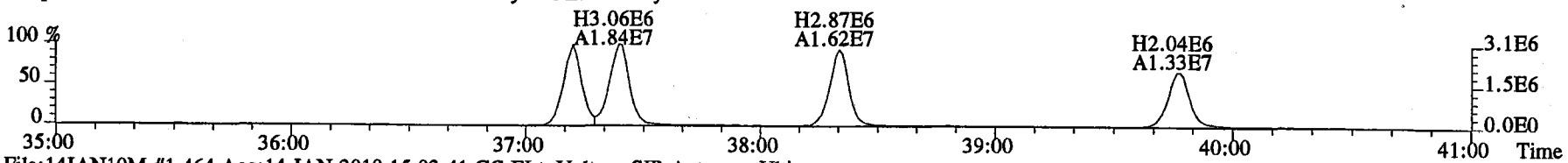
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



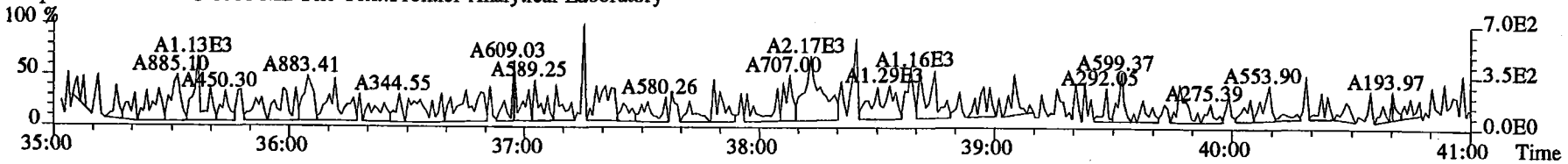
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



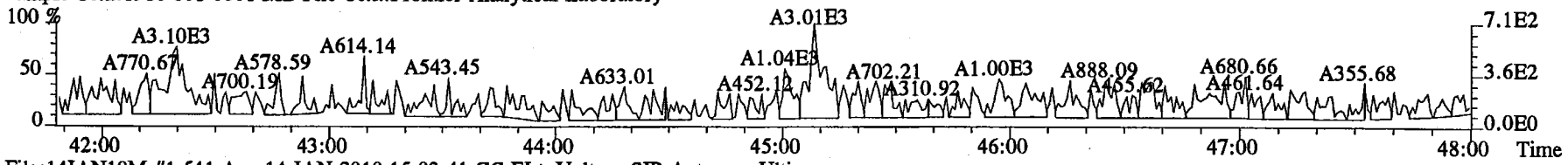
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



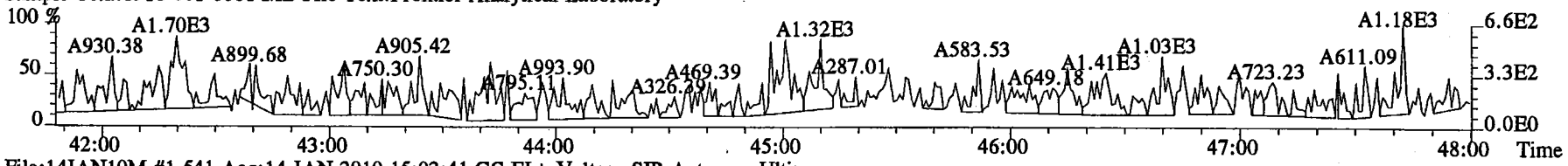
File:14JAN10M #1-464 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



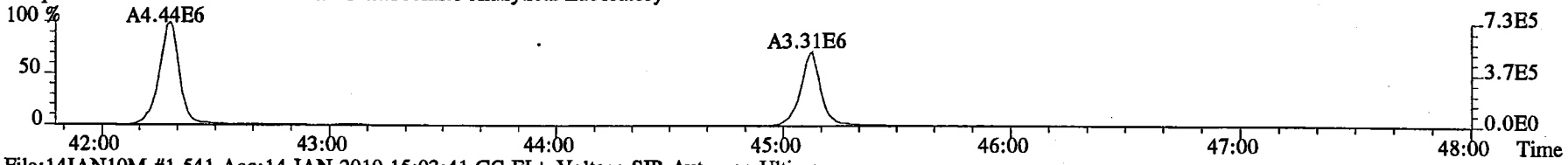
File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



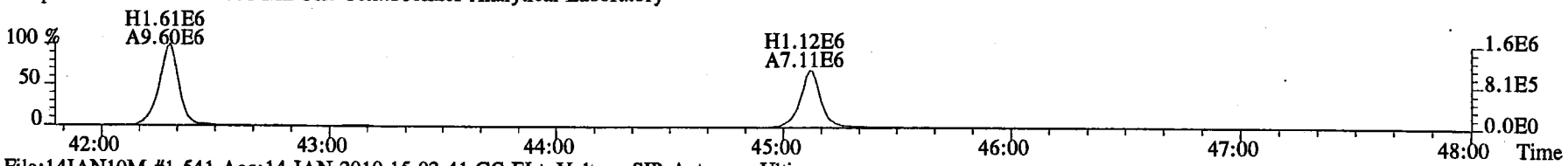
File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-541 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



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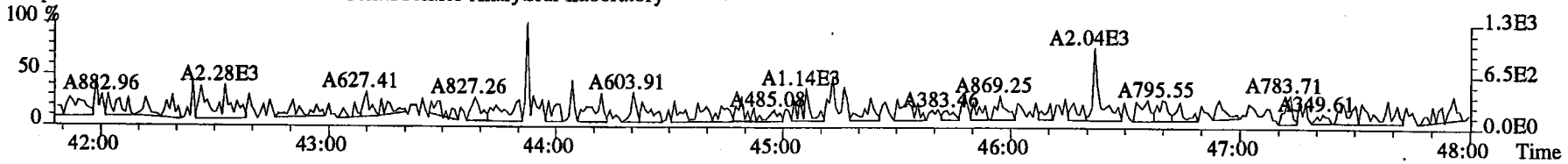
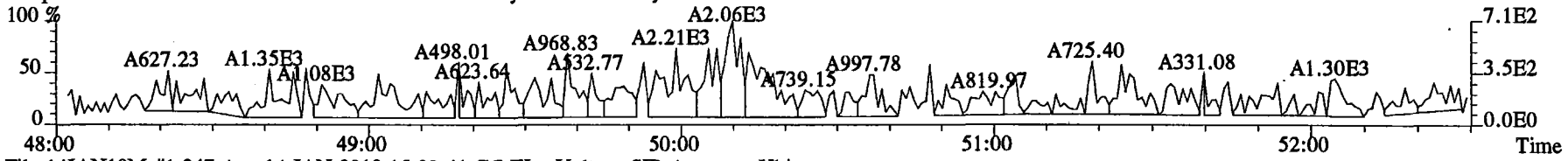
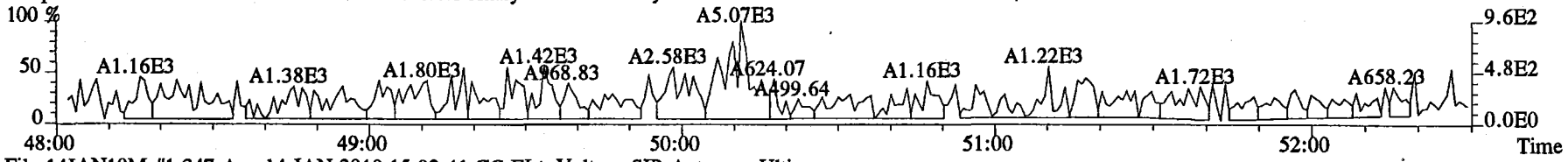
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



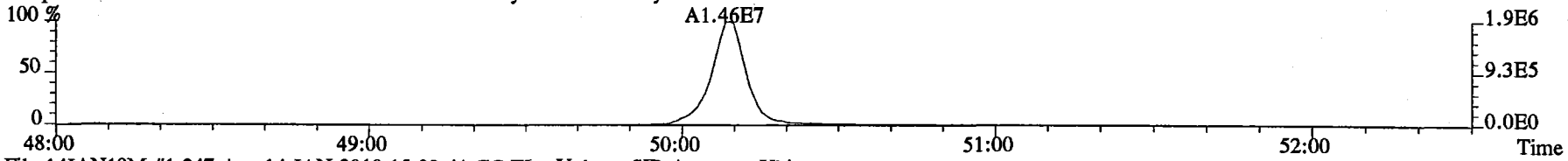
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



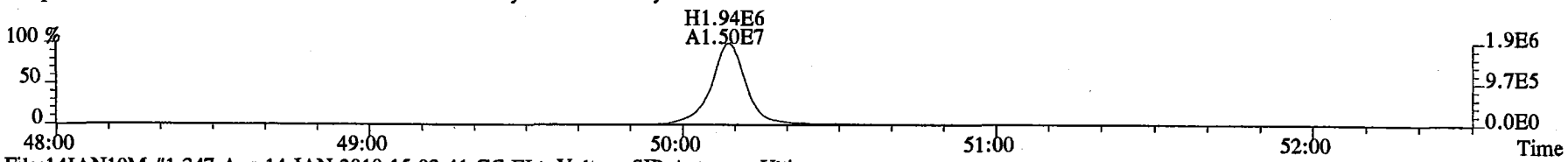
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



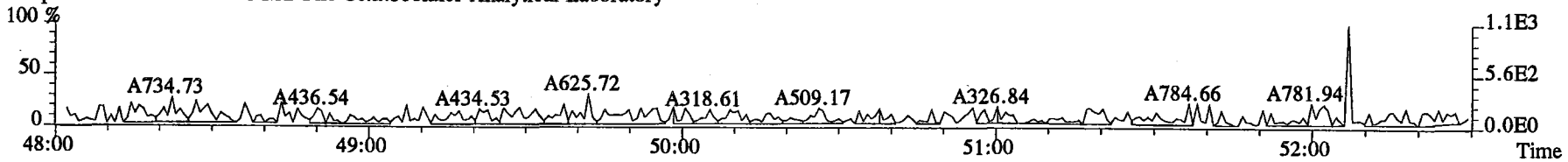
File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 15:03:41 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:1918-001-0001-MB File Text:Frontier Analytical Laboratory



USEPA - ITD

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

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Aqueous OPR Data Filename: 14JAN10M Sam:2

Ext. Date: 1/13/10 Shift: Day Analysis Date: 14-JAN-10 14:08:25

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
NATIVE ANALYTES			
2,3,7,8-TCDD	10	9.77	6.70 - 15.8
1,2,3,7,8-PeCDD	50	49.6	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	49.5	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	50.0	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	50.2	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	50.9	35.0 - 70.0
OCDD	100	95.8	78.0 - 144
2,3,7,8-TCDF	10	9.98	7.50 - 15.8
1,2,3,7,8-PeCDF	50	51.4	40.0 - 67.0
2,3,4,7,8-PeCDF	50	52.0	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	51.0	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	49.8	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	50.3	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	50.1	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	51.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	50.4	39.0 - 69.0
OCDF	100	99.9	63.0 - 170

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

Analyst: _____ Date: 1/15/10

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: 14JAN10M Sam:2

Ext. Date: 1/13/10 Shift: Day Analysis Date: 14-JAN-10 14:08:25

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	64.8	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	58.6	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	65.6	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	63.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	64.3	26.0 - 166
13C-OCDD	200	191	26.0 - 397
13C-2,3,7,8-TCDF	100	66.0	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	57.9	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	56.8	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	69.6	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	66.4	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	66.8	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	64.1	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	62.4	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	75.9	20.0 - 186
13C-OCDF	200	171	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	28.4	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: 1/15/10

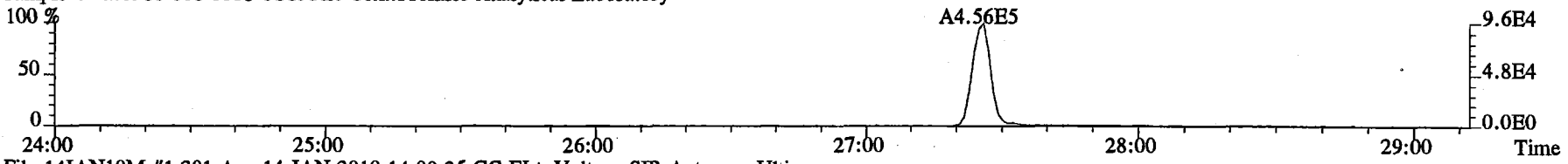
FAL ID: 1918-001-0001-OPR Filename: 14JAN10M Sam:2 Acquired: 14-JAN-10 14:08:25 ICal: PCDDFAL3-11-18-09
Client ID: OPR ConCal: ST011410M1 EndCal: ST011410M2
Results: 1918 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 101
WHO 1998 Tox: 126 WHO 2005 Tox: 114

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	1.02e+06	0.80 y	27:26	1.02	9.77		2.50	-	-	*
1,2,3,7,8-PeCDD	4.80e+06	1.61 y	33:15	0.96	49.6		2.50	-	-	*
1,2,3,4,7,8-HxCDD	4.86e+06	1.30 y	38:37	1.37	49.5		2.50	-	-	*
1,2,3,6,7,8-HxCDD	4.40e+06	1.29 y	38:47	1.34	50.0		2.50	-	-	*
1,2,3,7,8,9-HxCDD	4.70e+06	1.28 y	39:14	1.37	50.2		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	3.80e+06	0.92 y	44:14	1.17	50.9		2.50	-	-	*
OCDD	8.19e+06	0.94 y	49:48	1.21	95.8		2.50	-	-	*
2,3,7,8-TCDF	2.33e+06	0.67 y	26:40	1.29	9.98		2.50	-	-	*
1,2,3,7,8-PeCDF	7.28e+06	1.71 y	31:31	0.89	51.4		2.50	-	-	*
2,3,4,7,8-PeCDF	7.14e+06	1.68 y	32:50	0.91	52.0		2.50	-	-	*
1,2,3,4,7,8-HxCDF	6.73e+06	1.28 y	37:14	1.00	51.0		2.50	-	-	*
1,2,3,6,7,8-HxCDF	6.72e+06	1.29 y	37:25	0.92	49.8		2.50	-	-	*
2,3,4,6,7,8-HxCDF	6.36e+06	1.27 y	38:22	0.99	50.3		2.50	-	-	*
1,2,3,7,8,9-HxCDF	5.82e+06	1.28 y	39:48	1.09	50.1		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	5.33e+06	1.07 y	42:20	1.36	51.7		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	5.75e+06	1.05 y	45:09	1.61	50.4		2.50	-	-	*
OCDF	9.34e+06	0.92 y	50:11	0.84	99.9		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	1.03e+07	0.71 y	27:24	0.94	64.8					64.8
13C-1,2,3,7,8-PeCDD	1.00e+07	1.78 y	33:13	1.02	58.6					58.6
13C-1,2,3,4,7,8-HxCDD	7.14e+06	1.35 y	38:36	0.98	65.6					65.6
13C-1,2,3,6,7,8-HxCDD	6.55e+06	1.26 y	38:46	0.94	63.2					63.2
13C-1,2,3,4,6,7,8-HpCDD	6.40e+06	1.06 y	44:13	0.90	64.3					64.3
13C-OCDD	1.41e+07	0.98 y	49:47	0.67	191					95.4
13C-2,3,7,8-TCDF	1.82e+07	0.84 y	26:39	0.88	66.0					66.0
13C-1,2,3,7,8-PeCDF	1.60e+07	1.70 y	31:30	0.88	57.9					57.9
13C-2,3,4,7,8-PeCDF	1.52e+07	1.72 y	32:49	0.85	56.8					56.8
13C-1,2,3,4,7,8-HxCDF	1.32e+07	0.49 y	37:13	1.72	69.6					69.6
13C-1,2,3,6,7,8-HxCDF	1.47e+07	0.48 y	37:24	2.00	66.4					66.4
13C-2,3,4,6,7,8-HxCDF	1.28e+07	0.48 y	38:21	1.74	66.8					66.8
13C-1,2,3,7,8,9-HxCDF	1.07e+07	0.48 y	39:47	1.51	64.1					64.1
13C-1,2,3,4,6,7,8-HpCDF	7.58e+06	0.48 y	42:18	1.10	62.4					62.4
13C-1,2,3,4,7,8,9-HpCDF	7.10e+06	0.47 y	45:08	0.85	75.9					75.9
13C-OCDF	2.22e+07	0.97 y	50:10	1.17	171					85.5
37Cl-2,3,7,8-TCDD	4.66e+06		27:25	0.97	28.4					71.0
13C-1,2,3,4-TCDD	1.68e+07	0.75 y	26:49	-	64.4					
13C-1,2,3,4-TCDF	3.14e+07	0.84 y	25:34	-	68.0					
13C-1,2,3,7,8,9-HxCDD	1.11e+07	1.30 y	39:13	-	53.9					

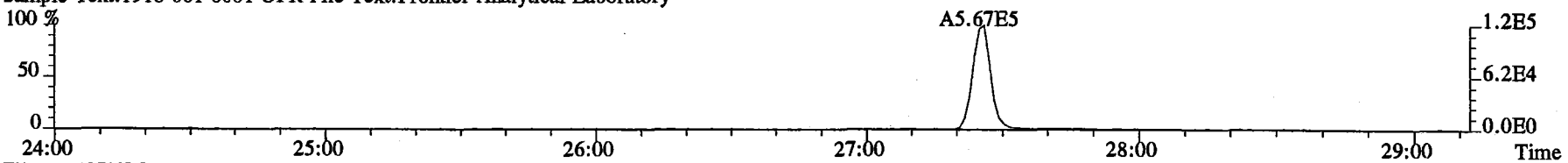
							Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.07e+06		22:48	1.02	10.2		2.50	-	-	*		22
Total Penta-Dioxins	4.83e+06		31:44	0.96	50.0		2.50	-	-	*		11
Total Hexa-Dioxins	1.41e+07		38:37	1.36	151		2.50	-	-	*		15
Total Hepta-Dioxins	4.01e+06		42:51	1.17	53.7		2.50	-	-	*		33
Total Tetra-Furans	2.42e+06		24:12	1.29	10.4		2.50	-	-	*		13
1st Fn. Tot Penta-Furans	4.31e+04		23:06	0.90	0.309		2.50	-	-	*	PeCDF	22
Total Penta-Furans	1.47e+07		30:15	0.90	105		2.50	-	-	*	105	8
Total Hexa-Furans	2.57e+07		35:33	0.99	202		2.50	-	-	*		7
Total Hepta-Furans	1.12e+07		42:20	1.47	103		2.50	-	-	*		10

Analyst: _____ Date: 1/15/10

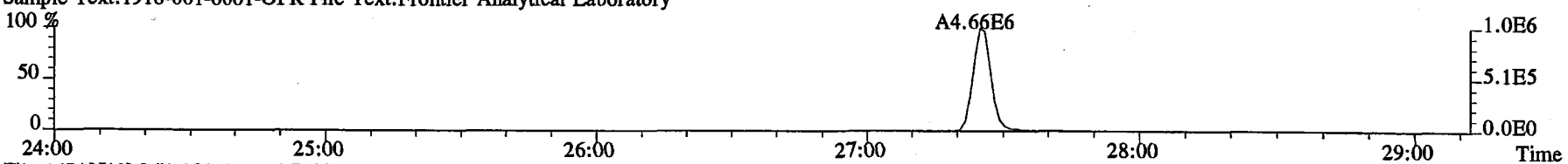
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



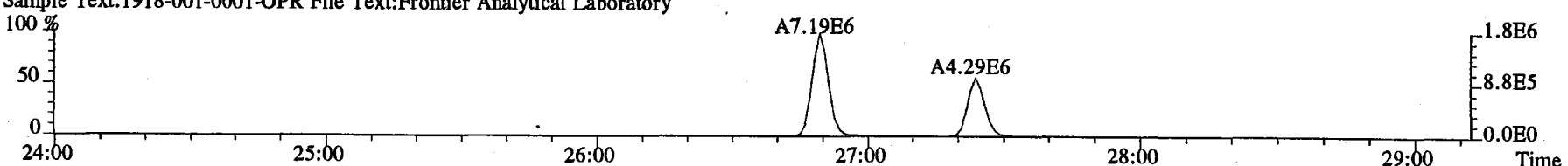
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



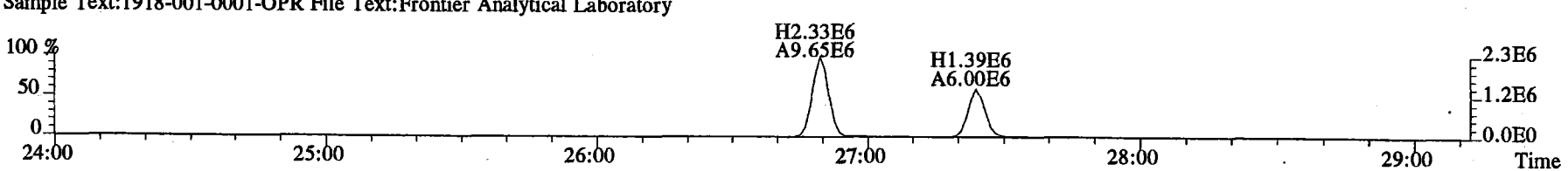
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



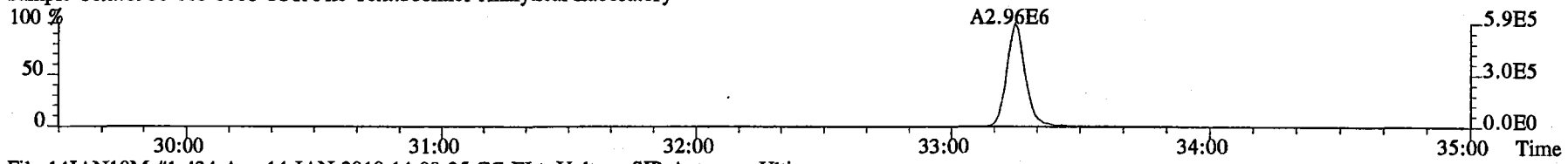
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



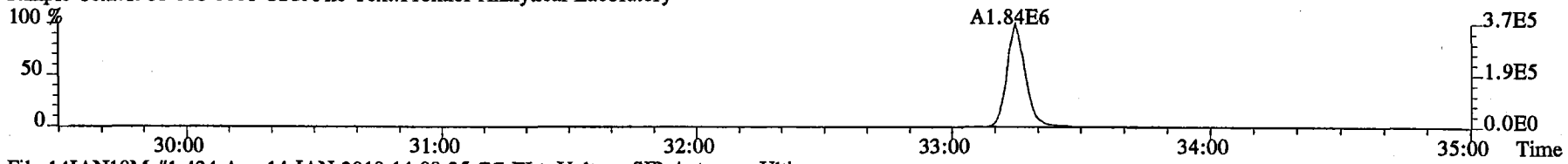
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



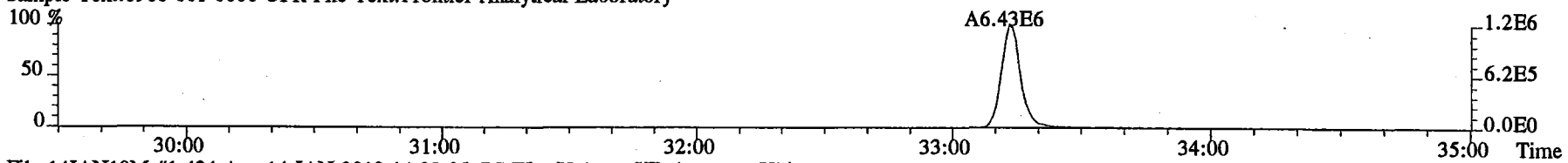
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



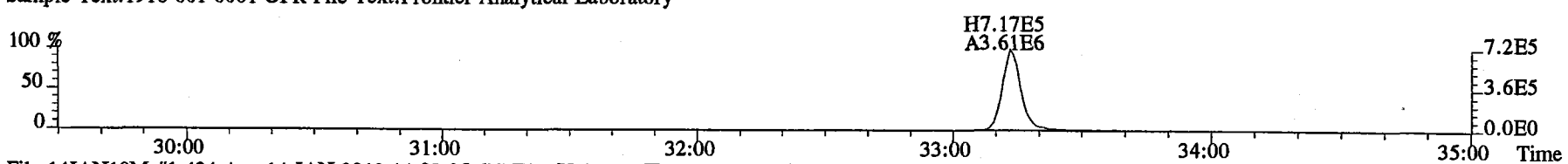
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



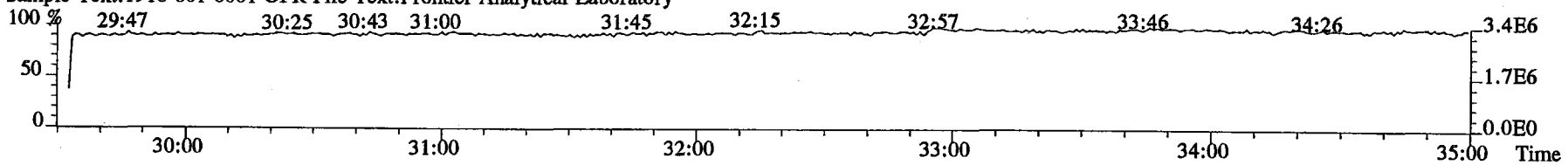
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



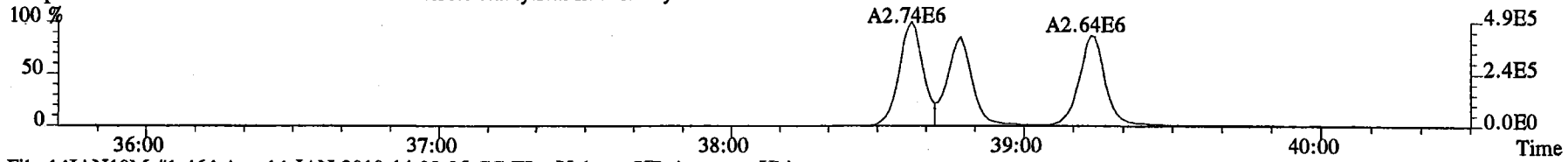
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



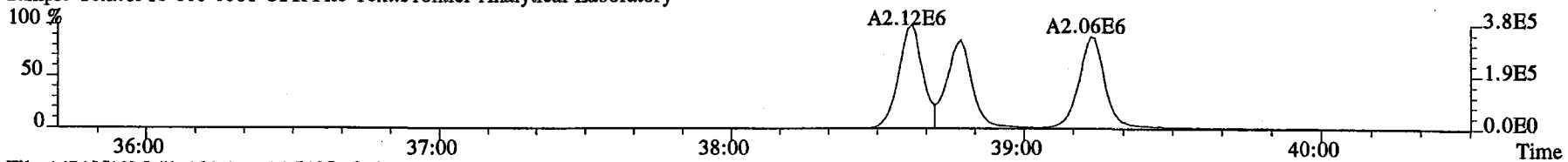
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



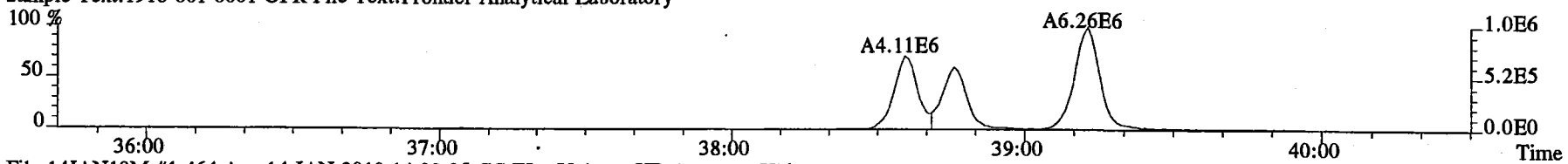
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



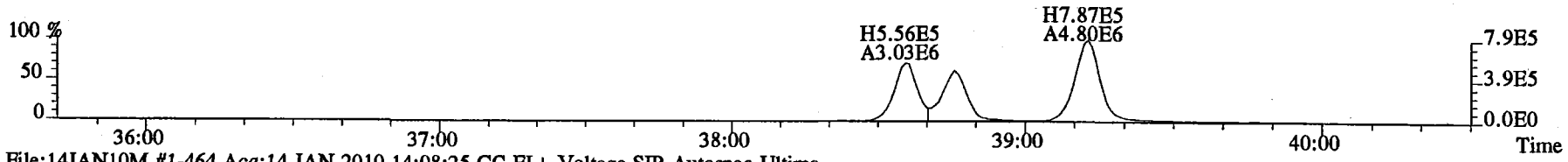
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



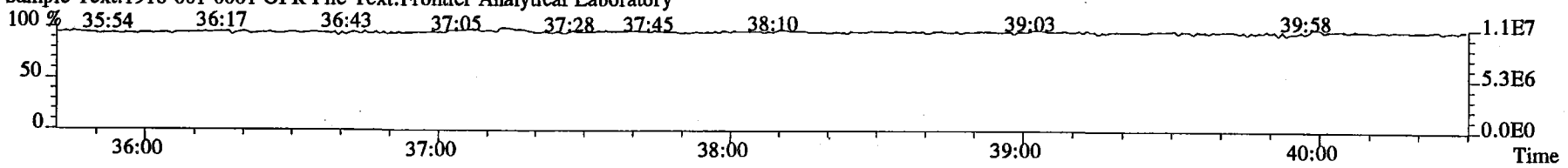
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



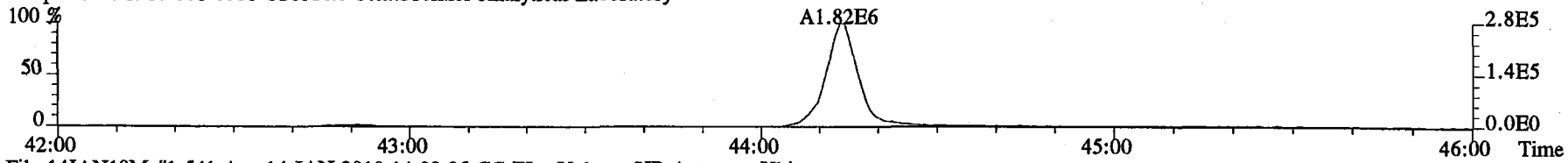
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



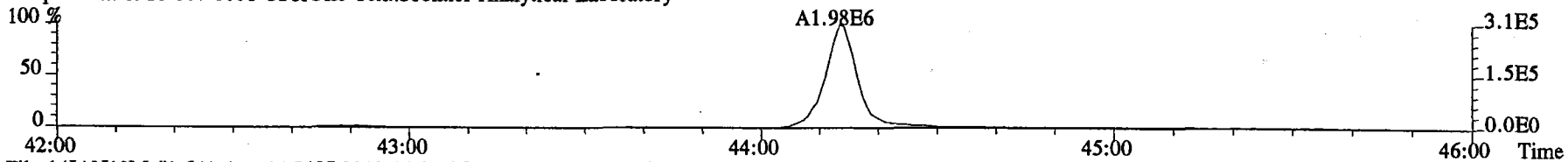
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



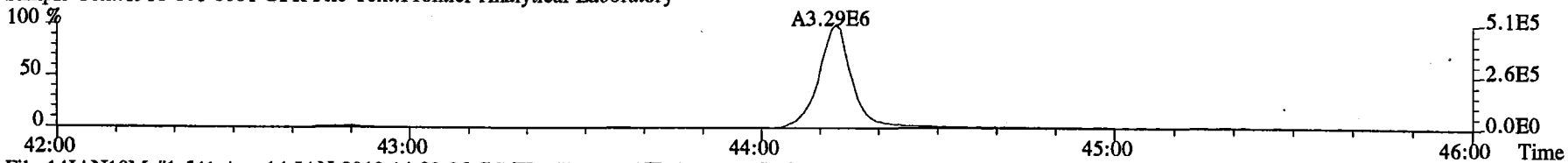
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



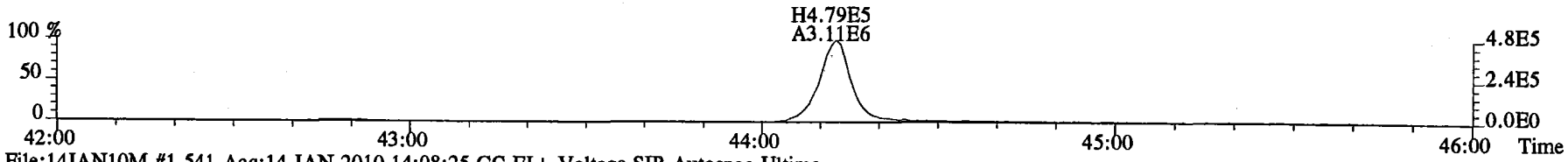
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



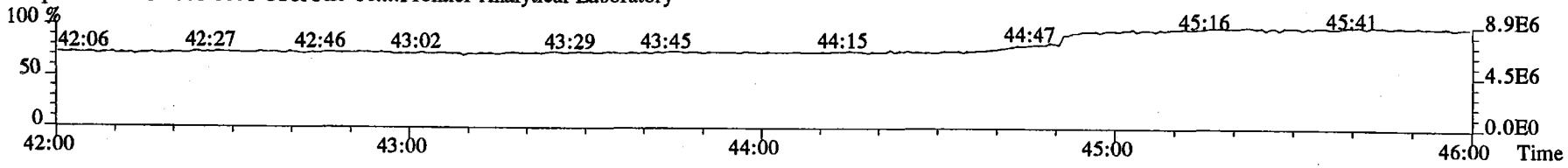
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



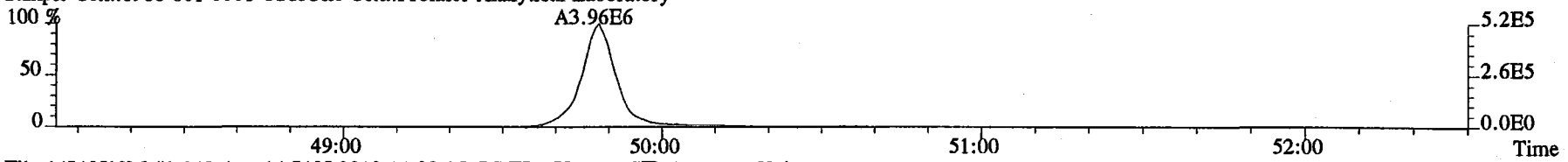
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



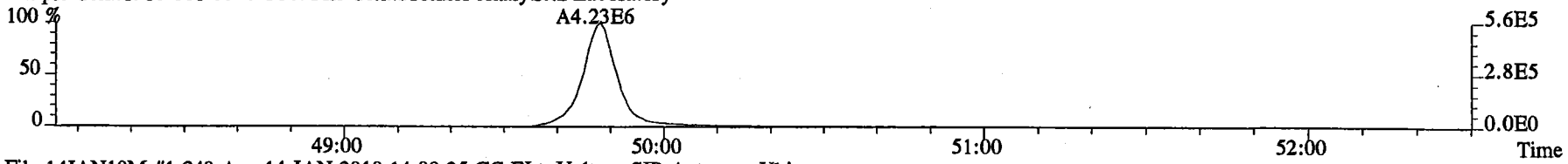
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



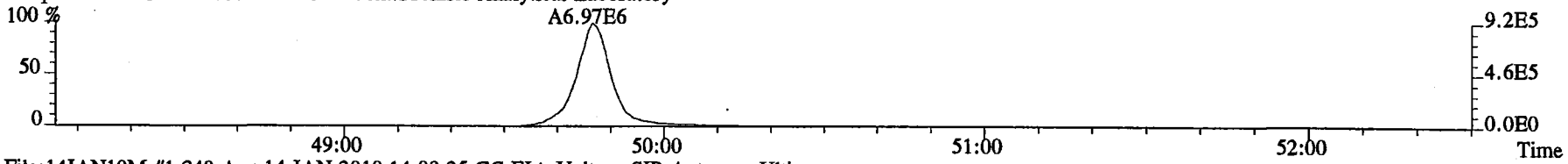
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



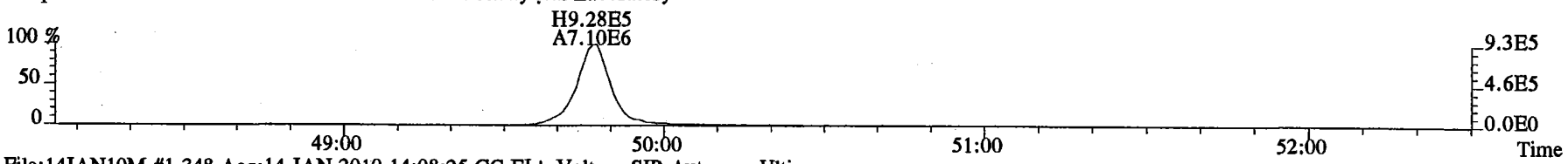
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



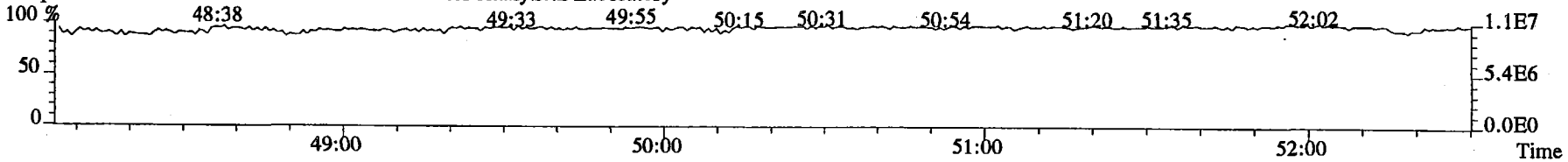
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



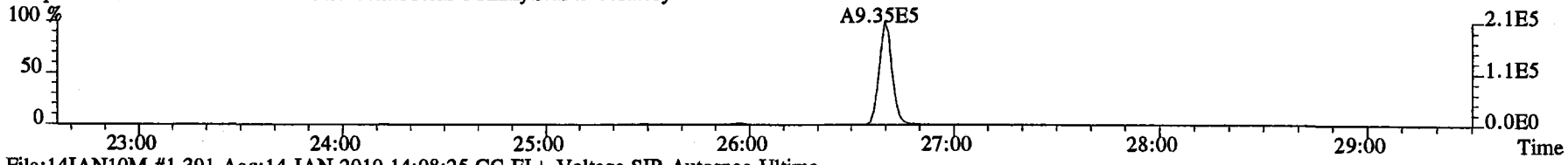
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



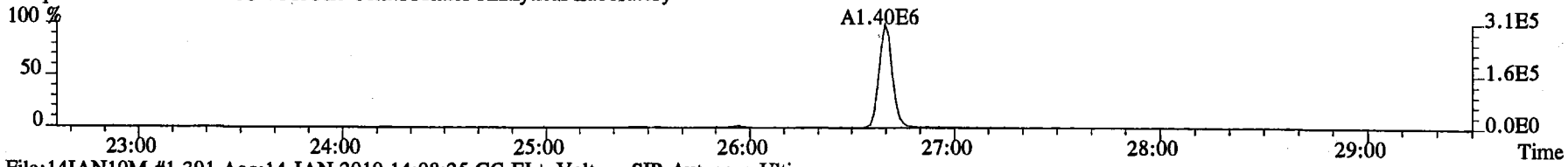
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



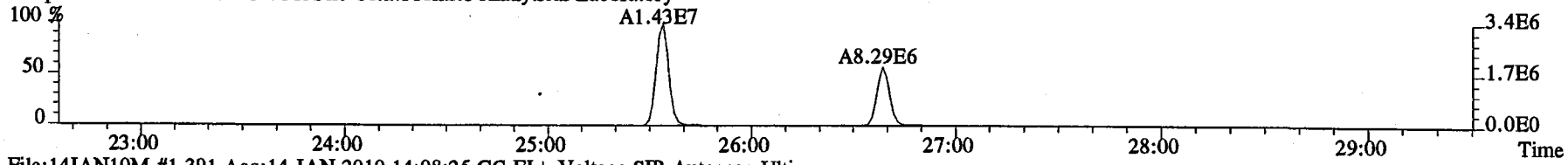
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



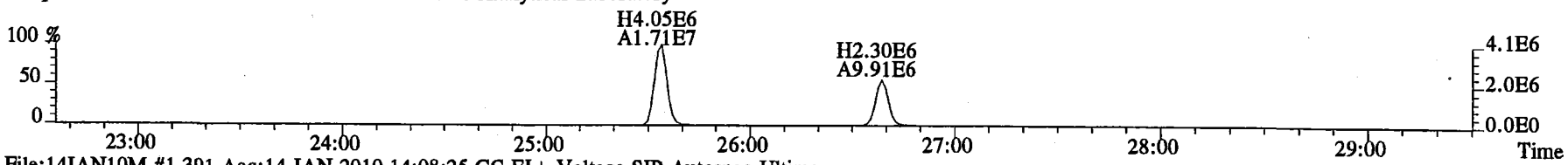
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



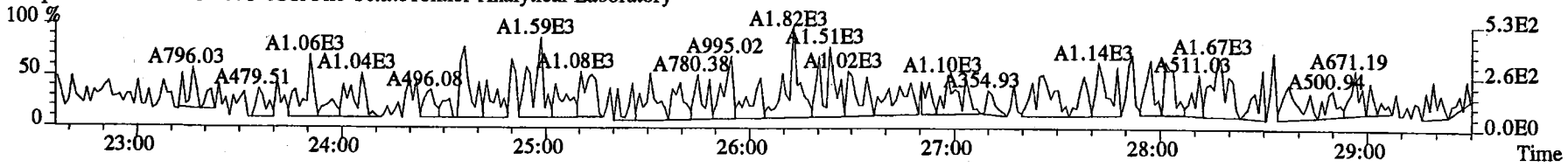
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



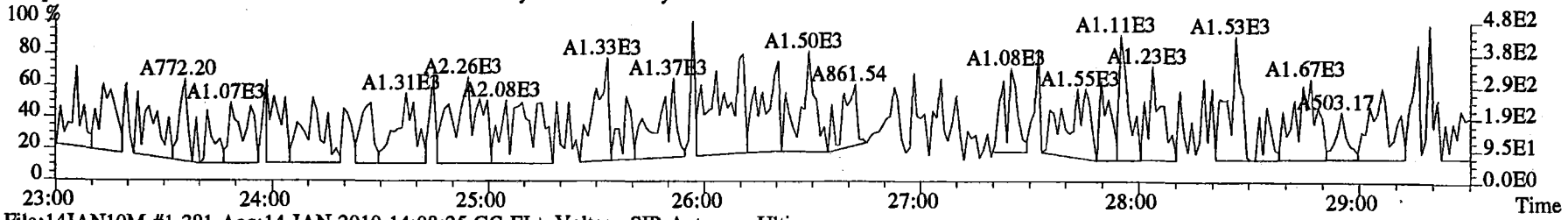
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



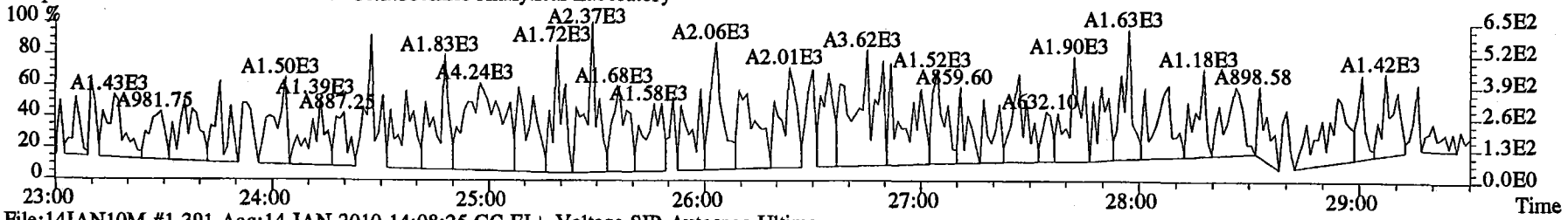
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



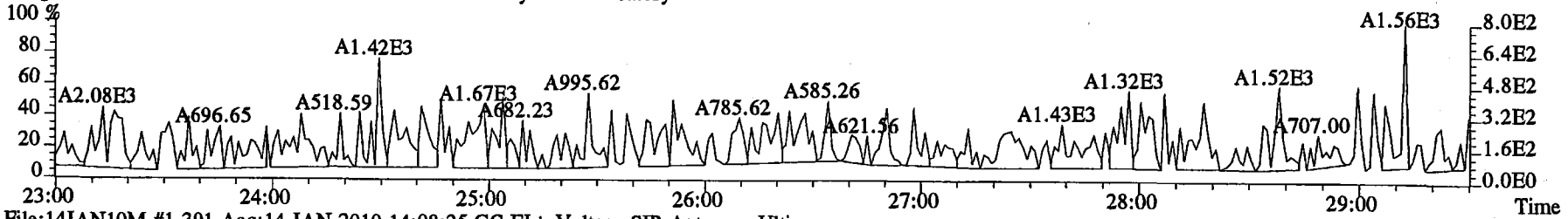
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



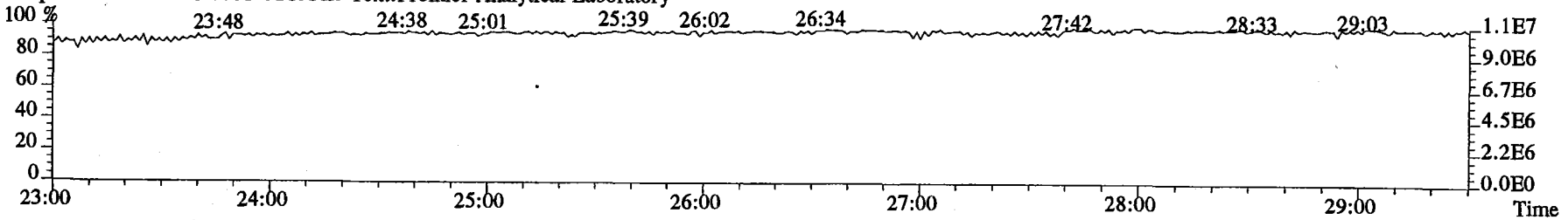
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



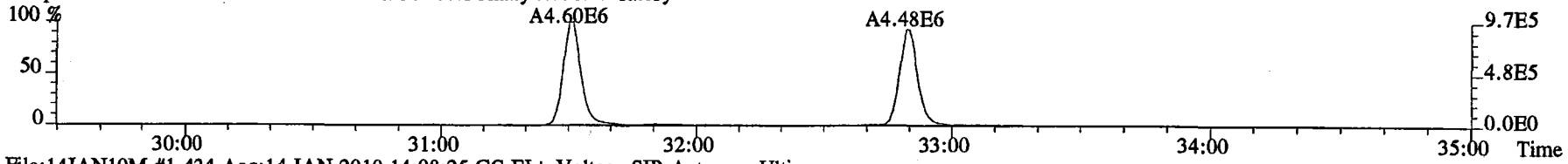
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



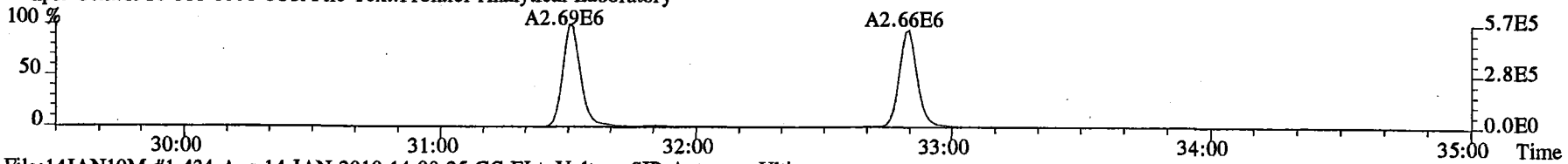
File:14JAN10M #1-391 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



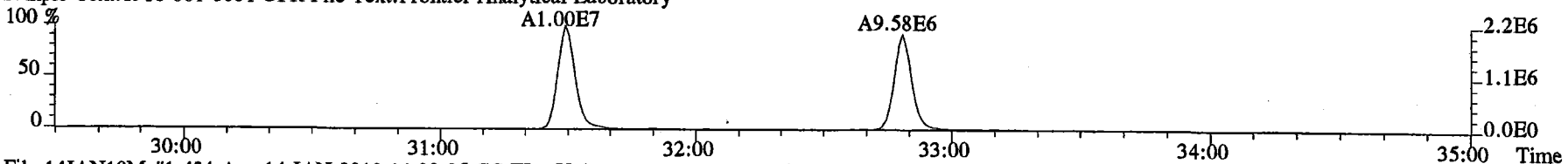
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



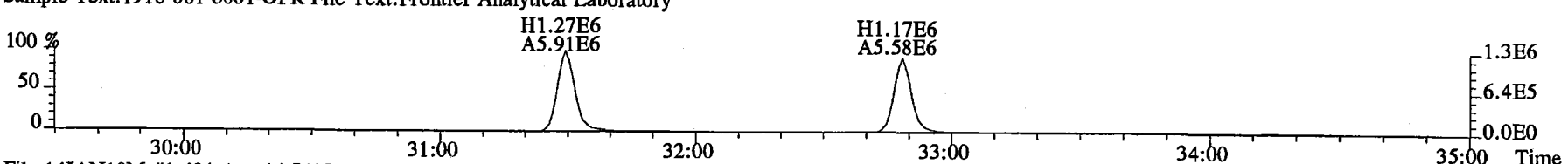
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



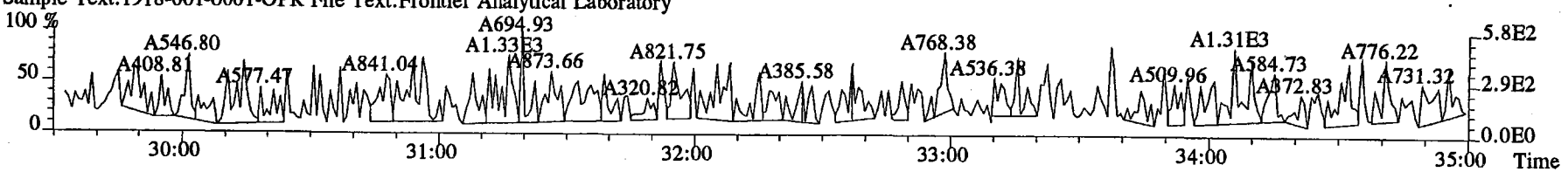
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



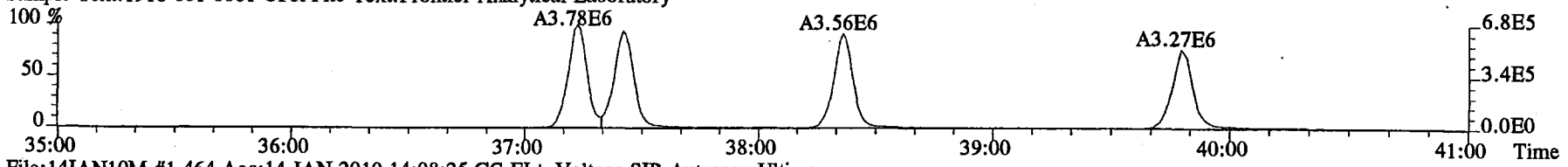
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



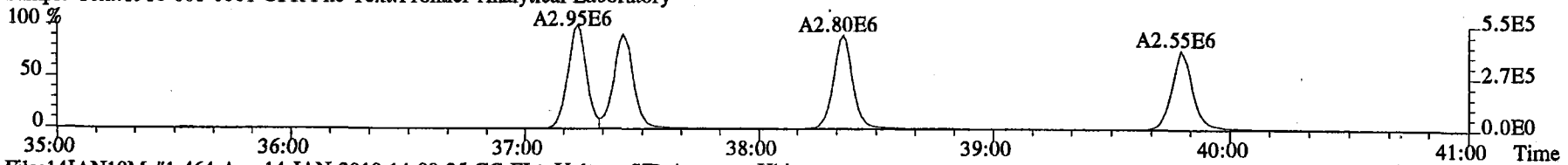
File:14JAN10M #1-424 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



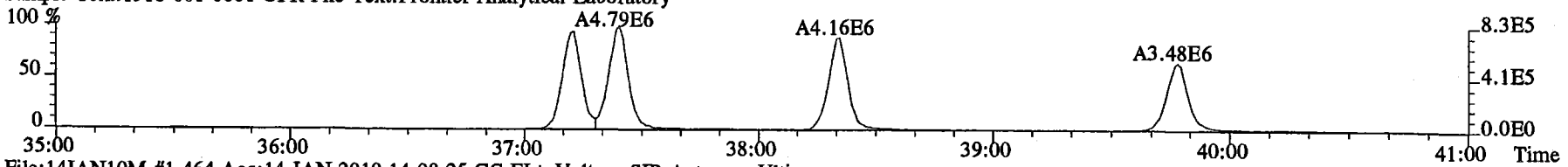
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



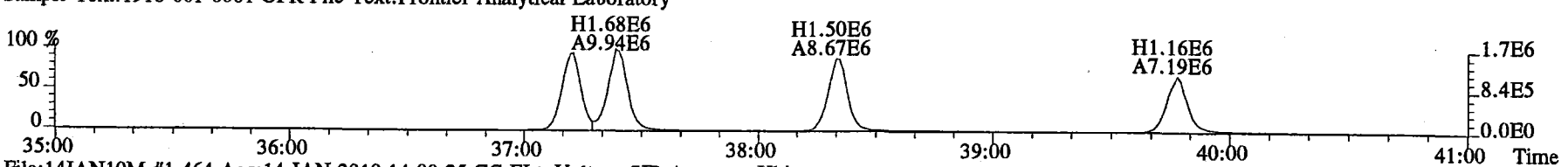
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



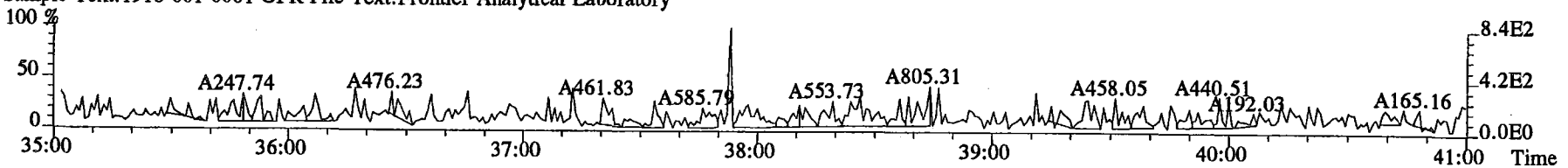
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



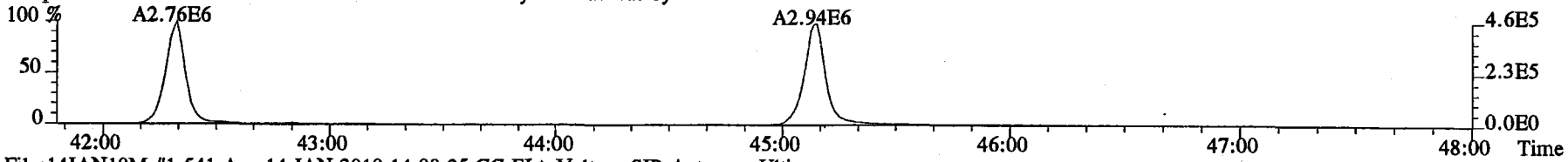
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



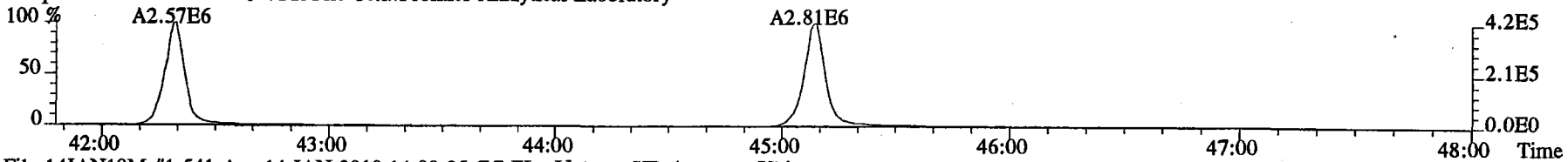
File:14JAN10M #1-464 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



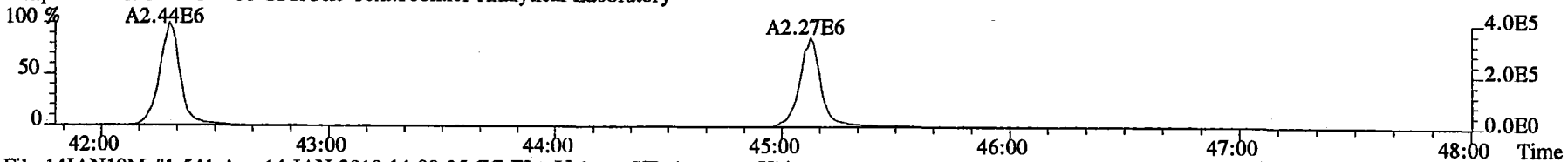
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



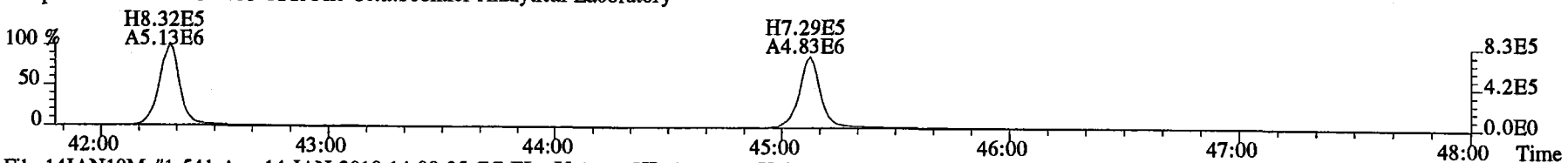
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



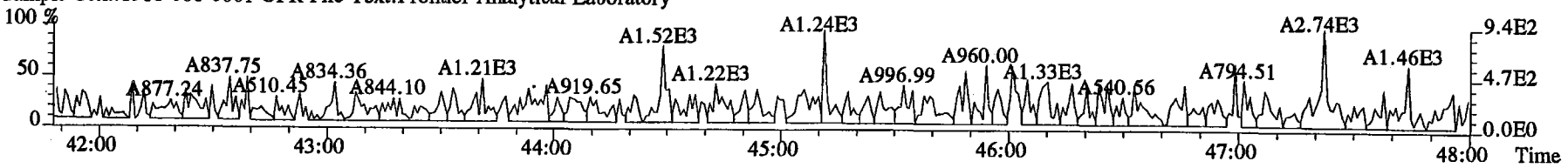
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



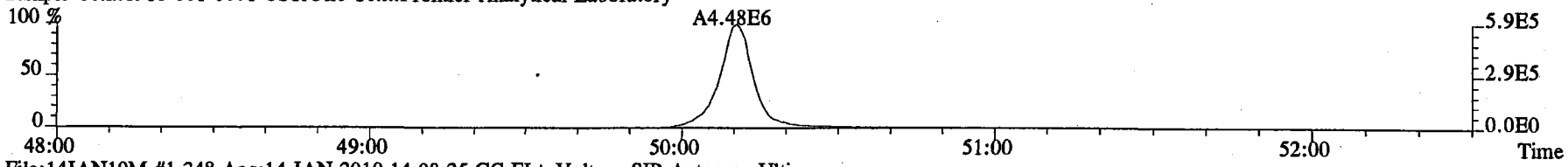
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



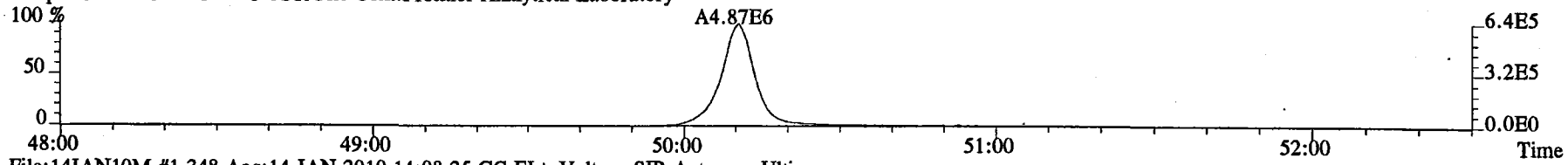
File:14JAN10M #1-541 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



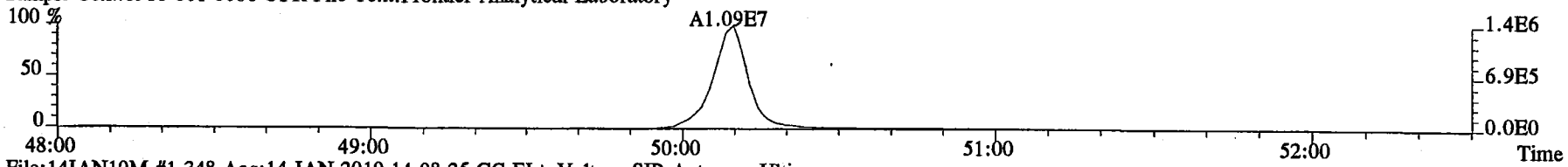
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



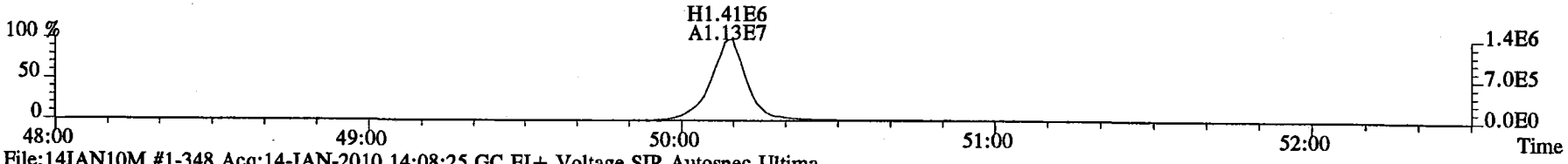
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



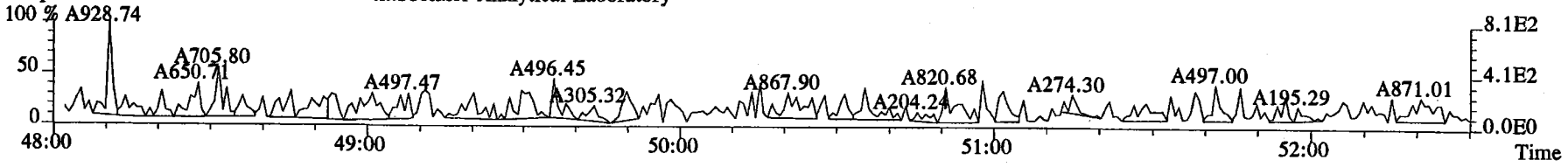
File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 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:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



File:14JAN10M #1-348 Acq:14-JAN-2010 14:08:25 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:1918-001-0001-OPR File Text:Frontier Analytical Laboratory



Frontier Analytical Laboratory
5172 Hillsdale Circle
El Dorado Hills, CA 95762
(916) 934-0900

Invoice

Date	Invoice #
1/15/2010	14500

Bill To	Project Manager
Analyitcal Resources Incorporated 4611 South 134th Place Tukwila, WA 98168-3420	Sue Dunnihoo QD71

P.O. No.	Terms	Quote No.	FAL Project ID:
QD71	Net 30	2242	5904

Item	Quantity	Description	Rate	Amount
400	3	EPA Method 1613 - Aqueous (PCDD/Fs)	850.00	2,550.00
EDD	3	Electronic Data Deliverable	25.00	75.00
L4	3	Level IV Data Package	25.00	75.00

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Total $2,700.00

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Phone #	Fax #
(916) 934-0900	(916) 934-0999

Web Site
www.frontieranalytical.com

FAL ID: 5904-001-0001-SA Filename: 14JAN10M Sam:8 Acquired: 14-JAN-10 19:40:14 ICal: PCDDFAL3-11-18-09
Client ID: CB31A123109COMP ConCal: ST011410M1 EndCal: ST011410M2
Results: 5911 GC Column: DB5 Amount: 1.012 NATO 1989 Tox: 16.1
WHO 1998 Tox: 12.8 WHO 2005 Tox: 13.8

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	347	329	0.765
1,2,3,7,8-PeCDD	2.81e+04	1.46	y	33:14	0.96	2.17	J	2.50	-	-	*
1,2,3,4,7,8-HxCDD	6.06e+04	1.22	y	38:37	1.37	4.24	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.59e+05	1.33	y	38:47	1.34	12.5	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.11e+05	1.27	y	39:15	1.37	8.19	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	4.45e+06	0.94	y	44:14	1.17	405		2.50	-	-	*
OCDD	3.83e+07	0.94	y	49:49	1.21	4540		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	469	635	0.694
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	1160	708	1.32
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	1160	708	1.34
1,2,3,4,7,8-HxCDF	2.05e+05	1.23	y	37:14	1.00	11.8	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.62e+05	1.19	y	37:25	0.92	9.12	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	9.05e+04	1.19	y	38:22	0.99	5.19	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	2.47e+04	1.16	y	39:52	1.09	1.46	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.17e+06	1.03	y	42:20	1.36	82.2		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	9.95e+04	1.17	y	45:09	1.61	7.34	J	2.50	-	-	*
OCDF	2.28e+06	0.89	y	50:12	0.84	252		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	1.81e+07	0.70	y	27:24	0.94	1920					97.2
13C-1,2,3,7,8-PeCDD	2.66e+07	1.77	y	33:14	1.02	2610					132
13C-1,2,3,4,7,8-HxCDD	2.05e+07	1.29	y	38:37	0.98	1770					89.4
13C-1,2,3,6,7,8-HxCDD	1.88e+07	1.28	y	38:46	0.94	1700					85.8
13C-1,2,3,4,6,7,8-HpCDD	1.86e+07	1.05	y	44:14	0.90	1750					88.6
13C-OCDD	2.75e+07	0.99	y	49:48	0.67	3490					88.3
13C-2,3,7,8-TCDF	2.76e+07	0.87	y	26:38	0.88	1870					94.4
13C-1,2,3,7,8-PeCDF	3.88e+07	1.74	y	31:30	0.88	2630					133
13C-2,3,4,7,8-PeCDF	3.88e+07	1.73	y	32:49	0.85	2710					137
13C-1,2,3,4,7,8-HxCDF	3.44e+07	0.49	y	37:13	1.72	1700					85.9
13C-1,2,3,6,7,8-HxCDF	3.84e+07	0.49	y	37:25	2.00	1620					82.2
13C-2,3,4,6,7,8-HxCDF	3.50e+07	0.50	y	38:21	1.74	1710					86.4
13C-1,2,3,7,8,9-HxCDF	3.08e+07	0.49	y	39:47	1.51	1740					87.8
13C-1,2,3,4,6,7,8-HpCDF	2.06e+07	0.47	y	42:19	1.10	1590					80.5
13C-1,2,3,4,7,8,9-HpCDF	1.67e+07	0.47	y	45:08	0.85	1670					84.4
13C-OCDF	4.25e+07	0.96	y	50:10	1.17	3070					77.5
37Cl-2,3,7,8-TCDD	8.31e+06			27:25	0.97	854					108
13C-1,2,3,4-TCDD	1.97e+07	0.70	y	26:50	-	74.6					
13C-1,2,3,4-TCDF	3.33e+07	0.87	y	25:34	-	71.2					
13C-1,2,3,7,8,9-HxCDD	2.33e+07	1.30	y	39:13	-	112					

				Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*	NotFnd	1.02	*		2.50	347	329	0.765		0
Total Penta-Dioxins	8.09e+04	30:17	0.96	6.25	J	2.50	-	-	*		3
Total Hexa-Dioxins	8.63e+05	36:10	1.36	64.2		2.50	-	-	*		6
Total Hepta-Dioxins	7.51e+06	42:52	1.17	684		2.50	-	-	*		2
Total Tetra-Furans	4.56e+05	25:50	1.29	25.4	D,M	2.50	-	-	*		3
1st Fn. Tot Penta-Furans	1.84e+05	28:29	0.90	10.5	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	8.81e+05	30:15	0.90	50.0	D,M	2.50	-	-	*	60.5	4
Total Hexa-Furans	3.77e+06	35:18	0.99	217	D,M	2.50	-	-	*		10
Total Hepta-Furans	3.64e+06	42:20	1.47	261		2.50	-	-	*		3

Analyst: _____ Date: 1/15/10

Totals class: Total Penta-Dioxins Entry #: 39

Run: 15 File: 14JAN10M S: 8 I: 1 F: 2
Acquired: 14-JAN-10 19:40:14

Total Concentration: 6.25 Unnamed Concentration: 4.075

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:17	1.81e+04	1.09e+04	1.67	y	2.89e+04	2.24	
31:44	1.40e+04	9.82e+03	1.42	y	2.38e+04	1.84	
33:14	1.67e+04	1.14e+04	1.46	y	2.81e+04	2.17	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 15 File: 14JAN10M S: 8 I: 1 F: 3
Acquired: 14-JAN-10 19:40:14

Total Concentration: 64.2 Unnamed Concentration: 39.310

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
36:10	8.52e+04	7.10e+04	1.20	y	1.56e+05	11.5	
37:06	2.60e+04	2.46e+04	1.06	y	5.06e+04	3.74	
37:31	1.82e+05	1.43e+05	1.28	y	3.25e+05	24.0	
38:37	3.33e+04	2.73e+04	1.22	y	6.06e+04	4.24	1,2,3,4,7,8-HxCDD
38:47	9.08e+04	6.83e+04	1.33	y	1.59e+05	12.5	1,2,3,6,7,8-HxCDD
39:15	6.23e+04	4.89e+04	1.27	y	1.11e+05	8.19	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 15 File: 14JAN10M S: 8 I: 1 F: 4
Acquired: 14-JAN-10 19:40:14

Total Concentration: 684 Unnamed Concentration: 279.006

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
42:52	1.49e+06	1.57e+06	0.95 y	3.06e+06	279	
44:14	2.16e+06	2.29e+06	0.94 y	4.45e+06	405	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 15 File: 14JAN10M S: 8 I: 1 F: 1
Acquired: 14-JAN-10 19:40:14

Total Concentration: 25.4 Unnamed Concentration: 25.431

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
25:50	1.90e+04	2.85e+04	0.67 y	4.75e+04	2.65	
27:53	9.65e+04	1.42e+05	0.68 y	2.39e+05	13.3	
28:06	6.81e+04	1.02e+05	0.67 y	1.70e+05	9.47	

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

Run: 15 File: 14JAN10M S: 8 I: 1 F: 1
Acquired: 14-JAN-10 19:40:14

Total Concentration: 10.5 Unnamed Concentration: 10.464

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
28:29	1.06e+05	7.84e+04	1.35	y	1.84e+05	10.5	

Totals class: Total Penta-Furans Entry #: 44

Run: 15 File: 14JAN10M S: 8 I: 1 F: 2
Acquired: 14-JAN-10 19:40:14

Total Concentration: 50.0 Unnamed Concentration: 50.001

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
30:15	7.20e+04	4.36e+04	1.65 y	1.16e+05	6.56	
31:48	3.11e+05	1.89e+05	1.64 y	5.00e+05	28.4	
32:06	1.03e+05	6.38e+04	1.62 y	1.67e+05	9.48	
34:10	5.95e+04	3.87e+04	1.54 y	9.82e+04	5.57	

Totals class: Total Hexa-Furans Entry #: 45

Run: 15 File: 14JAN10M S: 8 I: 1 F: 3
Acquired: 14-JAN-10 19:40:14

Total Concentration: 217 Unnamed Concentration: 189.229

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:18	8.17e+04	6.98e+04	1.17 y	1.51e+05	8.72	
35:33	3.16e+05	2.62e+05	1.20 y	5.78e+05	33.3	
36:28	4.30e+05	3.53e+05	1.22 y	7.83e+05	45.0	
36:44	2.76e+04	2.42e+04	1.14 y	5.18e+04	2.98	
37:14	1.13e+05	9.22e+04	1.23 y	2.05e+05	11.8	1,2,3,4,7,8-HxCDF
37:25	8.80e+04	7.42e+04	1.19 y	1.62e+05	9.12	1,2,3,6,7,8-HxCDF
37:42	1.09e+04	8.84e+03	1.23 y	1.97e+04	1.13	
38:09	9.41e+05	7.64e+05	1.23 y	1.71e+06	98.1	
38:22	4.92e+04	4.13e+04	1.19 y	9.05e+04	5.19	2,3,4,6,7,8-HxCDF
39:52	1.33e+04	1.15e+04	1.16 y	2.47e+04	1.46	1,2,3,7,8,9-HxCDF

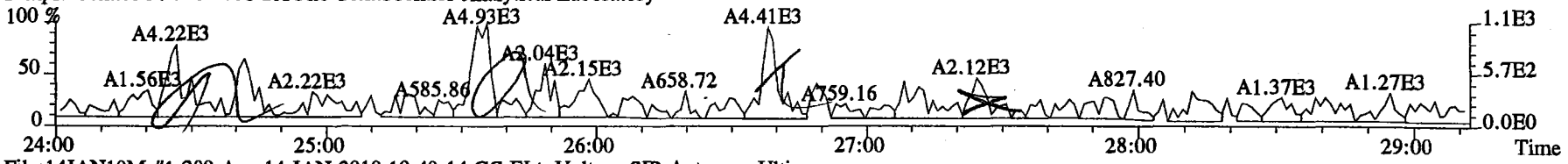
Totals class: Total Hepta-Furans Entry #: 46

Run: 15 File: 14JAN10M S: 8 I: 1 F: 4
Acquired: 14-JAN-10 19:40:14

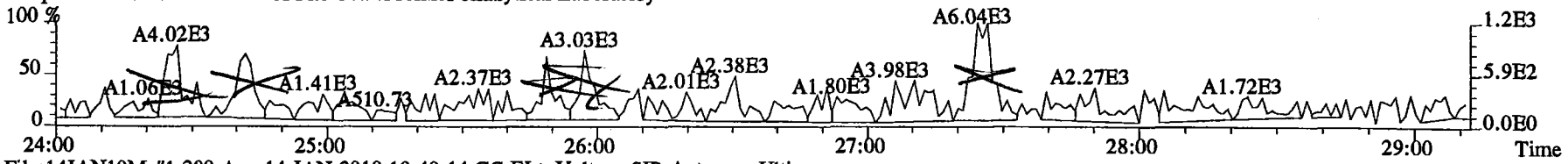
Total Concentration: 261 Unnamed Concentration: 171.412

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:20	5.93e+05	5.74e+05	1.03 y	1.17e+06	82.2	1,2,3,4,6,7,8-HpCDF
43:09	1.23e+06	1.15e+06	1.07 y	2.37e+06	171	
45:09	5.37e+04	4.58e+04	1.17 y	9.95e+04	7.34	1,2,3,4,7,8,9-HpCDF

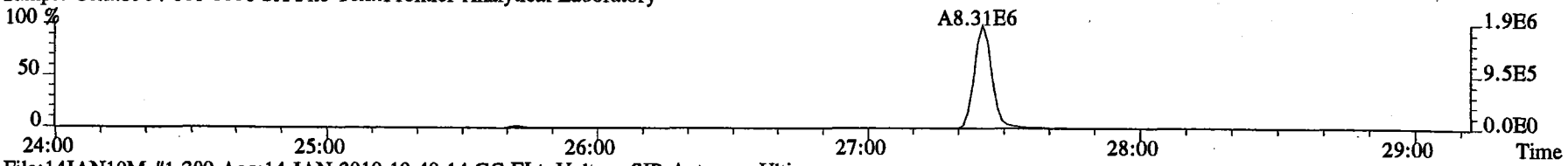
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



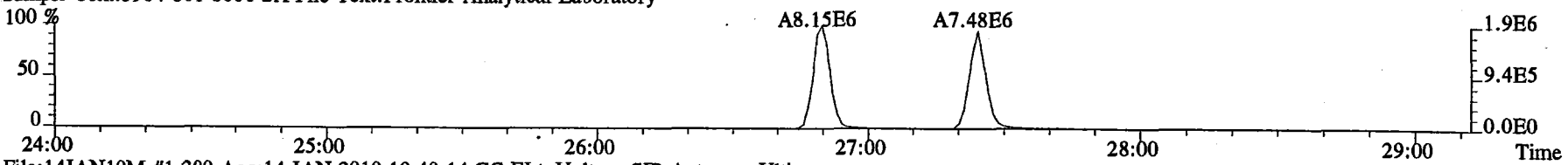
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



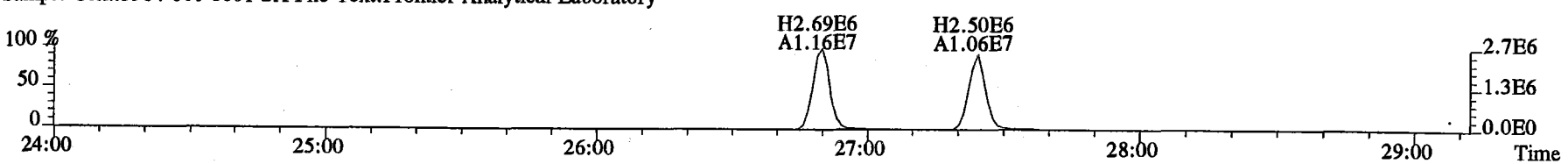
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



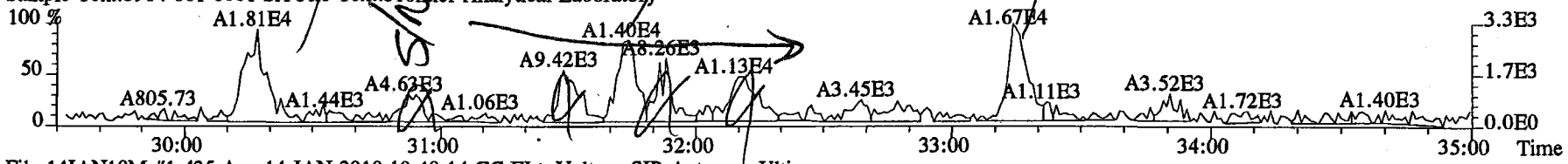
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



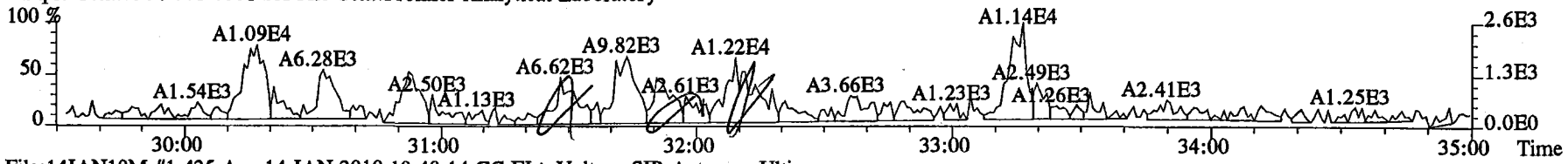
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



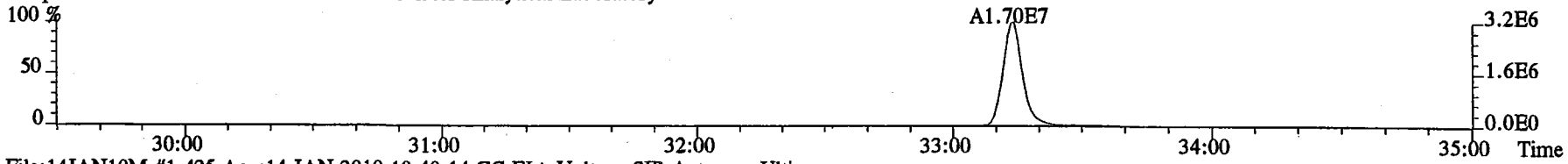
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



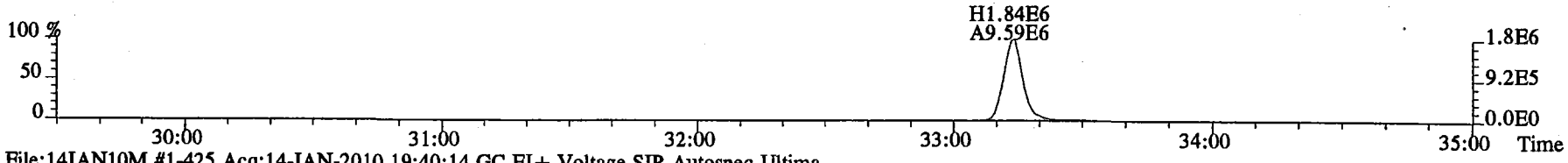
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



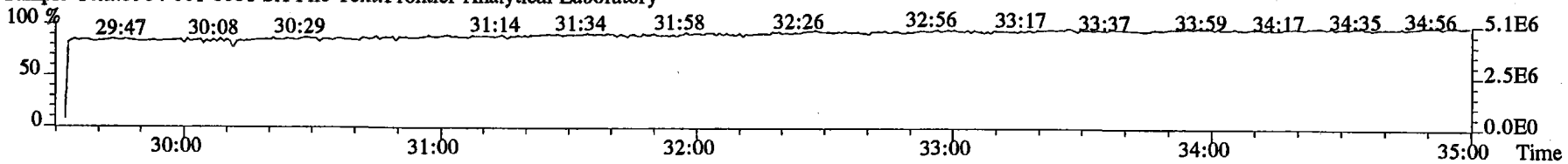
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



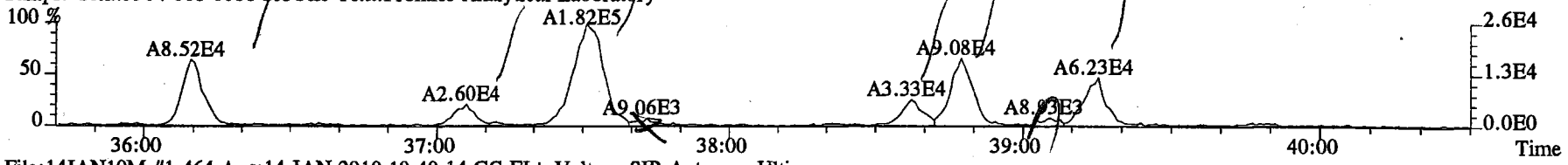
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



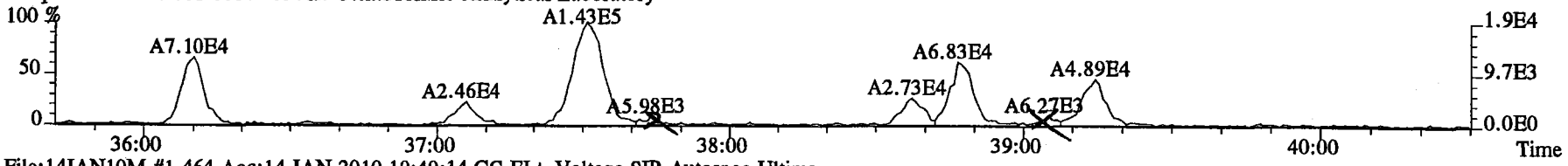
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:8 F:2 Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



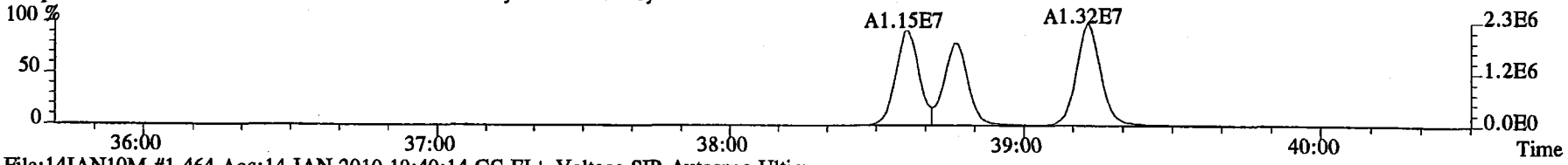
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



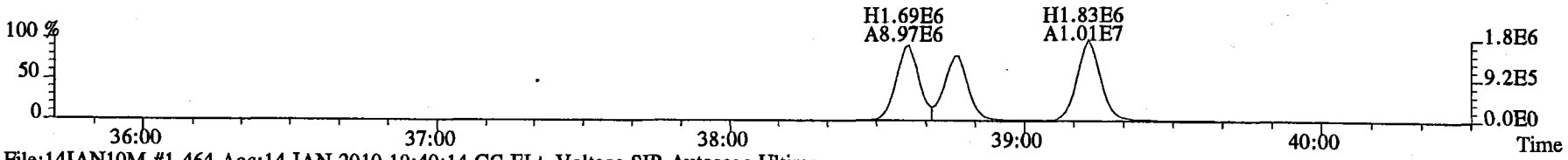
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



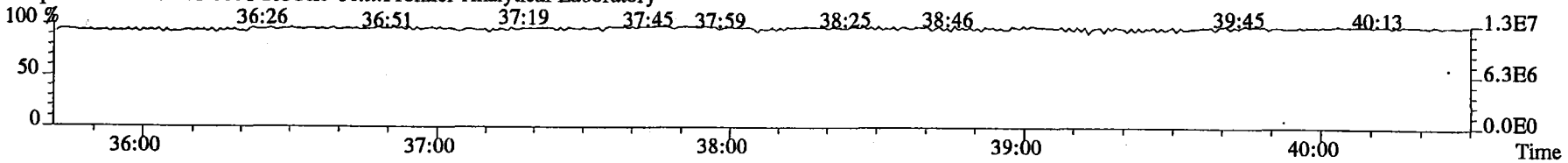
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



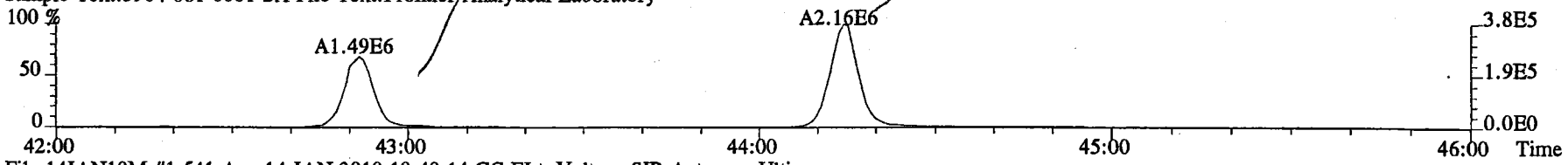
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



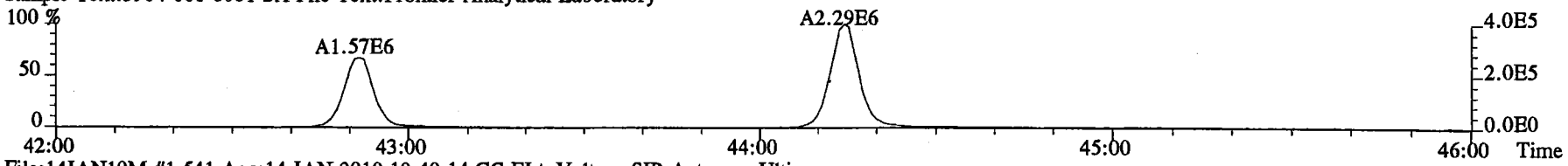
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:8 F:3 Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



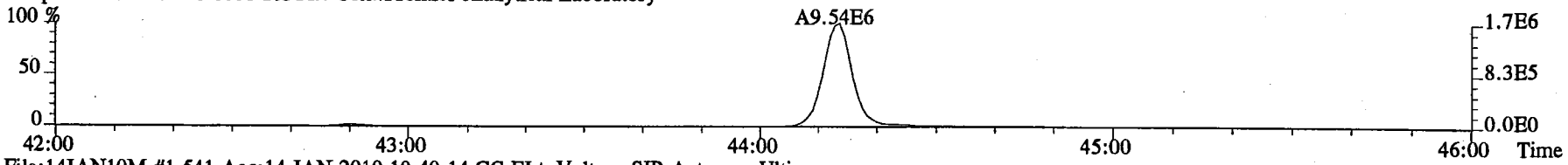
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



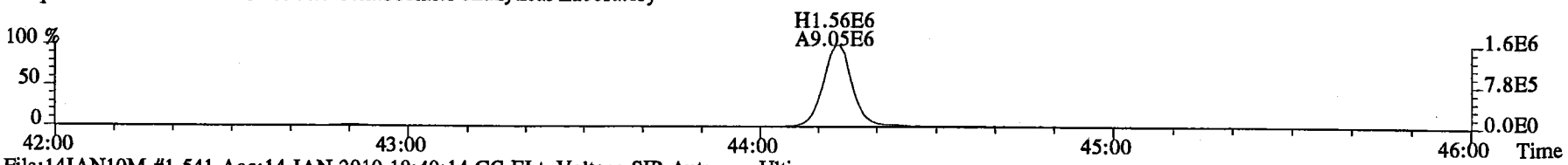
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



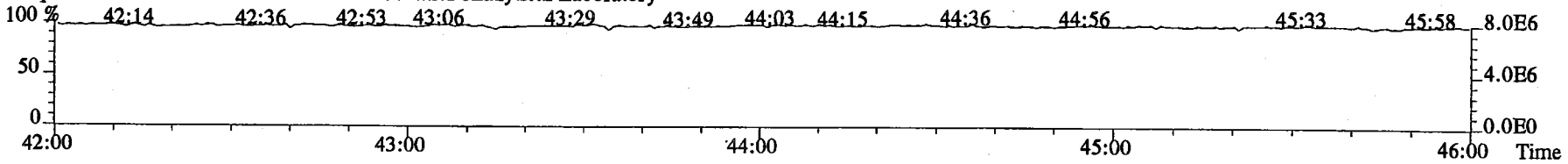
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



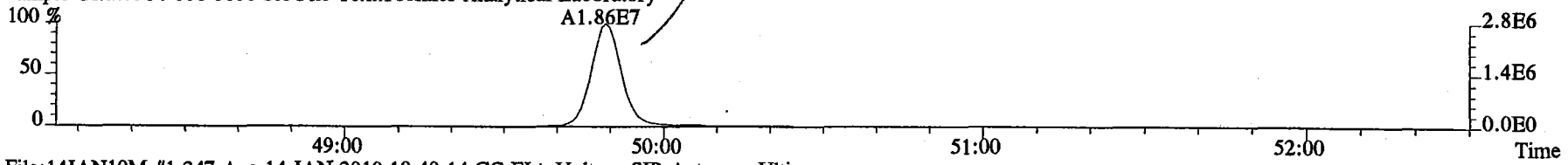
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



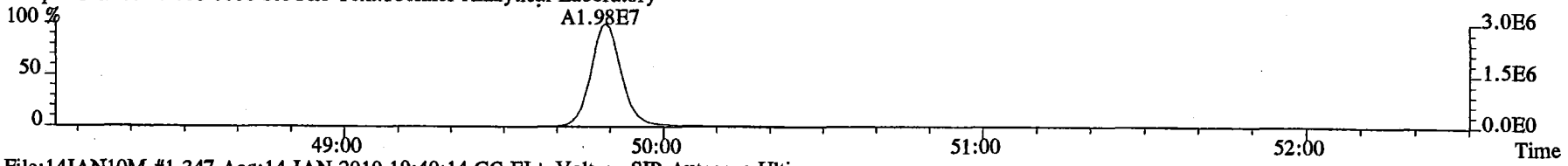
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:8 F:4 Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



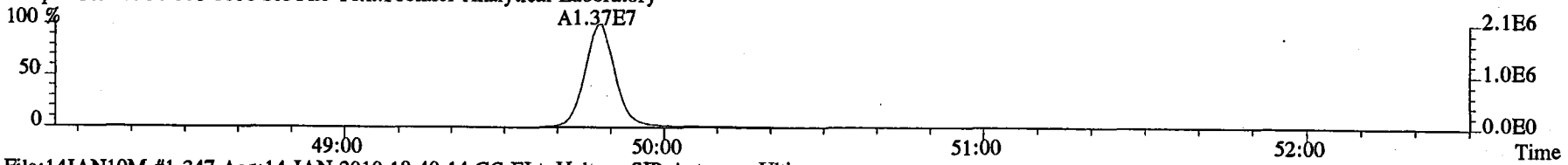
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



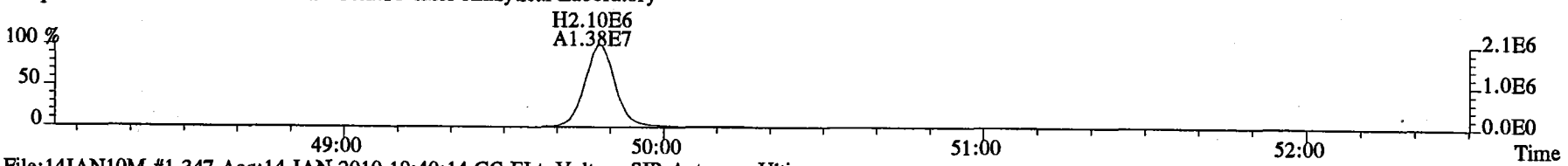
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



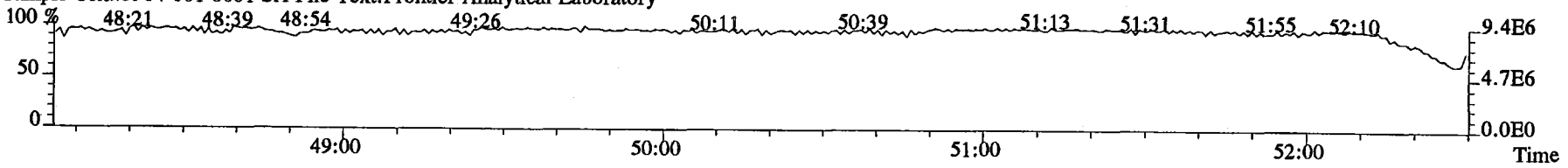
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory

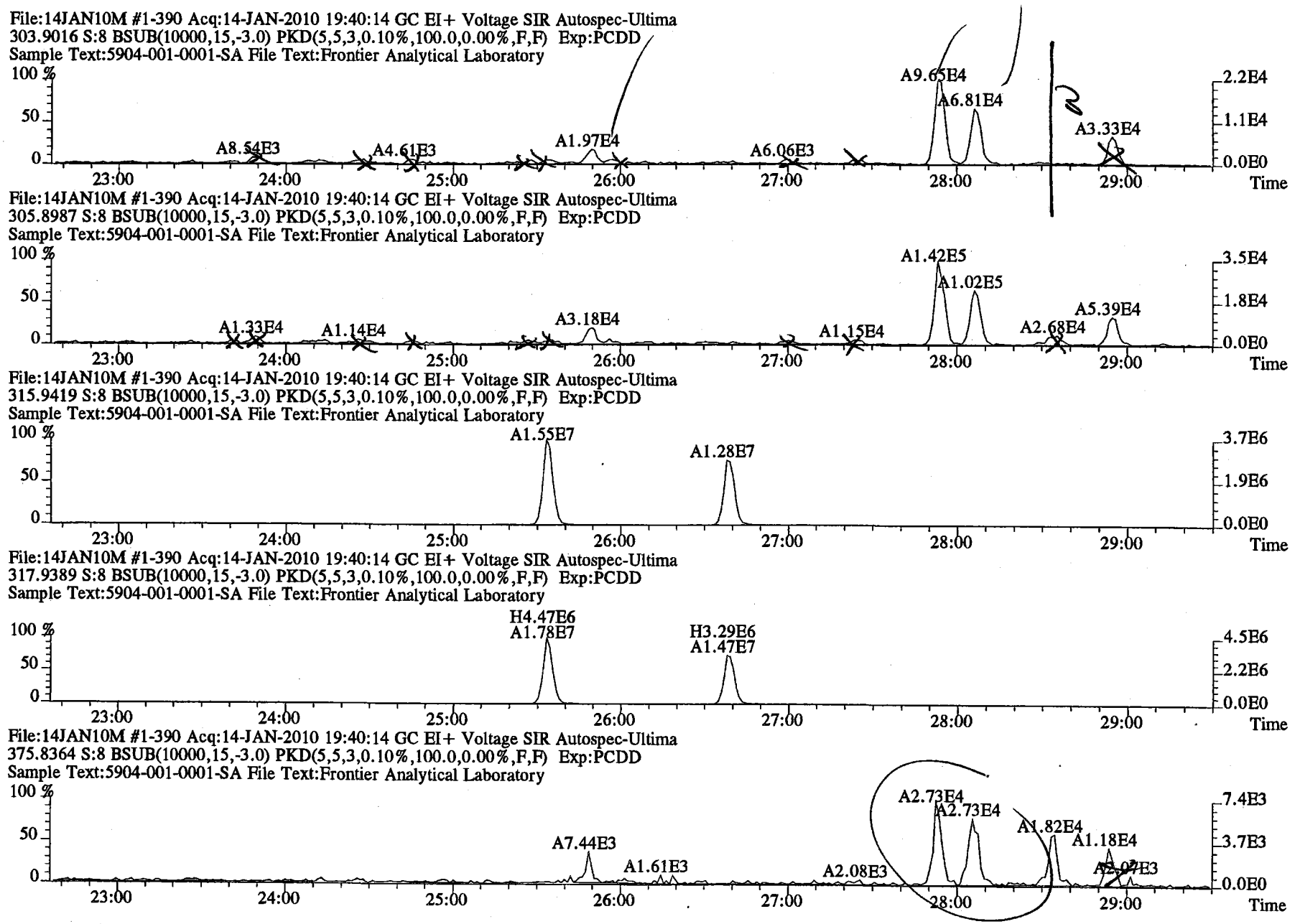


File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory

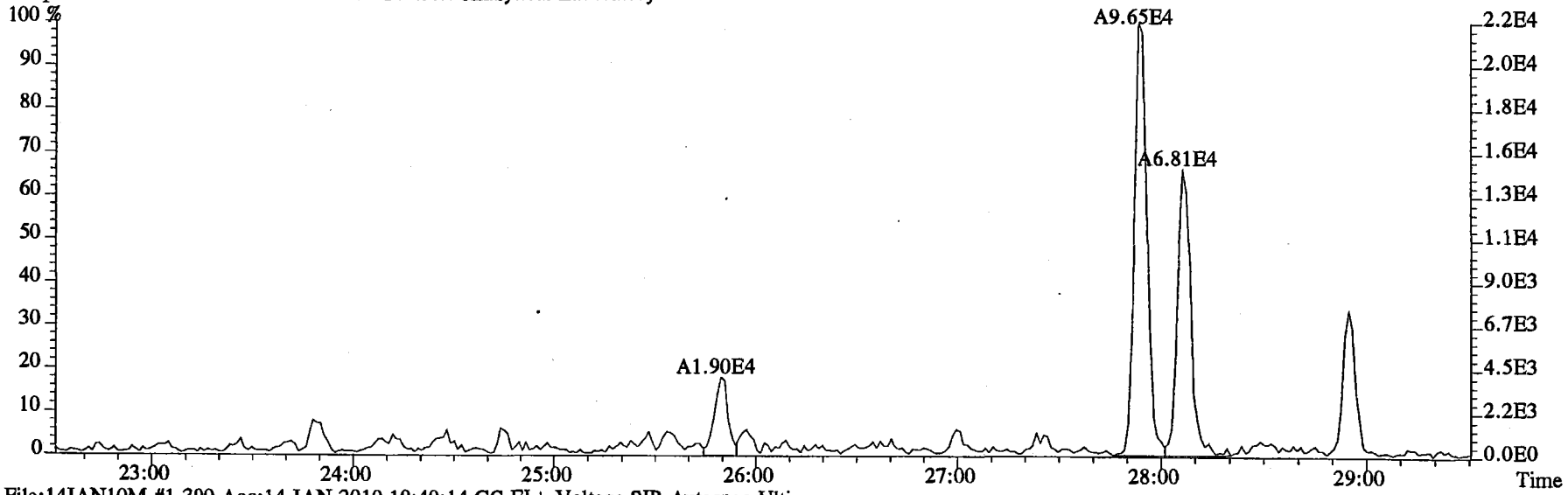


File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:8 F:5 Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory

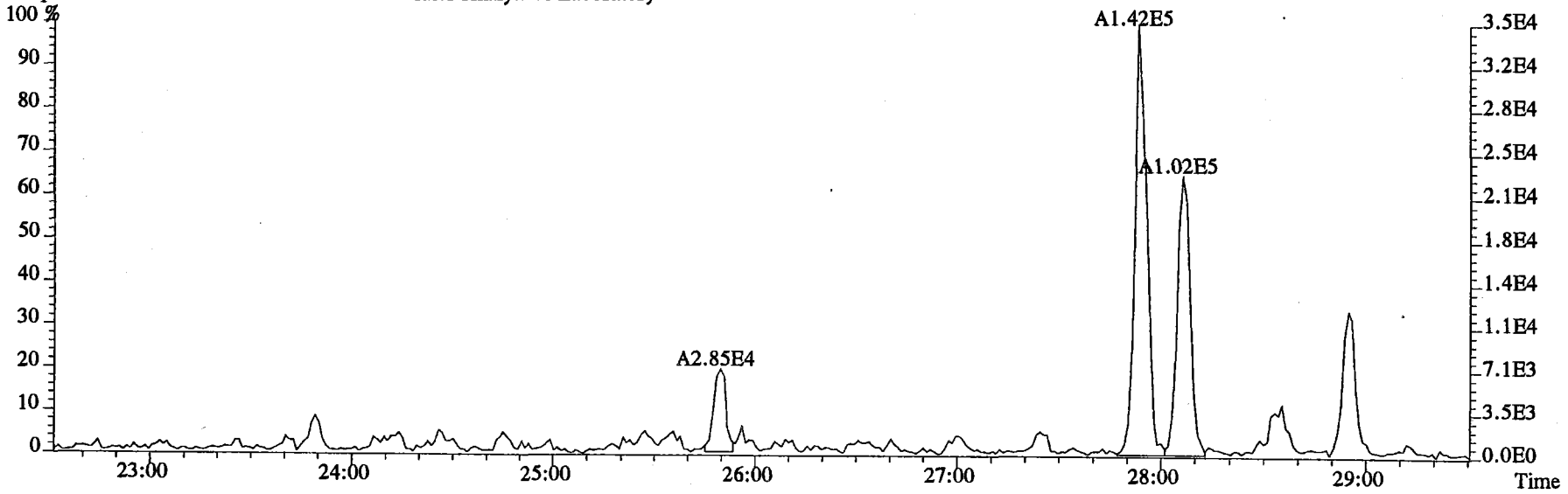



File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory
A8.54E3
A4.61E3
A1.97E4
A6.06E3
A9.65E4
A6.81E4
A3.33E4
2.2E4
1.1E4
0.0E0
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory
A1.33E4
A1.14E4
A3.18E4
A1.15E4
A1.42E5
A1.02E5
A2.68E4
A5.39E4
3.5E4
1.8E4
0.0E0
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory
A1.55E7
A1.28E7
3.7E6
1.9E6
0.0E0
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory
H4.47E6
A1.78E7
H3.29E6
A1.47E7
4.5E6
2.2E6
0.0E0
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory
A7.44E3
A1.61E3
A2.08E3
A2.73E4
A2.73E4
A1.82E4
A1.18E4
7.4E3
3.7E3
0.0E0
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time

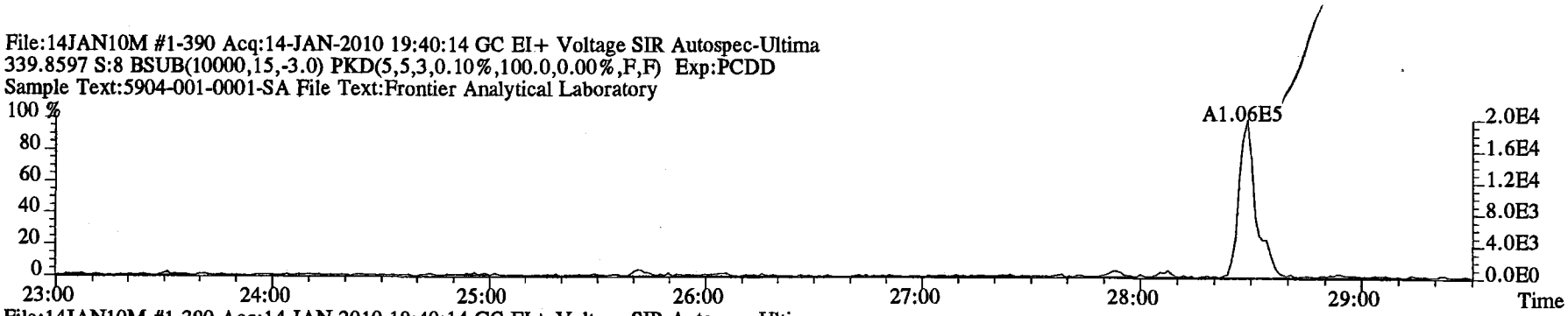
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



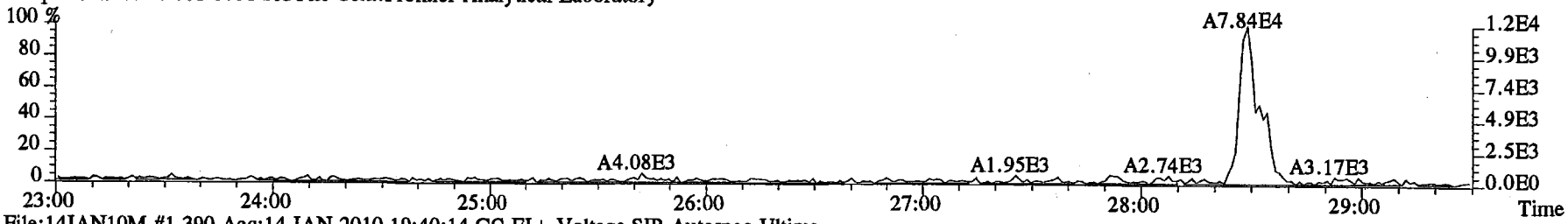
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



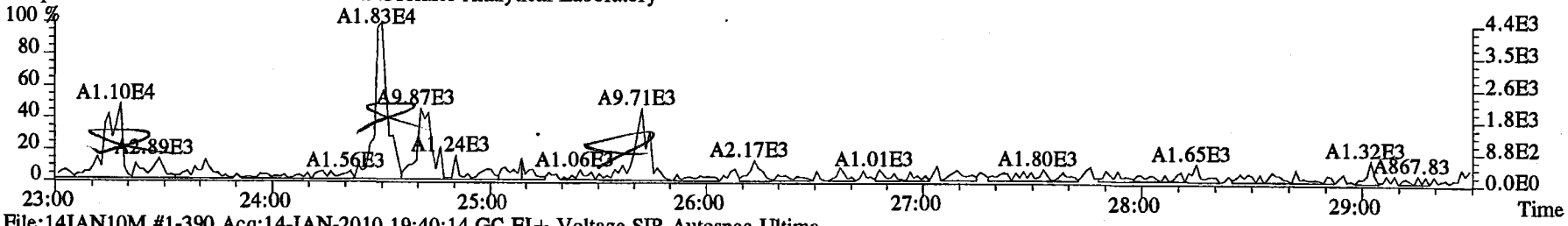
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



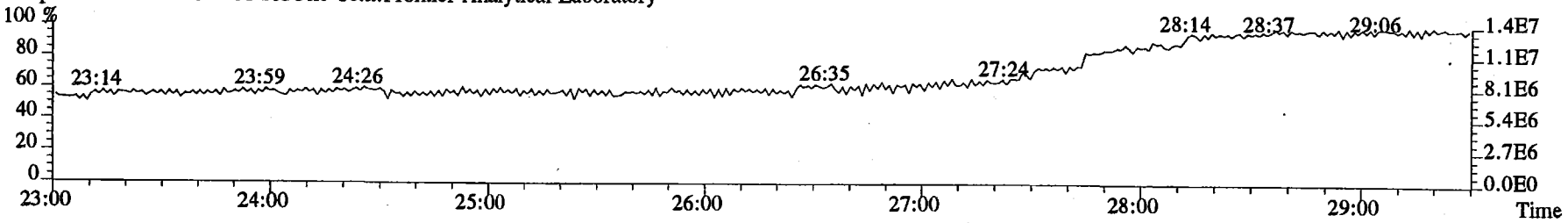
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



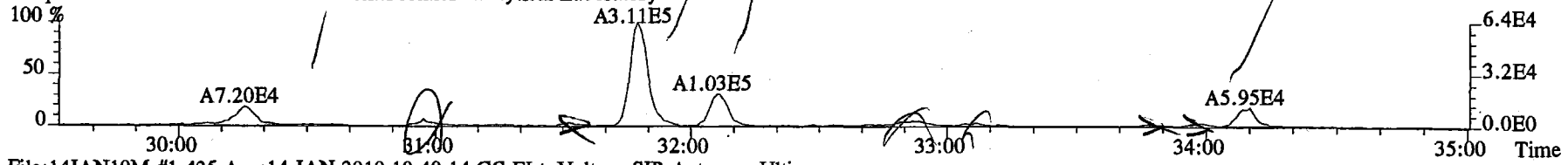
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



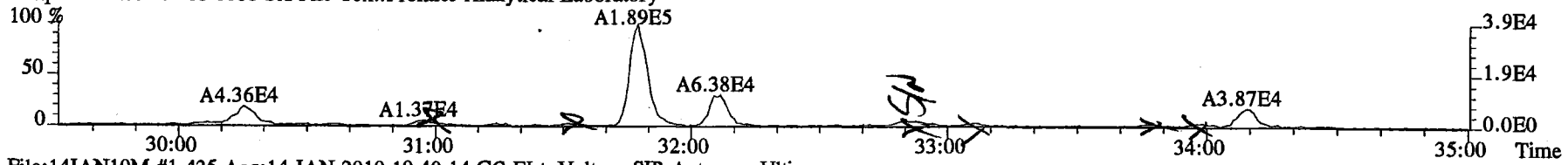
File:14JAN10M #1-390 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:8 Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



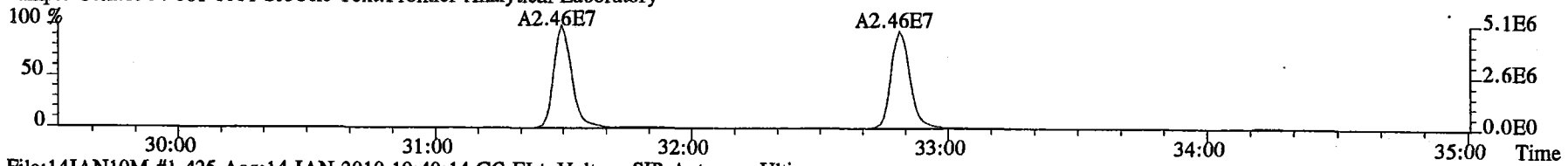
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 F:2 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



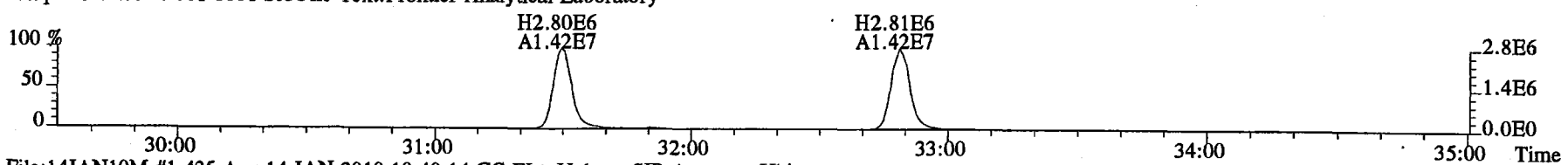
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



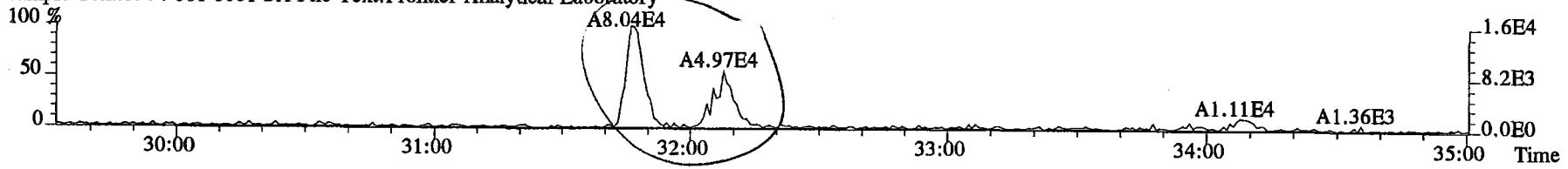
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



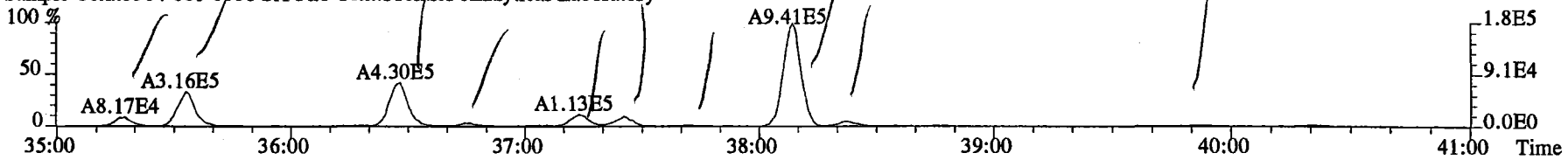
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



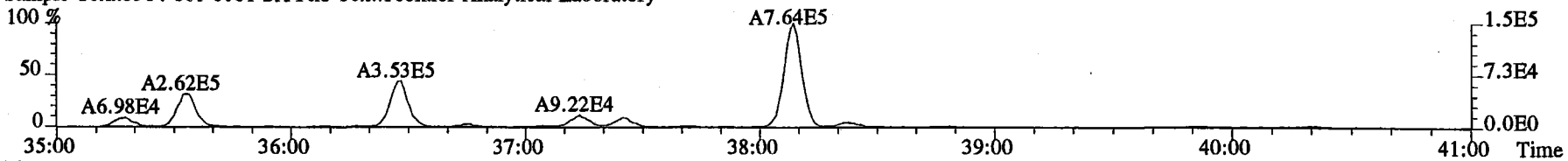
File:14JAN10M #1-425 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



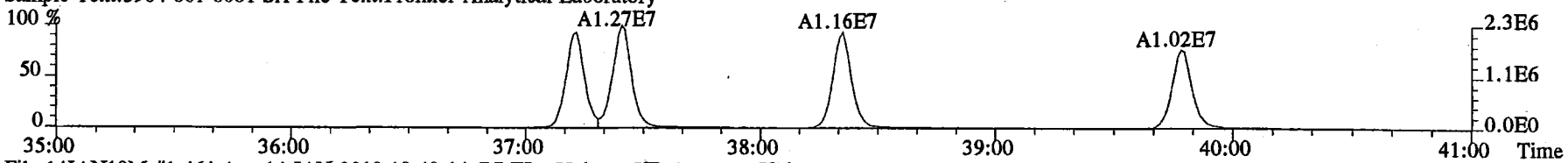
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



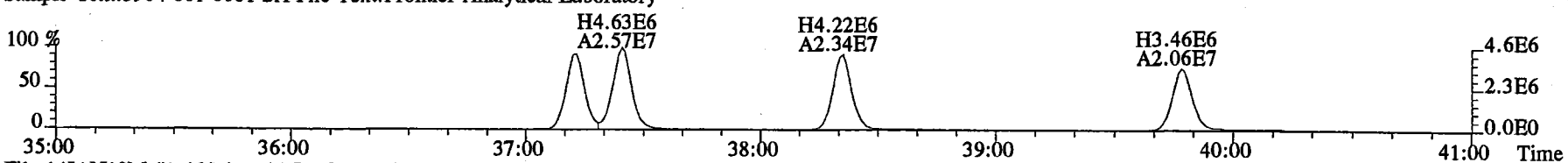
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



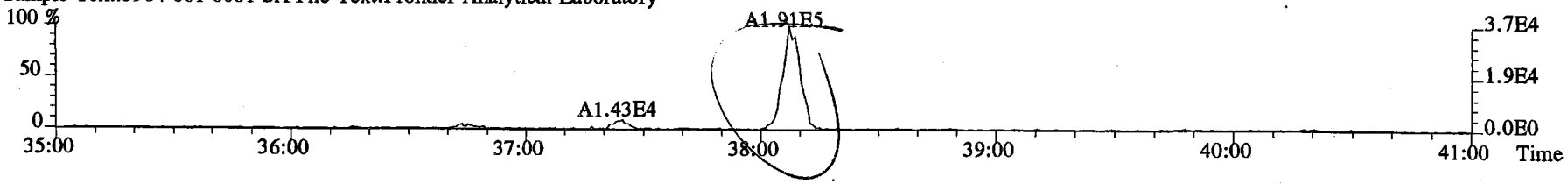
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



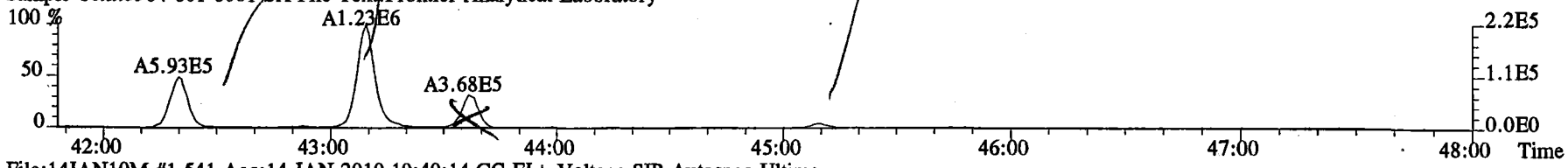
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



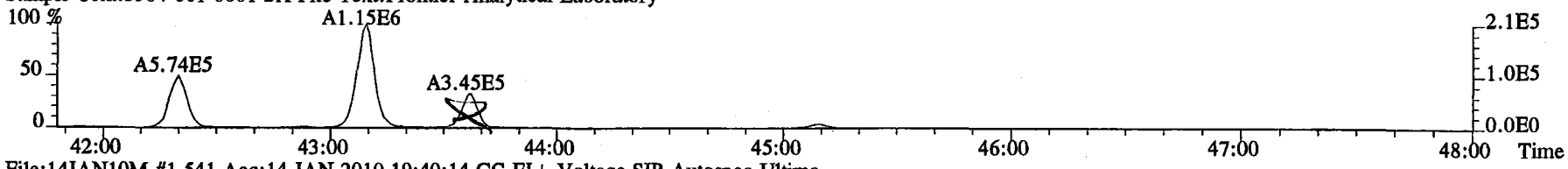
File:14JAN10M #1-464 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



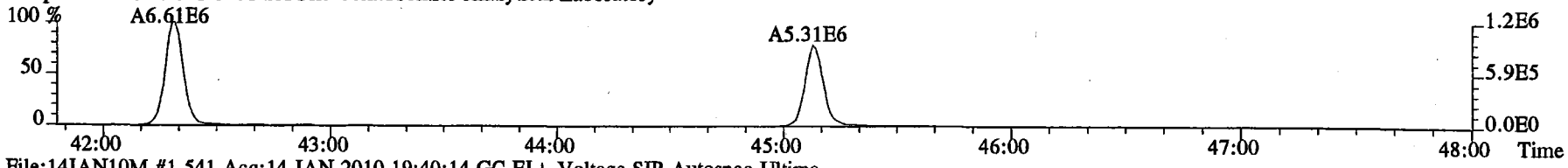
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



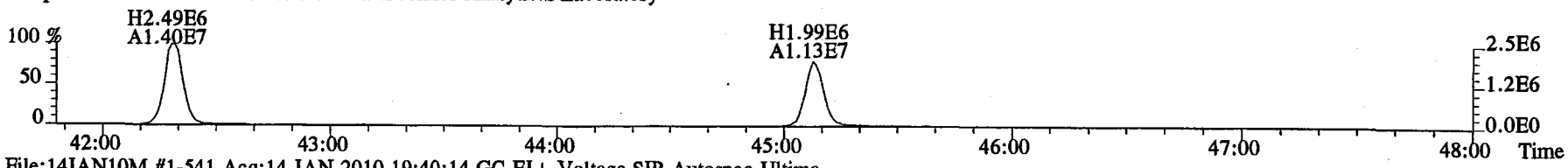
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



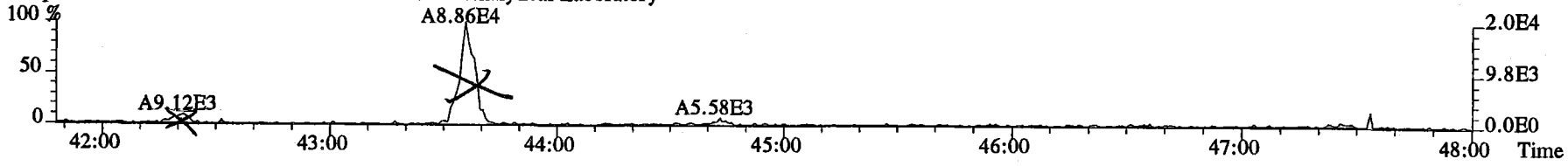
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



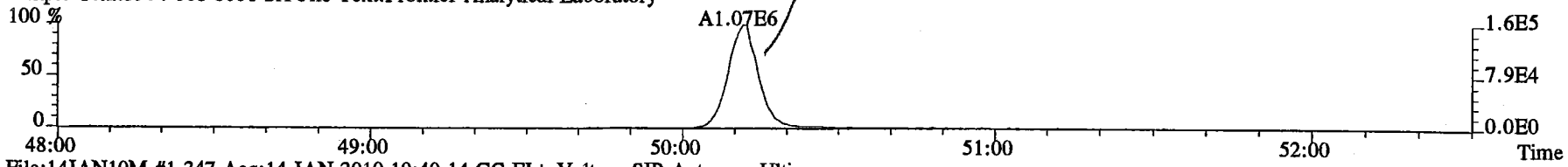
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



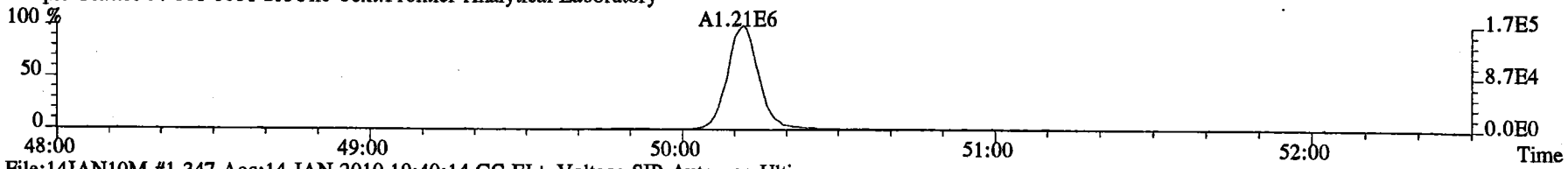
File:14JAN10M #1-541 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



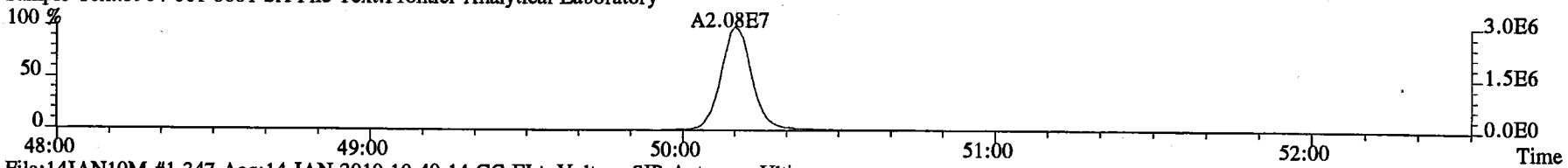
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



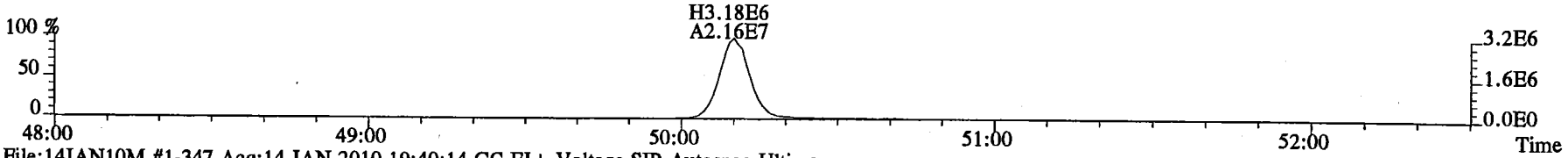
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



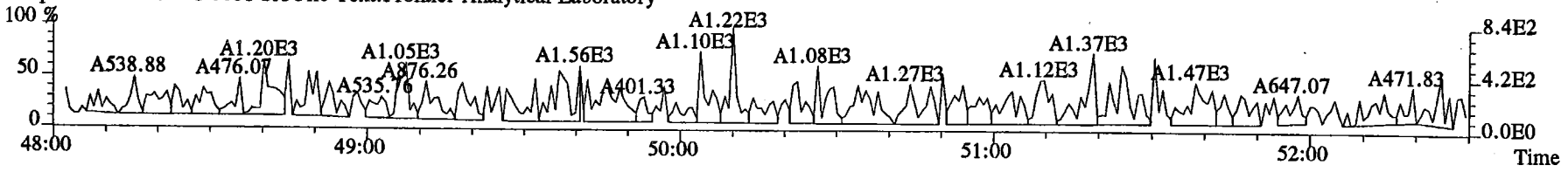
File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-001-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 19:40:14 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:5904-001-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 5904-002-0001-SA Filename: 14JAN10M Sam:9 Acquired: 14-JAN-10 20:35:29 ICal: PCDDFAL3-11-18-09
Client ID: CB4857123109COMP ConCal: ST011410M1 EndCal: ST011410M2
Results: 5911 GC Column: DB5 Amount: 1.015 NATO 1989 Tox: 8.24
WHO 1998 Tox: 5.99 WHO 2005 Tox: 6.49

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	296	376	0.599
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	883	659	1.62
1,2,3,4,7,8-HxCDD	3.42e+04	1.31	y	38:38	1.37	2.71	J	2.50	-	-	*
1,2,3,6,7,8-HxCDD	7.63e+04	1.20	y	38:48	1.34	6.81	J	2.50	-	-	*
1,2,3,7,8,9-HxCDD	5.79e+04	1.30	y	39:15	1.37	4.83	J	2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	2.05e+06	0.94	y	44:14	1.17	212		2.50	-	-	*
OCDD	1.74e+07	0.93	y	49:49	1.21	2380		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	523	940	0.611
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	715	487	0.866
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	715	487	0.947
1,2,3,4,7,8-HxCDF	1.10e+05	1.10	y	37:15	1.00	7.21	J	2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.00e+05	1.23	y	37:25	0.92	6.41	J	2.50	-	-	*
2,3,4,6,7,8-HxCDF	4.81e+04	1.36	y	38:23	0.99	3.15	J	2.50	-	-	*
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	478	464	0.992
1,2,3,4,6,7,8-HpCDF	5.87e+05	1.01	y	42:20	1.36	45.8		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	5.08e+04	0.99	y	45:08	1.61	4.30	J	2.50	-	-	*
OCDF	9.79e+05	0.87	y	50:11	0.84	122		2.50	-	-	*
											Rec
13C-2,3,7,8-TCDD	2.40e+07	0.71	y	27:24	0.94	1620					82.3
13C-1,2,3,7,8-PeCDD	2.47e+07	1.75	y	33:14	1.02	1540					78.2
13C-1,2,3,4,7,8-HxCDD	1.81e+07	1.29	y	38:37	0.98	1550					78.6
13C-1,2,3,6,7,8-HxCDD	1.64e+07	1.30	y	38:47	0.94	1480					75.1
13C-1,2,3,4,6,7,8-HpCDD	1.63e+07	1.05	y	44:14	0.90	1530					77.5
13C-OCDD	2.37e+07	1.00	y	49:48	0.67	3000					76.0
13C-2,3,7,8-TCDF	3.92e+07	0.85	y	26:39	0.88	1650					83.5
13C-1,2,3,7,8-PeCDF	3.86e+07	1.73	y	31:30	0.88	1620					82.3
13C-2,3,4,7,8-PeCDF	3.54e+07	1.75	y	32:50	0.85	1540					77.9
13C-1,2,3,4,7,8-HxCDF	3.03e+07	0.49	y	37:12	1.72	1480					75.3
13C-1,2,3,6,7,8-HxCDF	3.37e+07	0.49	y	37:25	2.00	1420					72.0
13C-2,3,4,6,7,8-HxCDF	3.05e+07	0.49	y	38:21	1.74	1480					75.2
13C-1,2,3,7,8,9-HxCDF	2.66e+07	0.49	y	39:47	1.51	1490					75.5
13C-1,2,3,4,6,7,8-HpCDF	1.86e+07	0.47	y	42:18	1.10	1420					72.3
13C-1,2,3,4,7,8,9-HpCDF	1.45e+07	0.47	y	45:09	0.85	1440					73.2
13C-OCDF	3.75e+07	0.97	y	50:10	1.17	2690					68.4
37Cl-2,3,7,8-TCDD	1.08e+07			27:25	0.97	704					89.4
13C-1,2,3,4-TCDD	3.10e+07	0.72	y	26:50	-	117					
13C-1,2,3,4-TCDF	5.35e+07	0.87	y	25:34	-	114					
13C-1,2,3,7,8,9-HxCDD	2.34e+07	1.29	y	39:13	-	112					

							Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*	2.50	296	376	0.599		0
Total Penta-Dioxins	*			NotFnd	0.96	*	2.50	883	659	1.62		0
Total Hexa-Dioxins	4.56e+05			36:10	1.36	38.5	2.50	-	-	*		6
Total Hepta-Dioxins	3.56e+06			42:52	1.17	369	2.50	-	-	*		2
Total Tetra-Furans	4.35e+05			25:50	1.29	17.0	D,M	2.50	-	-	*		3
1st Fn. Tot Penta-Furans	1.05e+05			28:29	0.90	6.25	D,M	2.50	-	-	*	PeCDF	1
Total Penta-Furans	6.94e+05			30:16	0.90	41.2	D,M	2.50	-	-	*	~~47.4~~	4
Total Hexa-Furans	1.97e+06			35:18	0.99	129	D,M	2.50	-	-	*	47.5	8
Total Hepta-Furans	1.82e+06			42:20	1.47	146		2.50	-	-	*		3

Analyst: _____ Date: 1/15/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 16 File: 14JAN10M S: 9 I: 1 F: 3
Acquired: 14-JAN-10 20:35:29

Total Concentration: 38.5 Unnamed Concentration: 24.122

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
36:10	4.88e+04	3.81e+04	1.28 y	8.69e+04	7.29	
37:06	1.76e+04	1.32e+04	1.33 y	3.08e+04	2.58	
37:32	9.37e+04	7.62e+04	1.23 y	1.70e+05	14.3	
38:38	1.94e+04	1.48e+04	1.31 y	3.42e+04	2.71	1,2,3,4,7,8-HxCDD
38:48	4.15e+04	3.47e+04	1.20 y	7.63e+04	6.81	1,2,3,6,7,8-HxCDD
39:15	3.27e+04	2.52e+04	1.30 y	5.79e+04	4.83	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 16 File: 14JAN10M S: 9 I: 1 F: 4
Acquired: 14-JAN-10 20:35:29

Total Concentration: 369 Unnamed Concentration: 156.303

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:52	7.33e+05	7.75e+05	0.95 y	1.51e+06	156	
44:14	9.94e+05	1.05e+06	0.94 y	2.05e+06	212	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 16 File: 14JAN10M S: 9 I: 1 F: 1
Acquired: 14-JAN-10 20:35:29

Total Concentration: 17.0 Unnamed Concentration: 16.984

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
25:50	4.51e+04	6.23e+04	0.72	y	1.07e+05	4.20	
27:53	7.80e+04	1.15e+05	0.68	y	1.92e+05	7.52	
28:06	5.54e+04	7.94e+04	0.70	y	1.35e+05	5.27	

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

Run: 16 File: 14JAN10M S: 9 I: 1 F: 1
Acquired: 14-JAN-10 20:35:29

Total Concentration: 6.25 Unnamed Concentration: 6.252

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:29	6.06e+04	4.48e+04	1.35 y	1.05e+05	6.25	

Totals class: Total Penta-Furans Entry #: 44

Run: 16 File: 14JAN10M S: 9 I: 1 F: 2
Acquired: 14-JAN-10 20:35:29

Total Concentration: 41.2 Unnamed Concentration: 41.177

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:16	4.28e+04	2.72e+04	1.57	y	7.01e+04	4.16	
31:48	2.38e+05	1.46e+05	1.63	y	3.84e+05	22.8	
32:06	1.16e+05	7.12e+04	1.63	y	1.87e+05	11.1	
34:09	3.25e+04	2.05e+04	1.59	y	5.30e+04	3.14	

Totals class: Total Hexa-Furans Entry #: 45

Run: 16 File: 14JAN10M S: 9 I: 1 F: 3
Acquired: 14-JAN-10 20:35:29

Total Concentration: 129 Unnamed Concentration: 112.157

RT	m1 Resp	m2 Resp	RA		Resp	Concentration	Name
35:18	4.33e+04	3.62e+04	1.20	y	7.95e+04	5.22	
35:33	1.67e+05	1.34e+05	1.24	y	3.01e+05	19.8	
36:28	2.29e+05	1.74e+05	1.32	y	4.04e+05	26.5	
36:44	3.03e+04	2.60e+04	1.16	y	5.63e+04	3.70	
37:15	5.80e+04	5.25e+04	1.10	y	1.10e+05	7.21	1,2,3,4,7,8-HxCDF
37:25	5.55e+04	4.50e+04	1.23	y	1.00e+05	6.41	1,2,3,6,7,8-HxCDF
38:09	4.76e+05	3.91e+05	1.22	y	8.67e+05	57.0	
38:23	2.78e+04	2.04e+04	1.36	y	4.81e+04	3.15	2,3,4,6,7,8-HxCDF

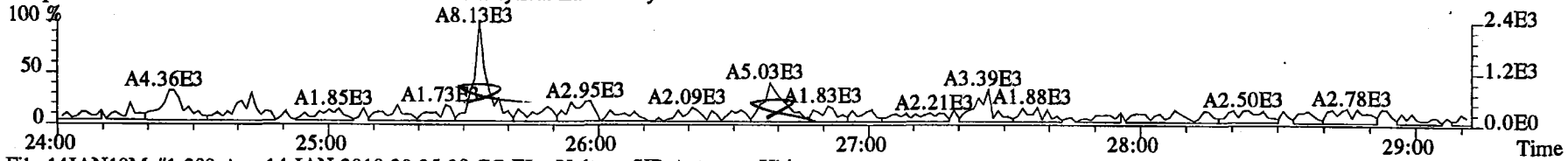
Totals class: Total Hepta-Furans Entry #: 46

Run: 16 File: 14JAN10M S: 9 I: 1 F: 4
Acquired: 14-JAN-10 20:35:29

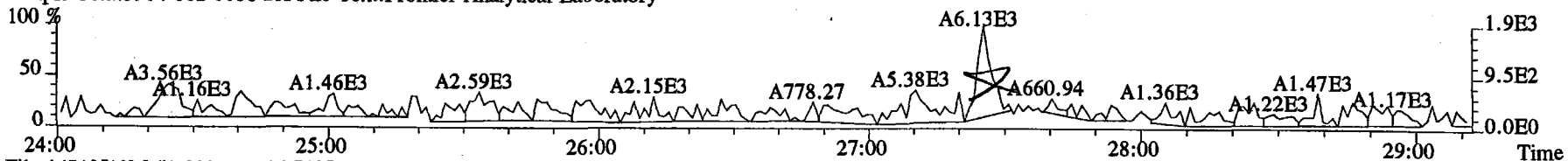
Total Concentration: 146 Unnamed Concentration: 96.021

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:20	2.95e+05	2.92e+05	1.01 y	5.87e+05	45.8	1,2,3,4,6,7,8-HpCDF
43:09	6.19e+05	5.63e+05	1.10 y	1.18e+06	96.0	
45:08	2.53e+04	2.55e+04	0.99 y	5.08e+04	4.30	1,2,3,4,7,8,9-HpCDF

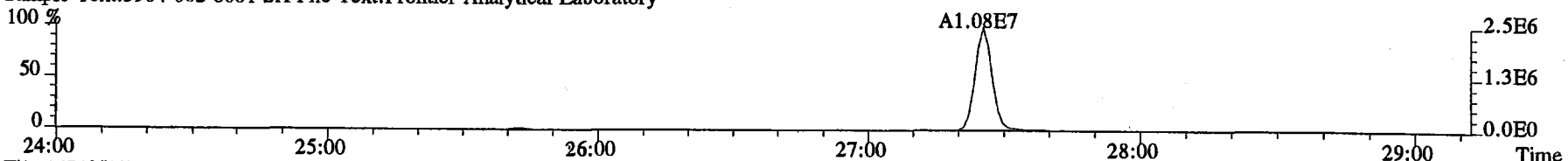
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



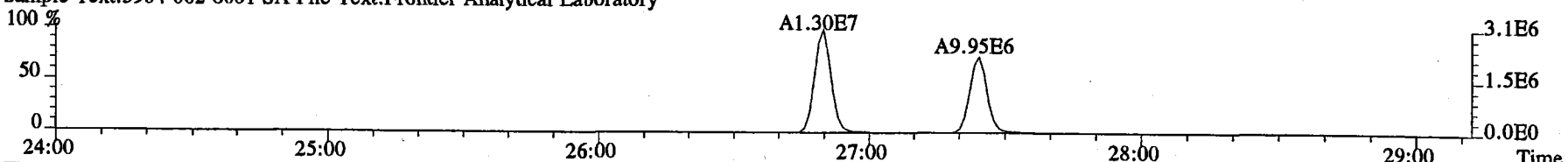
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



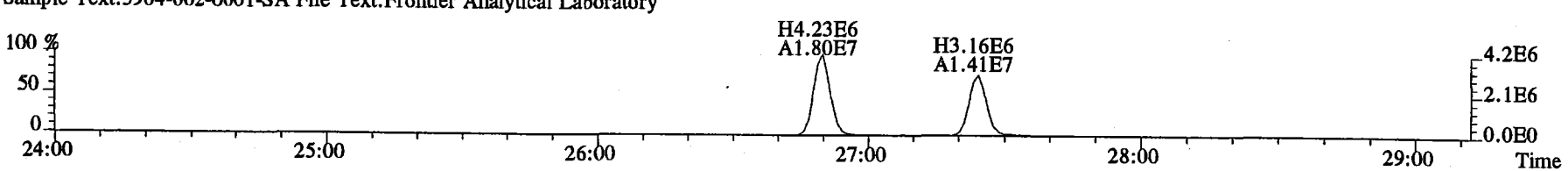
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



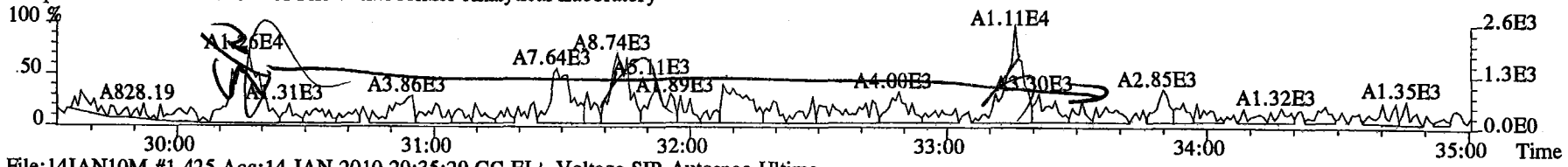
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



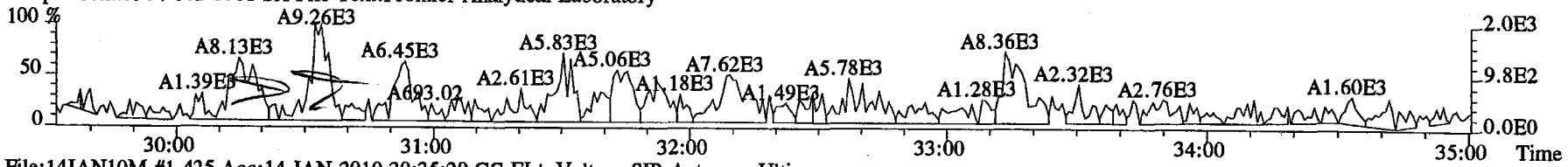
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



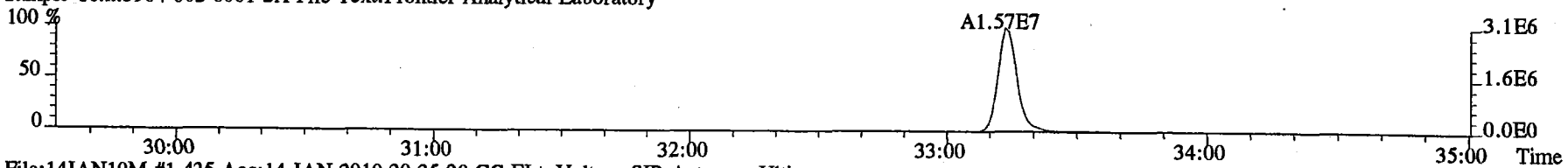
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:9 F:2 BSUB(10000,15,-3.0) BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



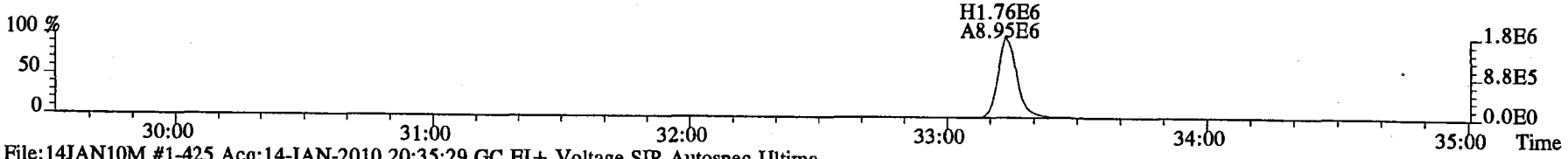
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



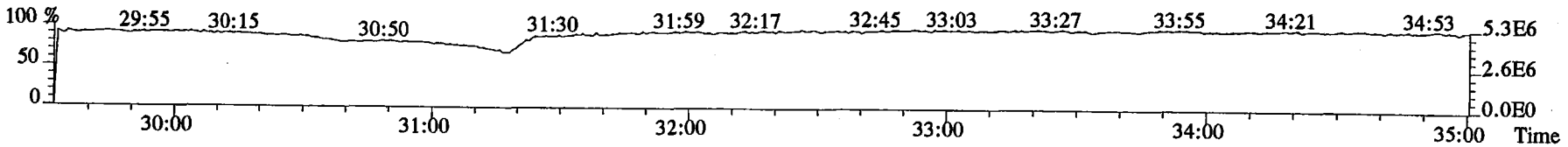
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



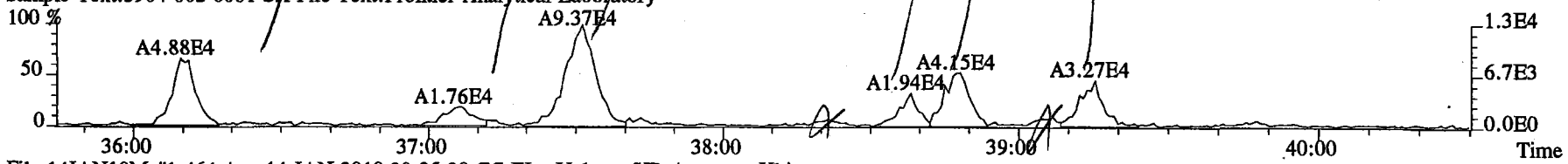
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



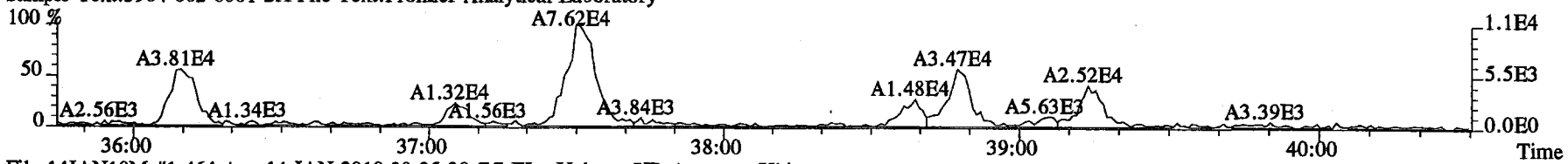
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:9 F:2 Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



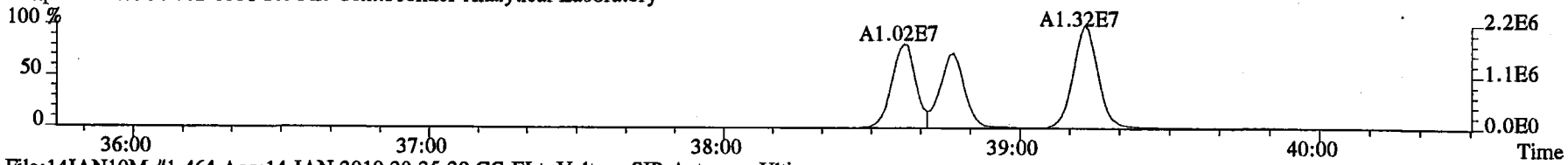
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



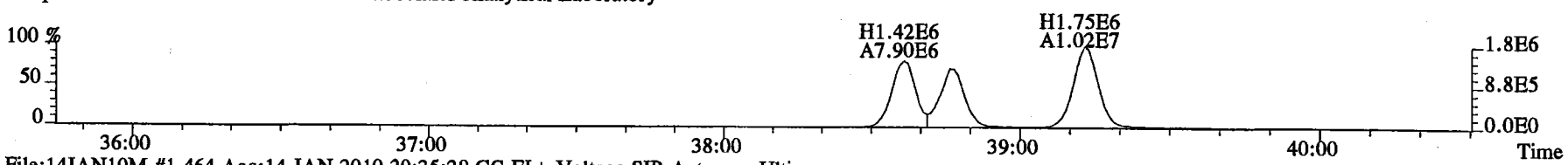
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



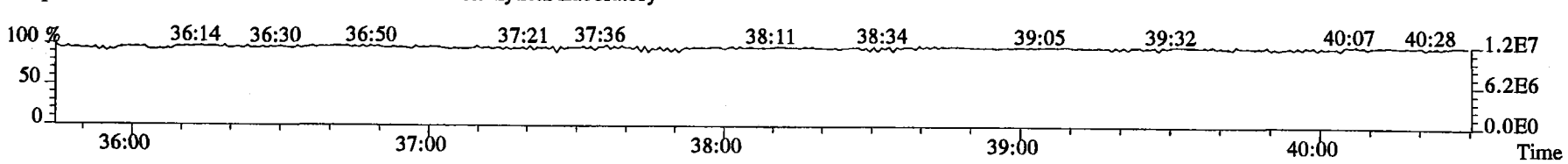
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



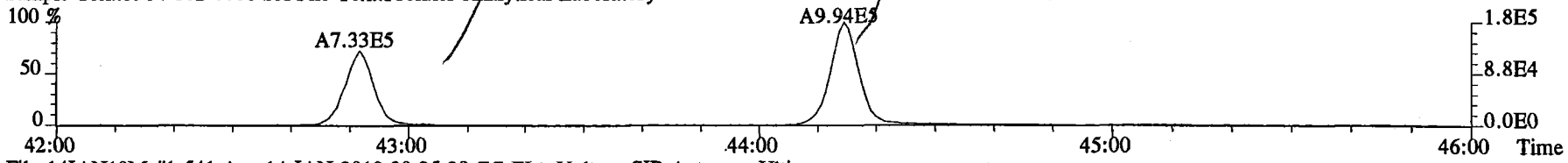
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



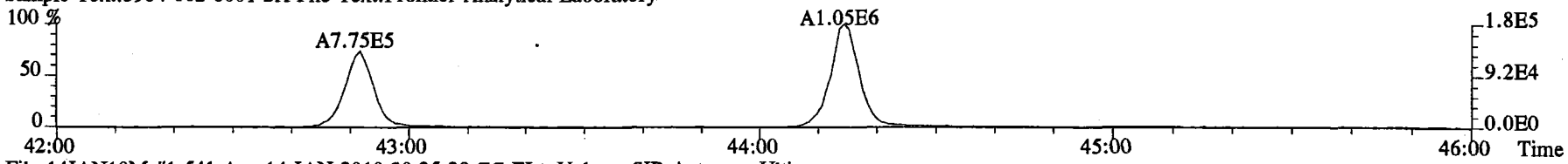
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:9 F:3 Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



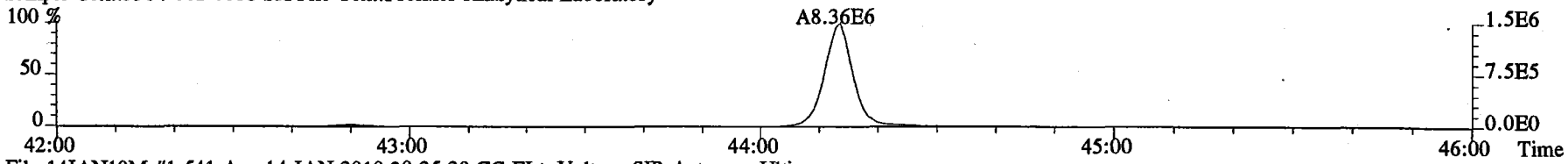
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



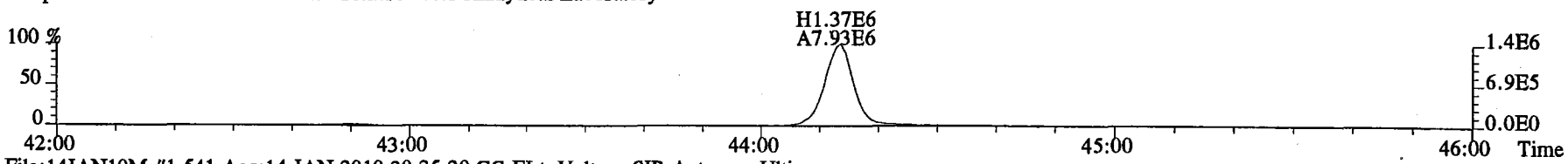
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



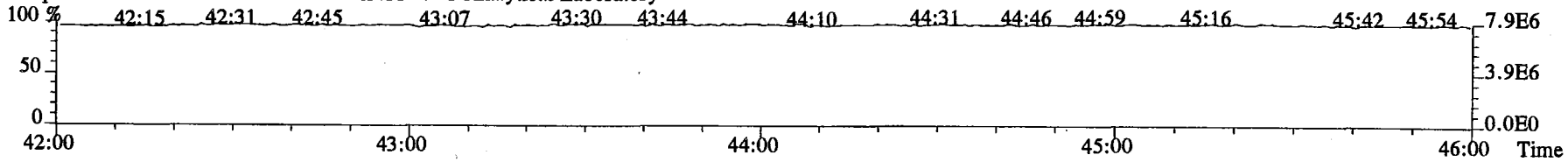
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



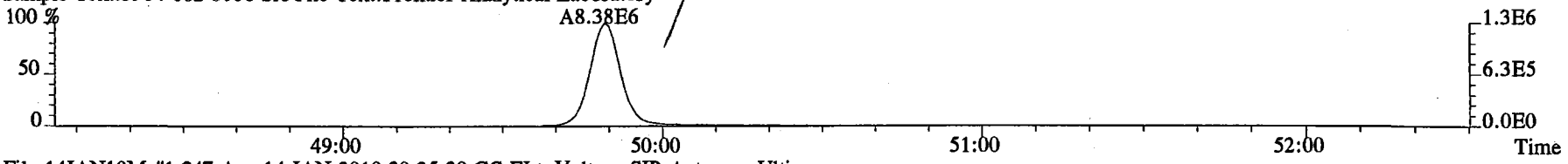
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



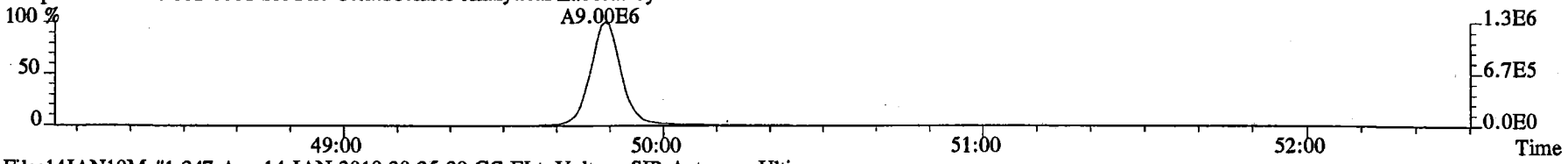
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:9 F:4 Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



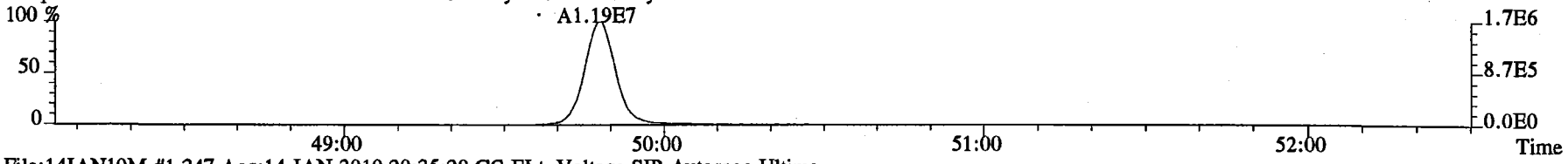
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



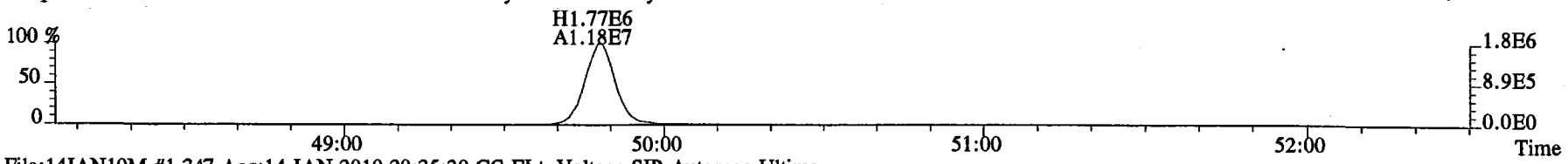
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



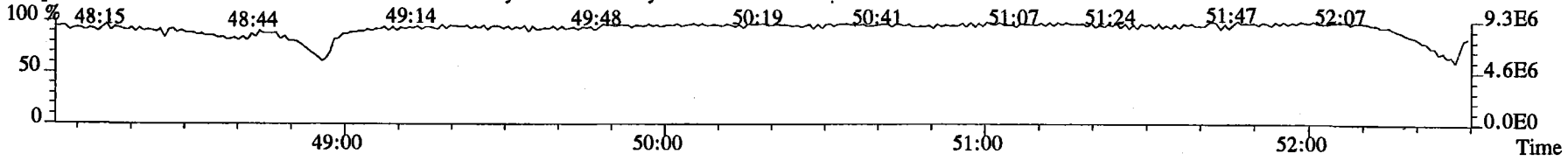
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory

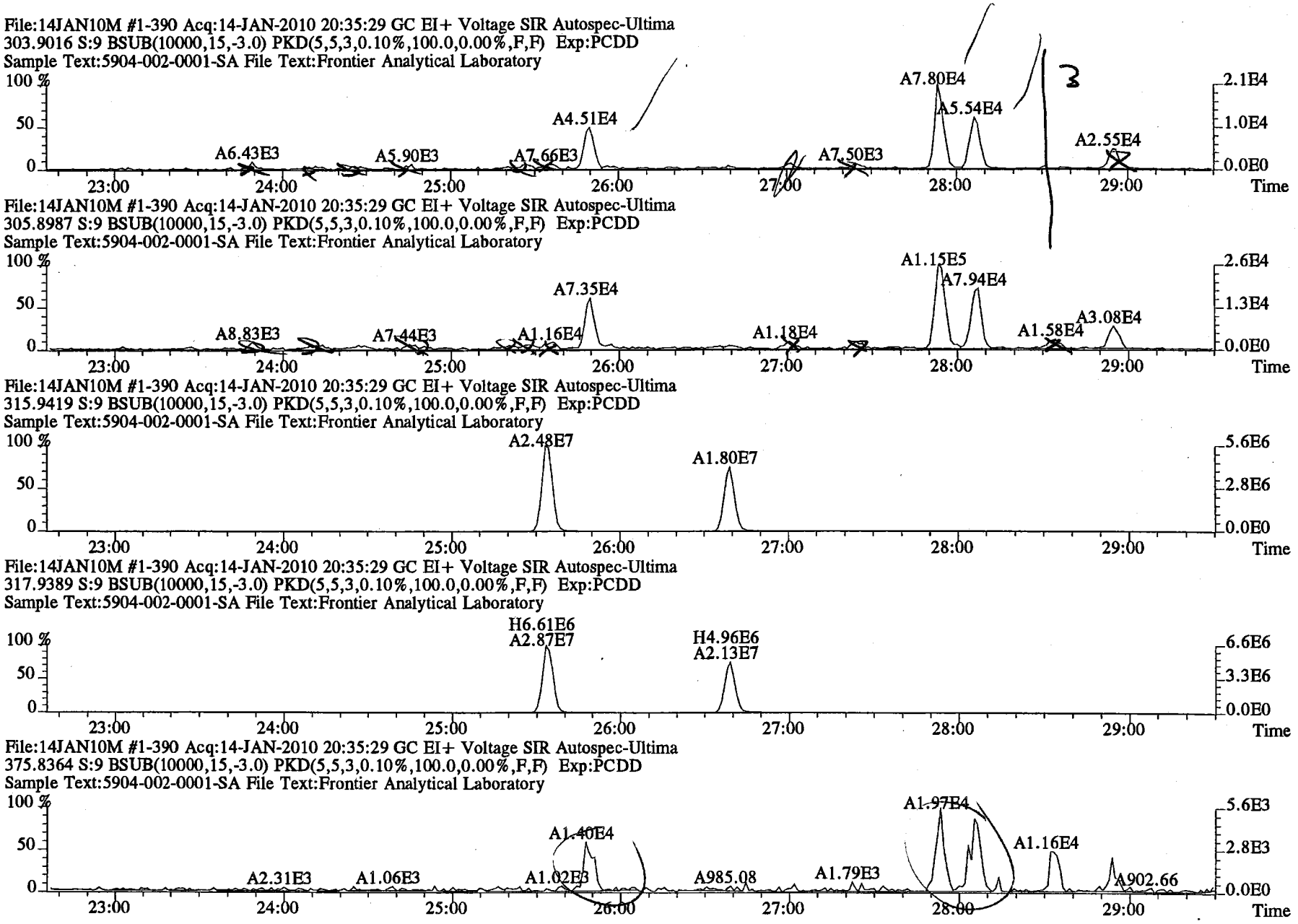


File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory

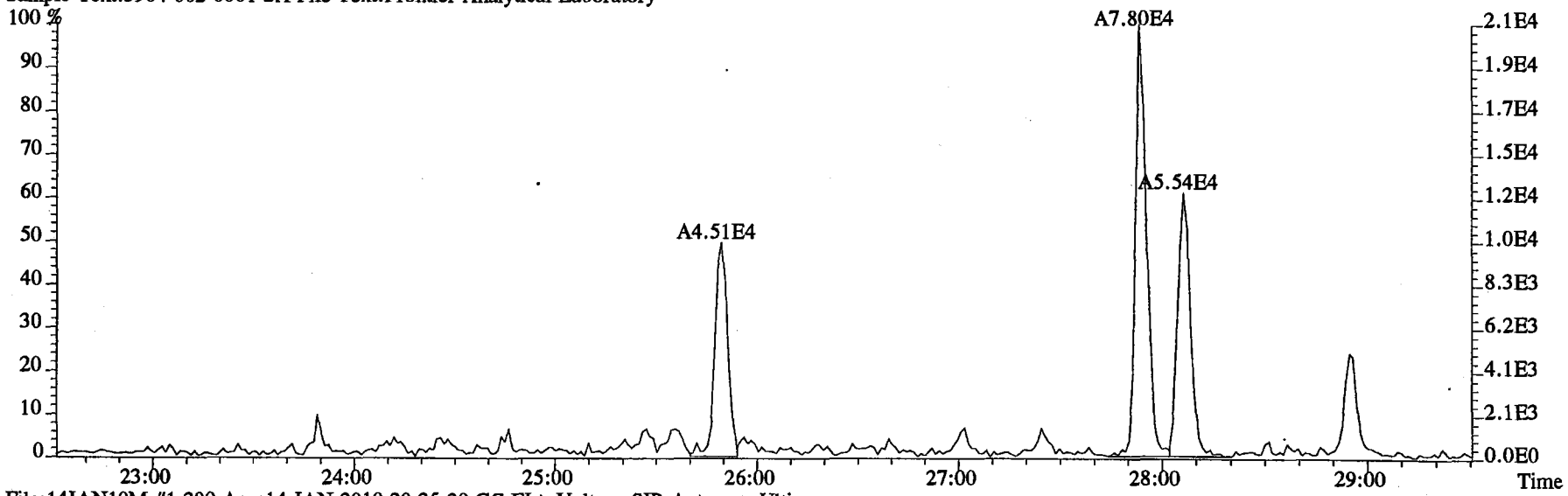


File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:9 F:5 Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory

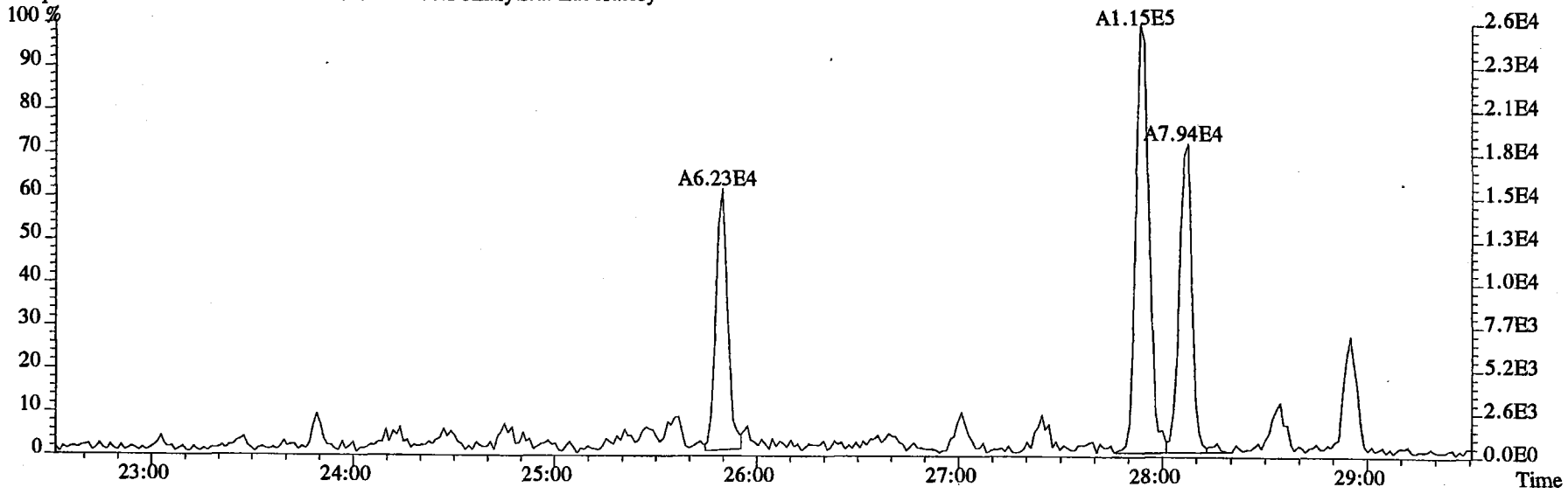



File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory
A6.43E3
A5.90E3
A7.66E3
A4.51E4
A7.50E3
A7.80E4
A5.54E4
A2.55E4
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory
A8.83E3
A7.44E3
A1.16E4
A7.35E4
A1.18E4
A1.15E5
A7.94E4
A1.58E4
A3.08E4
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory
A2.48E7
A1.80E7
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory
H6.61E6
A2.87E7
H4.96E6
A2.13E7
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory
A2.31E3
A1.06E3
A1.40E4
A1.02E3
A985.08
A1.79E3
A1.97E4
A1.16E4
A902.66
100 %
50
0
23:00
24:00
25:00
26:00
27:00
28:00
29:00
Time
2.1E4
1.0E4
0.0E0
2.6E4
1.3E4
5.6E6
2.8E6
6.6E6
3.3E6
5.6E3
2.8E3

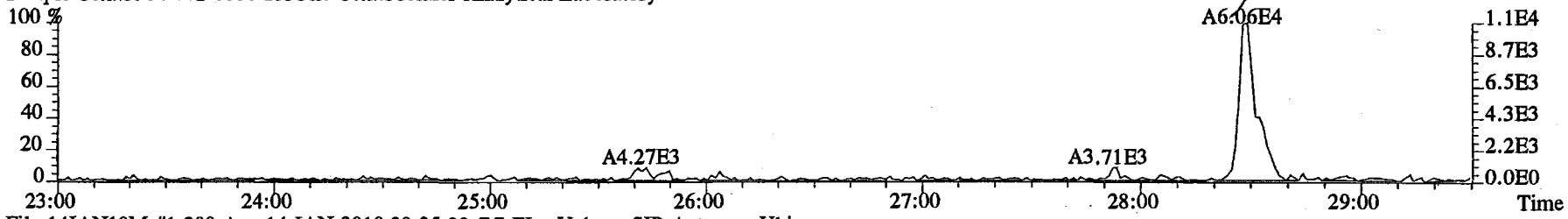
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



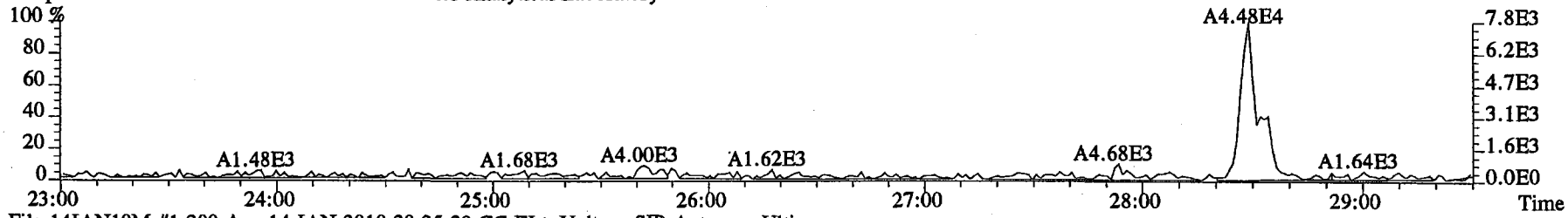
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



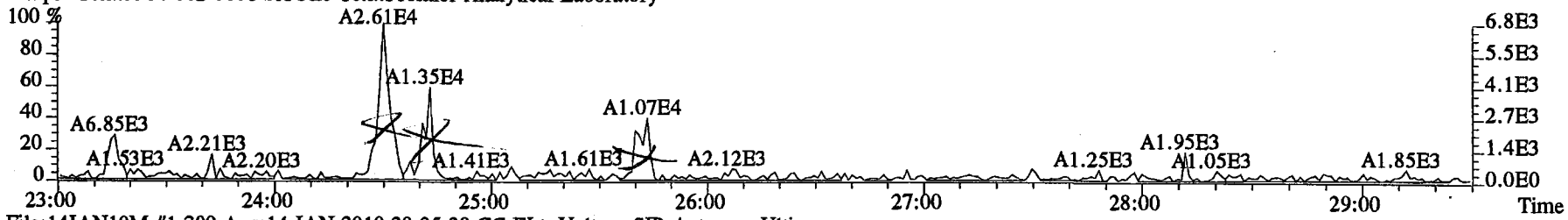
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



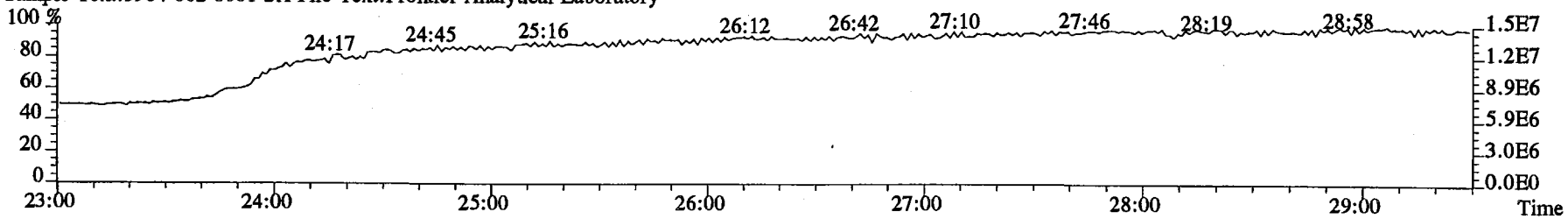
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



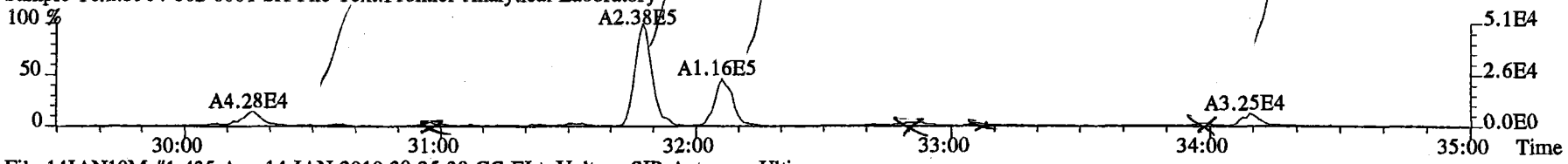
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:9 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



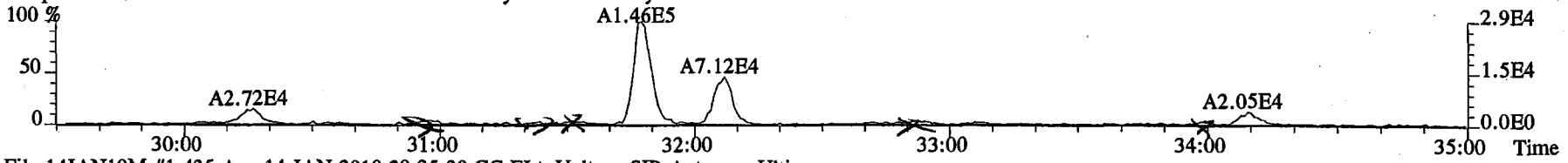
File:14JAN10M #1-390 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:9 Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



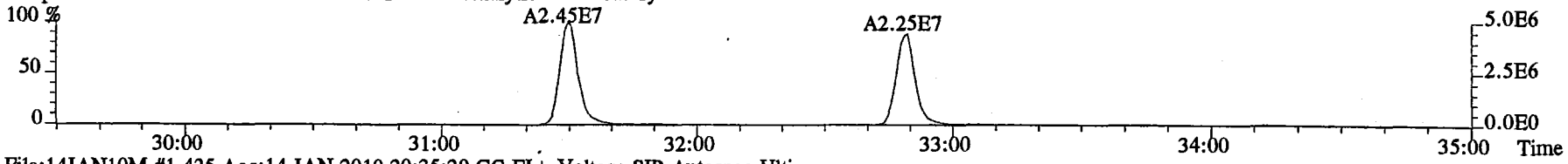
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



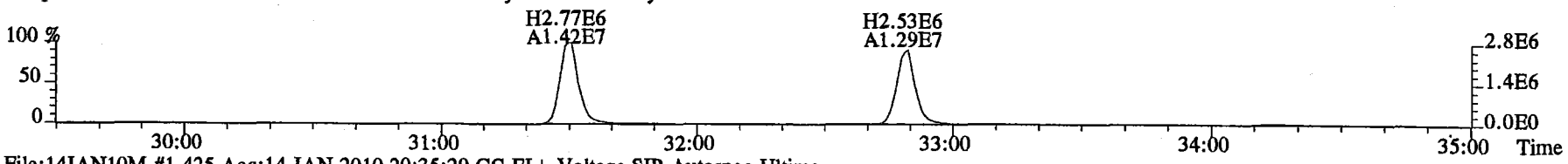
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



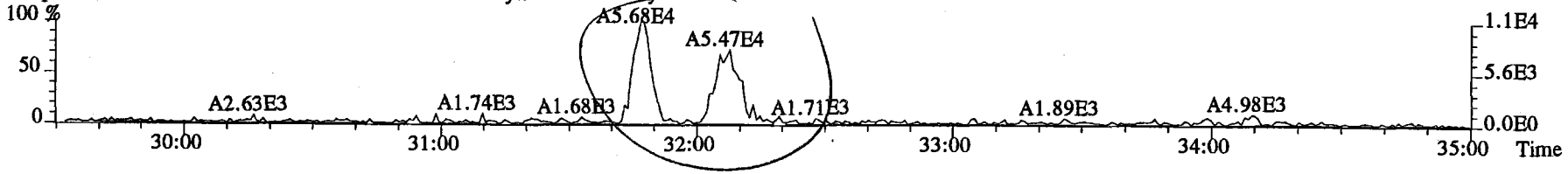
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



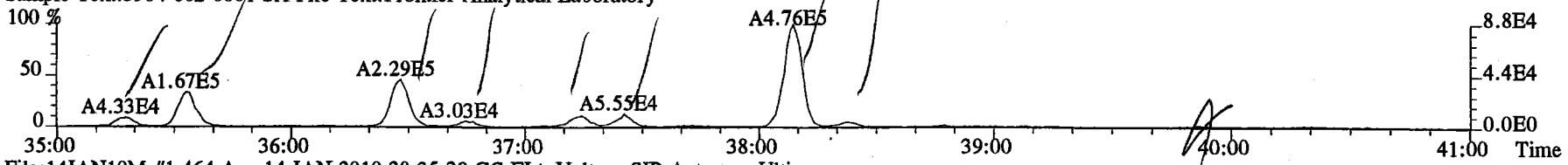
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



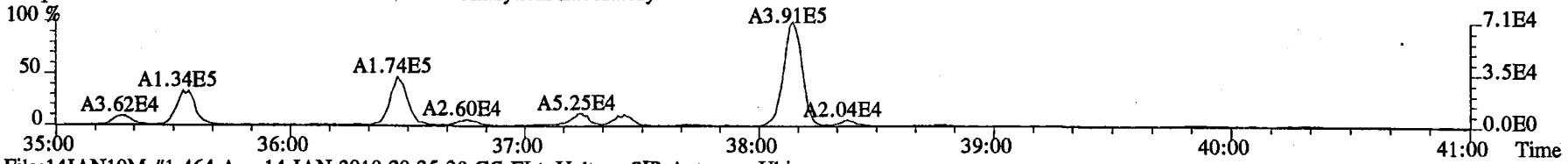
File:14JAN10M #1-425 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:9 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



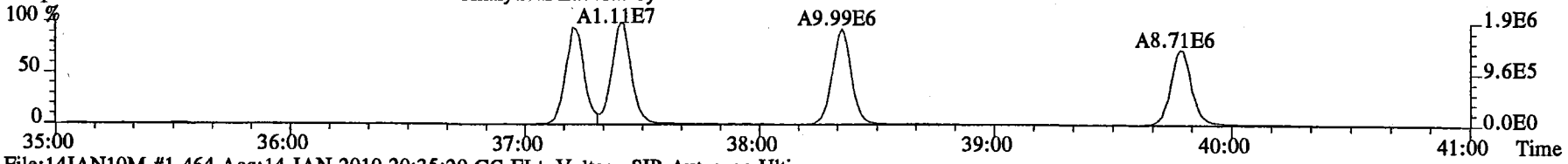
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



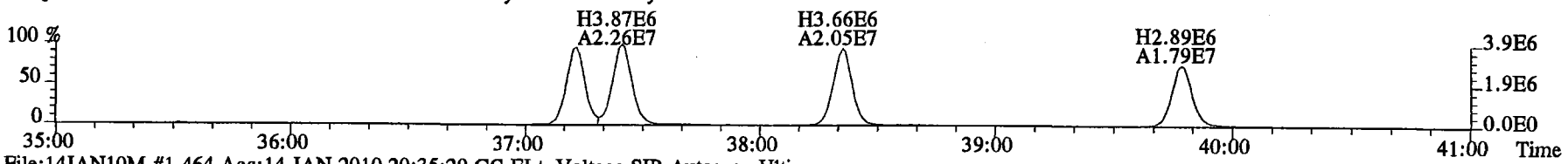
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



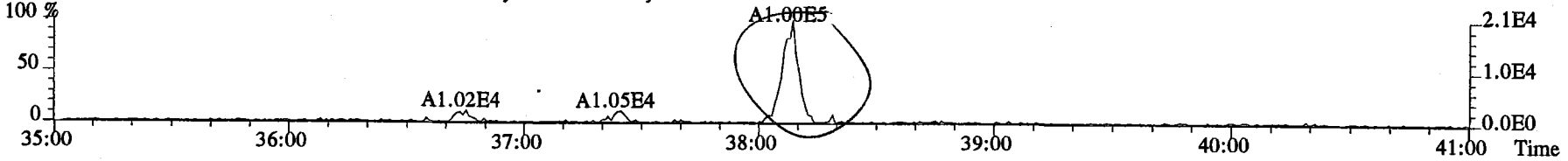
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



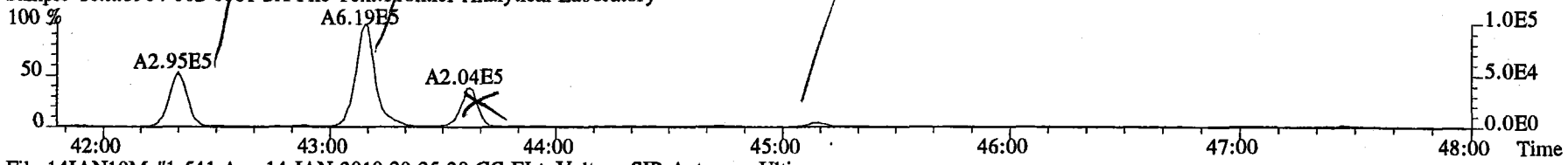
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



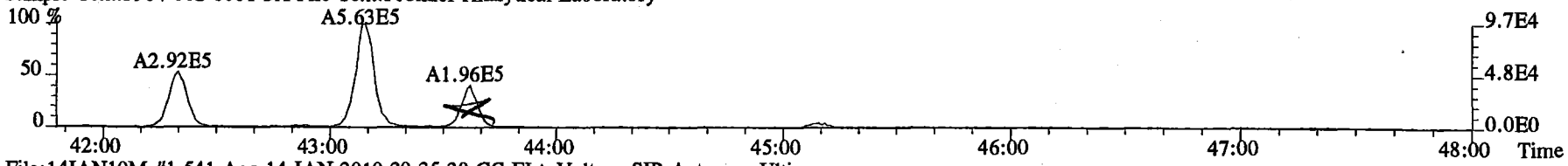
File:14JAN10M #1-464 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:9 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



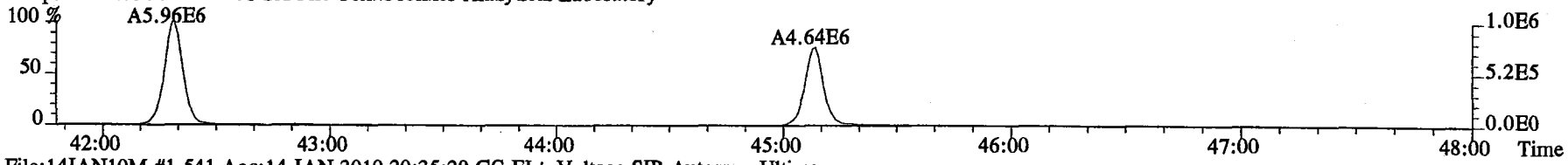
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



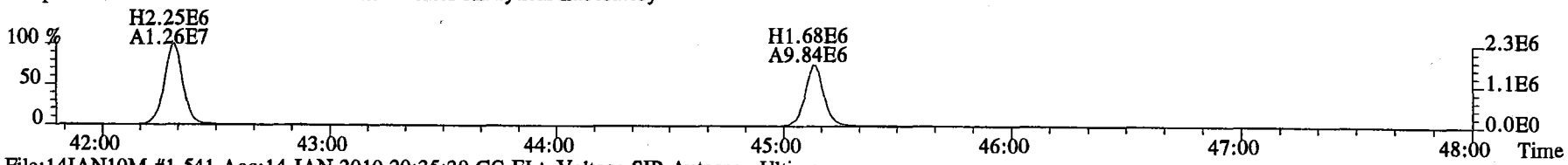
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



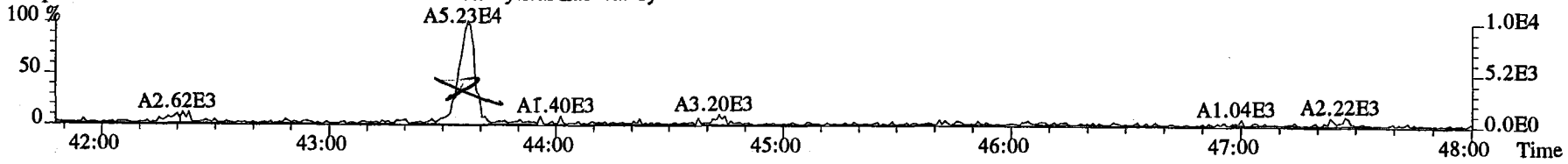
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



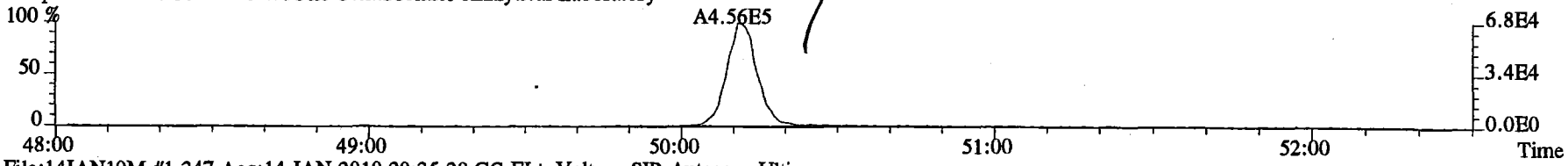
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



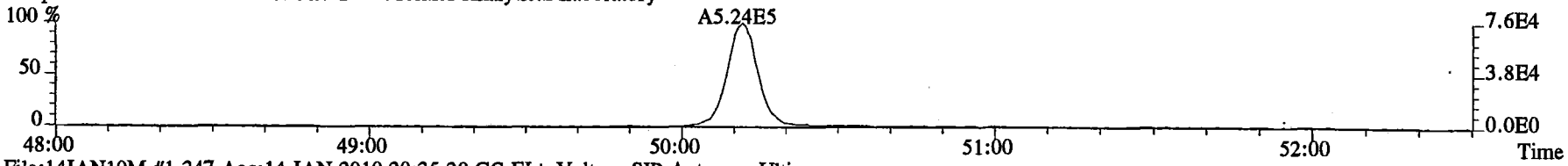
File:14JAN10M #1-541 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:9 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



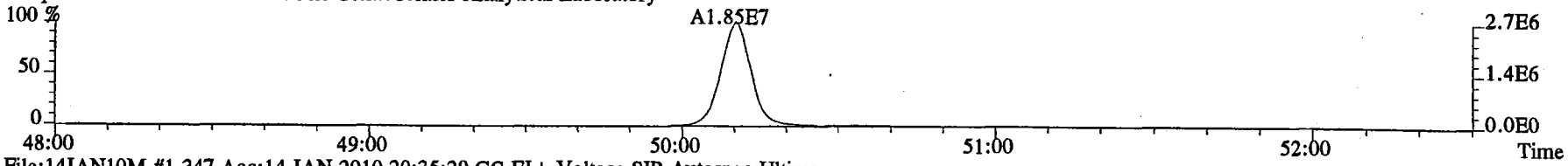
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



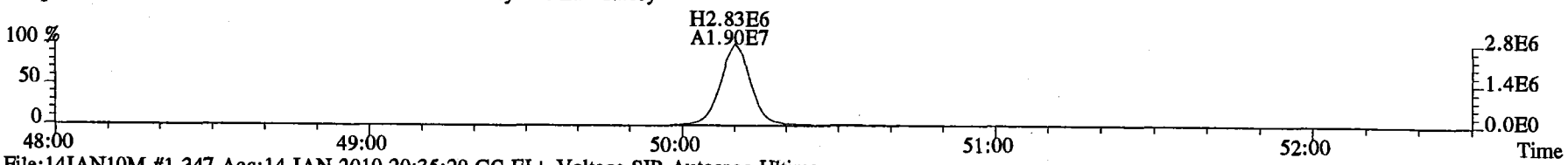
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



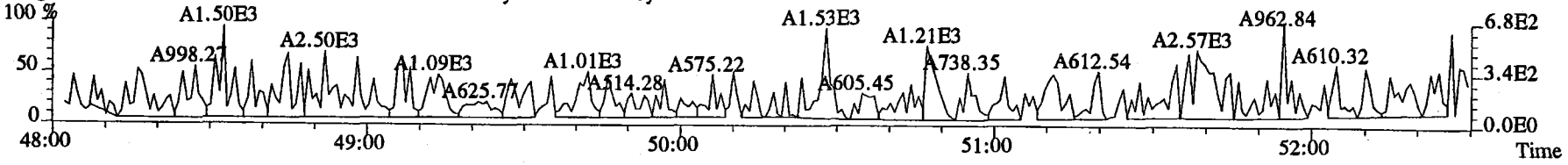
File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-347 Acq:14-JAN-2010 20:35:29 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:9 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-002-0001-SA File Text:Frontier Analytical Laboratory



FAL ID: 5904-003-0001-SA Filename: 14JAN10M Sam:10 Acquired: 14-JAN-10 21:30:44 ICal: PCDDFAL3-11-18-09
Client ID: CB1123109COMP ConCal: ST011410M1 EndCal: ST011410M2
Results: 5911 GC Column: DB5 Amount: 1.026 NATO 1989 Tox: 0.416
WHO 1998 Tox: 0.268 WHO 2005 Tox: 0.301

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	*	*	n	NotFnd	1.02	*		2.50	192	212	0.530
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.96	*		2.50	373	280	1.01
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	1.37	*		2.50	393	382	1.17
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	1.34	*		2.50	393	382	1.38
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	1.37	*		2.50	393	382	1.26
1,2,3,4,6,7,8-HpCDD	1.48e+05	0.97	y	44:13	1.17	20.4	J	2.50	-	-	*
OCDD	8.56e+05	0.91	y	49:48	1.21	151		2.50	-	-	*
2,3,7,8-TCDF	*	*	n	NotFnd	1.29	*		2.50	383	727	0.686
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.89	*		2.50	278	257	0.545
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.91	*		2.50	278	257	0.588
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.00	*		2.50	356	171	0.652
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.92	*		2.50	356	171	0.669
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	0.99	*		2.50	356	171	0.679
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.09	*		2.50	356	171	0.752
1,2,3,4,6,7,8-HpCDF	4.58e+04	1.04	y	42:18	1.36	4.85	J	2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.61	*		2.50	273	144	0.719
OCDF	8.27e+04	0.90	y	50:10	0.84	13.0	J	2.50	-	-	*

						Rec
13C-2,3,7,8-TCDD	1.55e+07	0.73	y	27:24	0.94	1720	88.1
13C-1,2,3,7,8-PeCDD	1.65e+07	1.76	y	33:13	1.02	1690	86.8
13C-1,2,3,4,7,8-HxCDD	1.28e+07	1.31	y	38:36	0.98	1670	85.9
13C-1,2,3,6,7,8-HxCDD	1.12e+07	1.31	y	38:46	0.94	1540	79.2
13C-1,2,3,4,6,7,8-HpCDD	1.22e+07	1.05	y	44:13	0.90	1740	89.5
13C-OCDD	1.82e+07	0.99	y	49:47	0.67	3530	90.6
13C-2,3,7,8-TCDF	2.59e+07	0.84	y	26:39	0.88	1740	89.0
13C-1,2,3,7,8-PeCDF	2.64e+07	1.70	y	31:30	0.88	1770	90.7
13C-2,3,4,7,8-PeCDF	2.47e+07	1.69	y	32:49	0.85	1710	87.8
13C-1,2,3,4,7,8-HxCDF	2.13e+07	0.49	y	37:12	1.72	1600	82.0
13C-1,2,3,6,7,8-HxCDF	2.34e+07	0.50	y	37:24	2.00	1510	77.3
13C-2,3,4,6,7,8-HxCDF	2.13e+07	0.49	y	38:20	1.74	1580	81.1
13C-1,2,3,7,8,9-HxCDF	1.88e+07	0.50	y	39:47	1.51	1610	82.8
13C-1,2,3,4,6,7,8-HpCDF	1.35e+07	0.48	y	42:18	1.10	1590	81.5
13C-1,2,3,4,7,8,9-HpCDF	1.07e+07	0.47	y	45:08	0.85	1640	84.0
13C-OCDF	2.93e+07	0.96	y	50:09	1.17	3220	82.7
37Cl-2,3,7,8-TCDD	7.59e+06			27:25	0.97	815	105
13C-1,2,3,4-TCDD	1.86e+07	0.74	y	26:50	-	69.5	
13C-1,2,3,4-TCDF	3.32e+07	0.84	y	25:33	-	70.0	
13C-1,2,3,7,8,9-HxCDD	1.51e+07	1.29	y	39:13	-	71.8	

							Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	*			NotFnd	1.02	*	2.50	192	212	0.530		0
Total Penta-Dioxins	*			NotFnd	0.96	*	2.50	373	280	1.01		0
Total Hexa-Dioxins	5.00e+04			36:08	1.36	5.97	J 2.50	-	-	*		2
Total Hepta-Dioxins	2.90e+05			42:51	1.17	39.9	2.50	-	-	*		2
Total Tetra-Furans	*			NotFnd	1.29	*	2.50	383	727	0.686		0
1st Fn. Tot Penta-Furans	*			NotFnd	0.90	*	J 2.50	-	-	*	PeCDF	0
Total Penta-Furans	1.78e+04			31:47	0.90	1.51	J 2.50	-	-	*	1.51	1
Total Hexa-Furans	6.61e+04			35:34	0.99	6.13	J 2.50	-	-	*		3
Total Hepta-Furans	1.07e+05			42:18	1.47	11.5	J 2.50	-	-	*		2

Analyst: _____ Date: 1/15/10

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 17 File: 14JAN10M S: 10 I: 1 F: 3
Acquired: 14-JAN-10 21:30:44

Total Concentration: 5.97 Unnamed Concentration: 5.970

RT	m1 Resp	m2 Resp	RA	Resp	Concentration	Name
36:08	1.05e+04	9.16e+03	1.15 y	1.97e+04	2.35	
37:31	1.76e+04	1.27e+04	1.39 y	3.03e+04	3.62	

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 17 File: 14JAN10M S: 10 I: 1 F: 4
Acquired: 14-JAN-10 21:30:44

Total Concentration: 39.9 Unnamed Concentration: 19.521

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:51	6.93e+04	7.28e+04	0.95 y	1.42e+05	19.5	
44:13	7.29e+04	7.52e+04	0.97 y	1.48e+05	20.4	1,2,3,4,6,7,8-HpCDD

Totals class: Total Penta-Furans Entry #: 44

Run: 17 File: 14JAN10M S: 10 I: 1 F: 2
Acquired: 14-JAN-10 21:30:44

Total Concentration: 1.51 Unnamed Concentration: 1.512

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
31:47	1.02e+04	7.60e+03	1.34 y	1.78e+04	1.51	

Totals class: Total Hexa-Furans Entry #: 45

Run: 17 File: 14JAN10M S: 10 I: 1 F: 3
Acquired: 14-JAN-10 21:30:44

Total Concentration: 6.13 Unnamed Concentration: 6.134

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
35:34	1.01e+04	8.64e+03	1.16 y	1.87e+04	1.73	
36:26	7.09e+03	6.18e+03	1.15 y	1.33e+04	1.23	
38:08	1.82e+04	1.60e+04	1.14 y	3.41e+04	3.17	

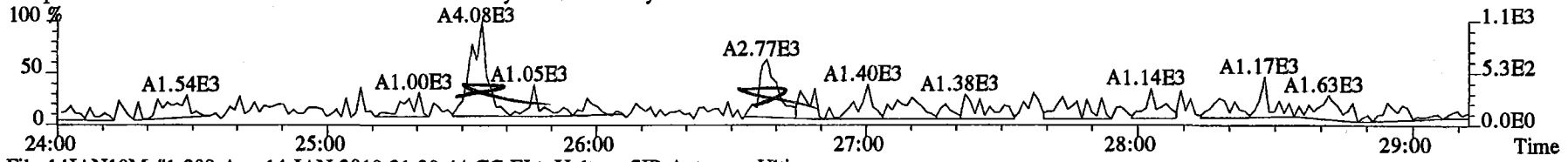
Totals class: Total Hepta-Furans Entry #: 46

Run: 17 File: 14JAN10M S: 10 I: 1 F: 4
Acquired: 14-JAN-10 21:30:44

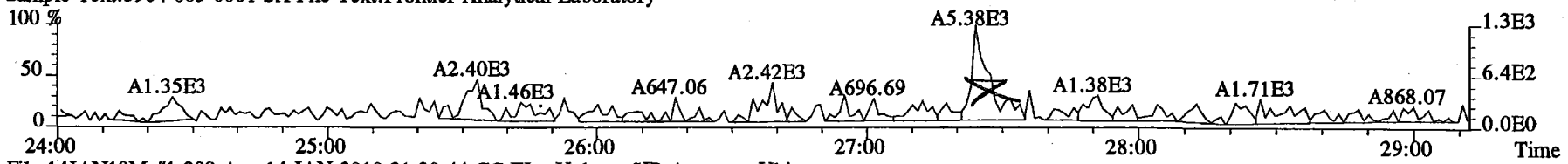
Total Concentration: 11.5 Unnamed Concentration: 6.647

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:18	2.33e+04	2.25e+04	1.04 y	4.58e+04	4.85	1,2,3,4,6,7,8-HpCDF
43:09	3.22e+04	2.85e+04	1.13 y	6.07e+04	6.65	

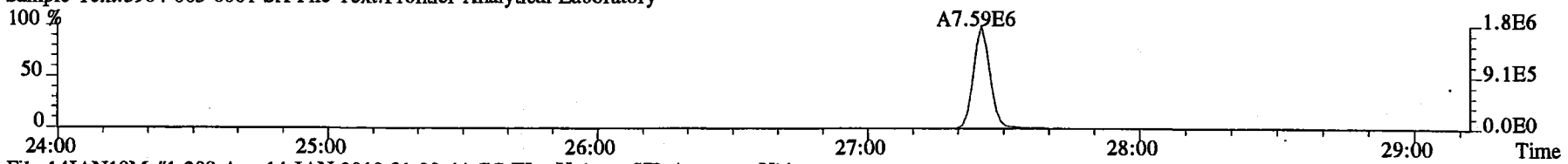
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



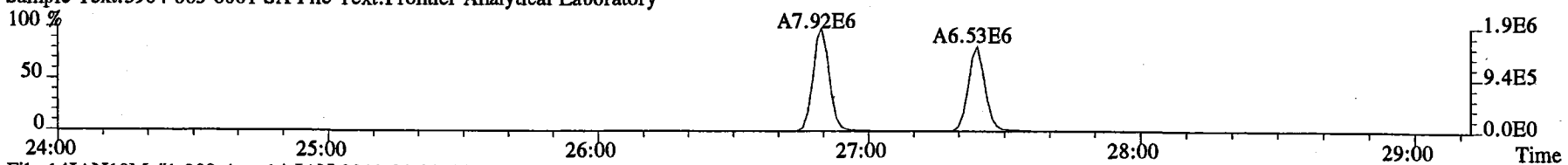
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



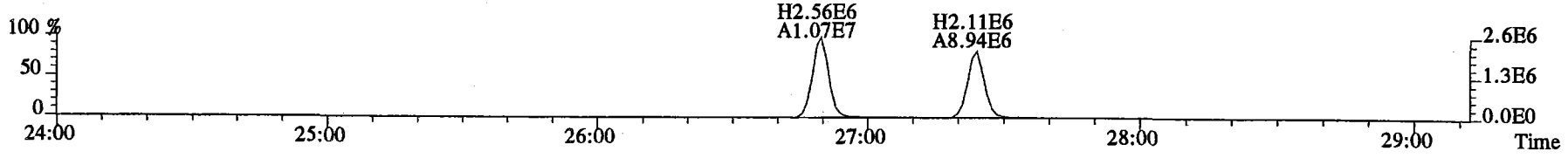
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



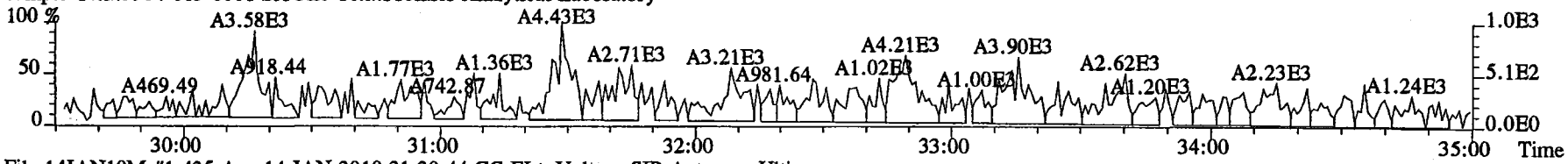
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



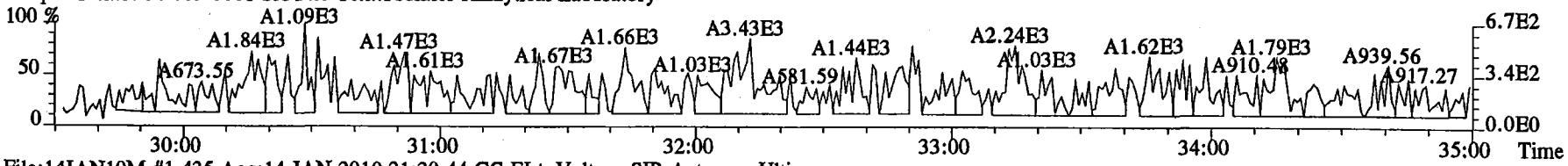
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



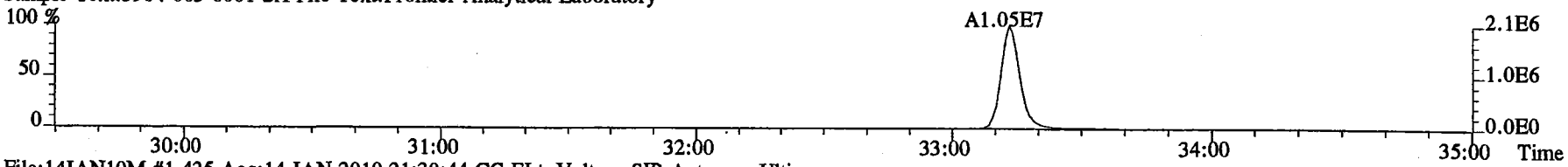
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



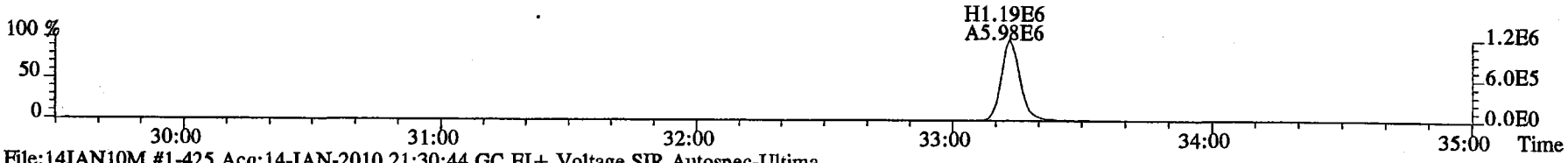
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



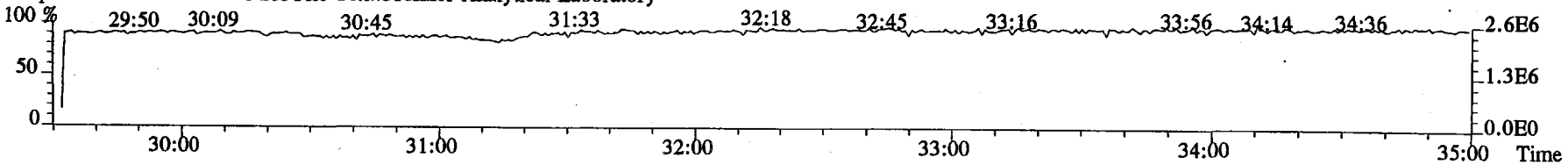
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



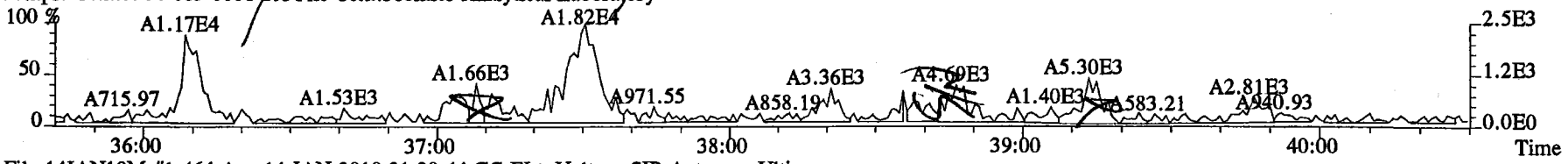
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



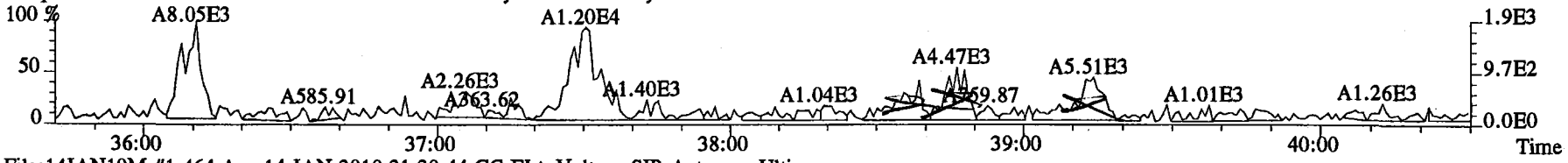
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:10 F:2 Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



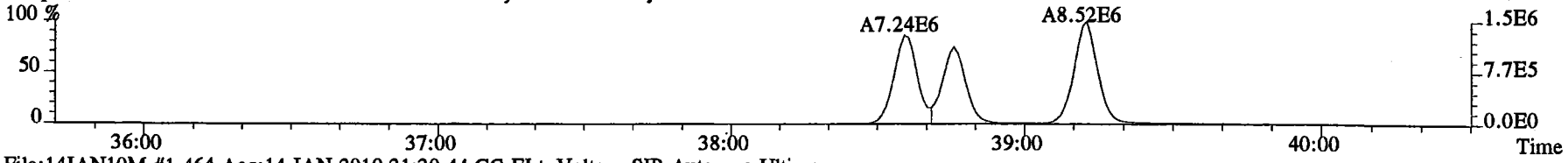
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



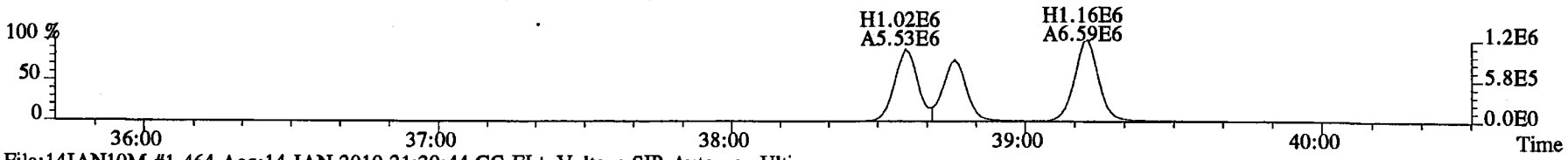
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



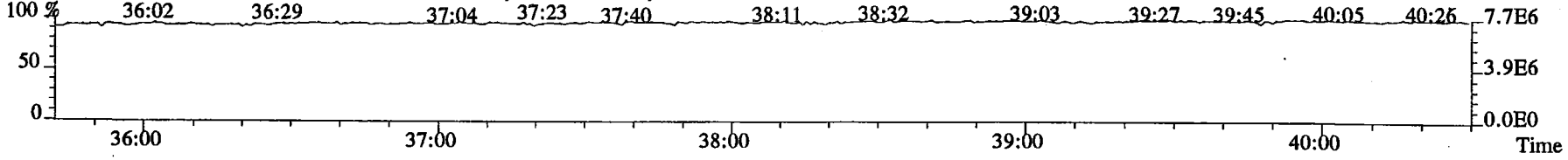
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



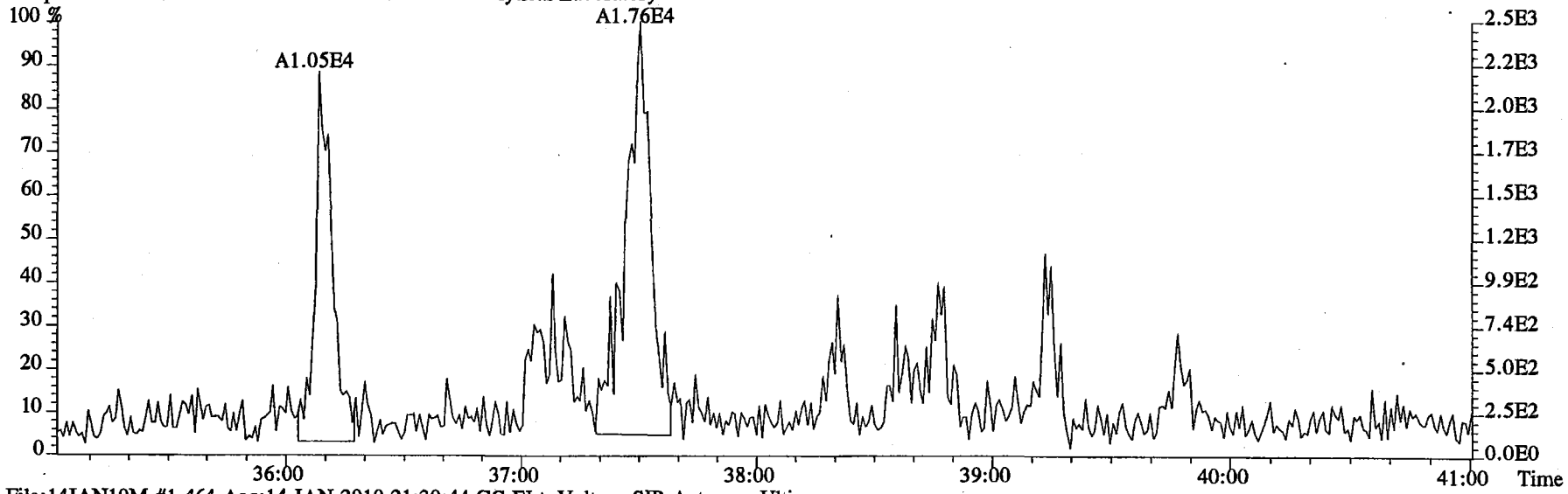
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



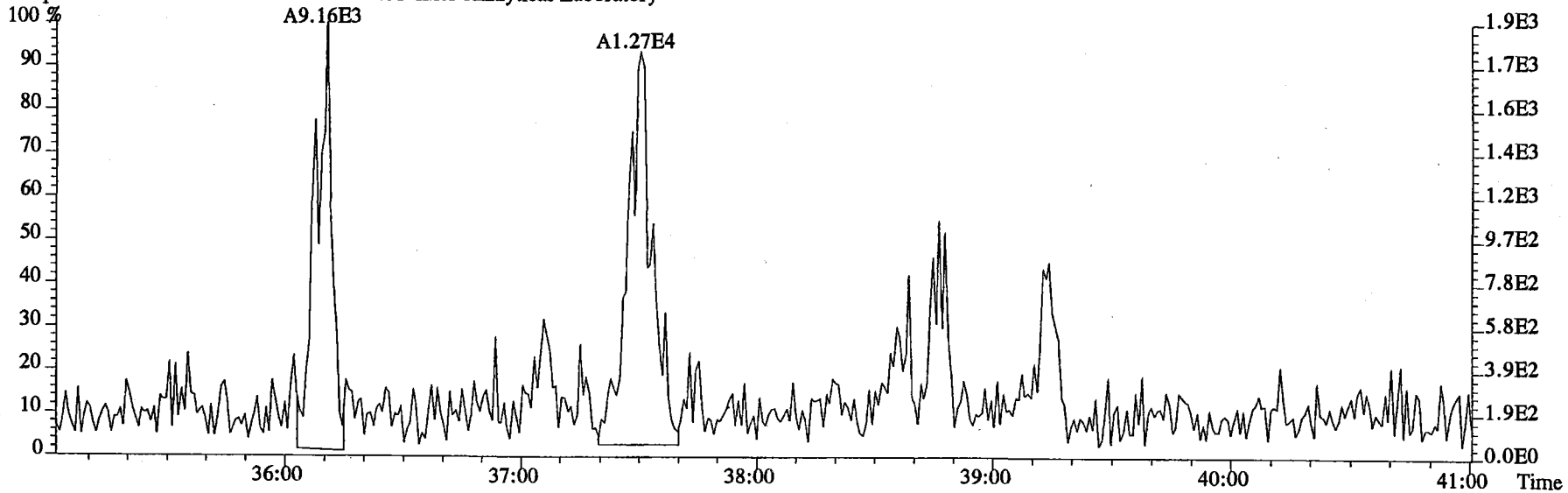
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:10 F:3 Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



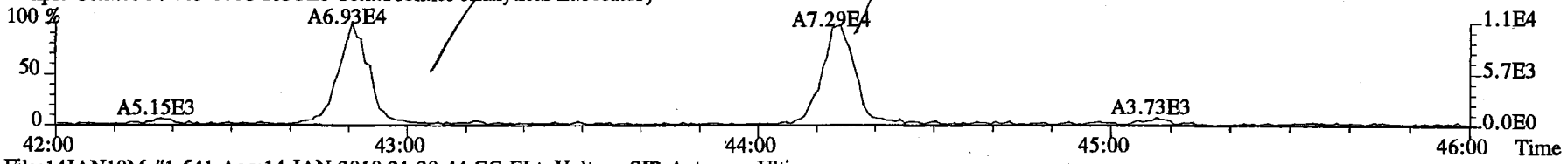
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



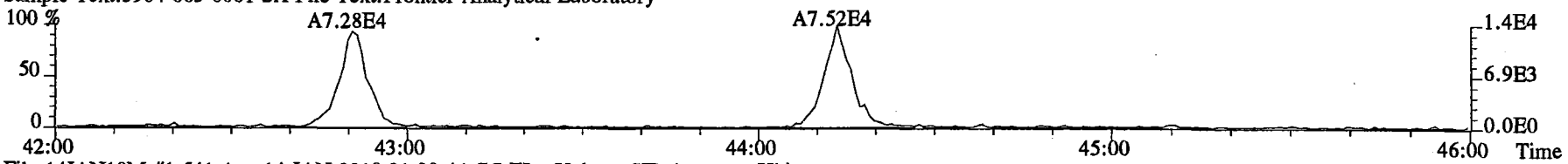
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



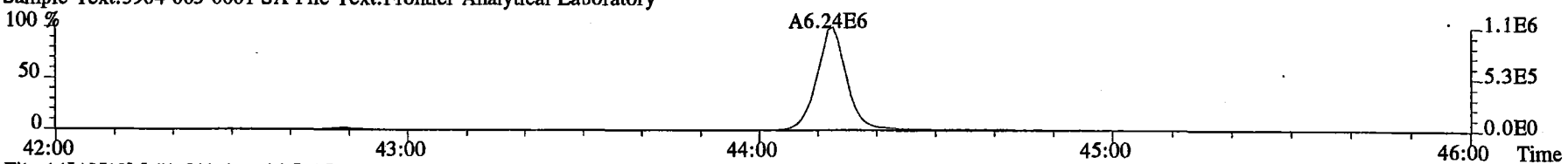
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0,10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



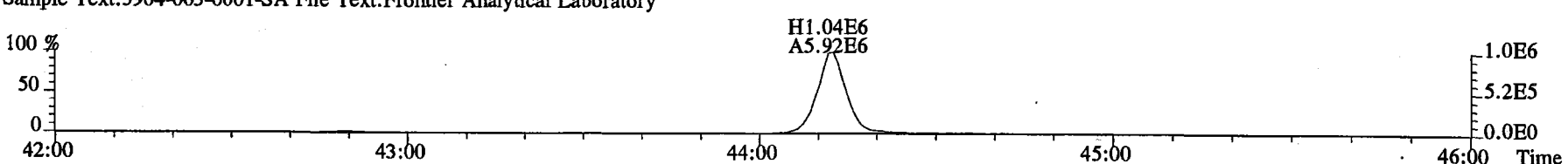
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



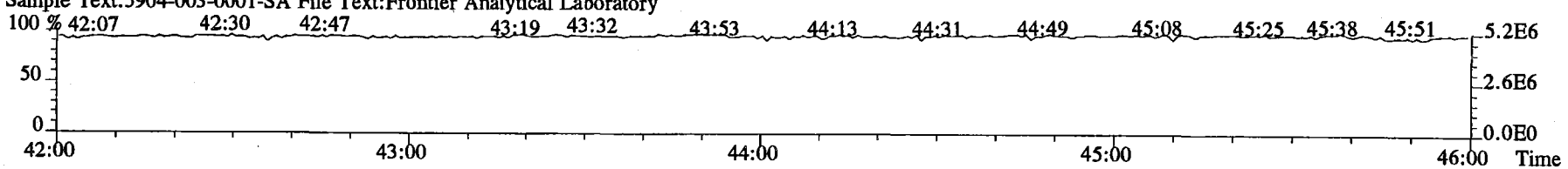
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 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:5904-003-0001-SA File Text:Frontier Analytical Laboratory

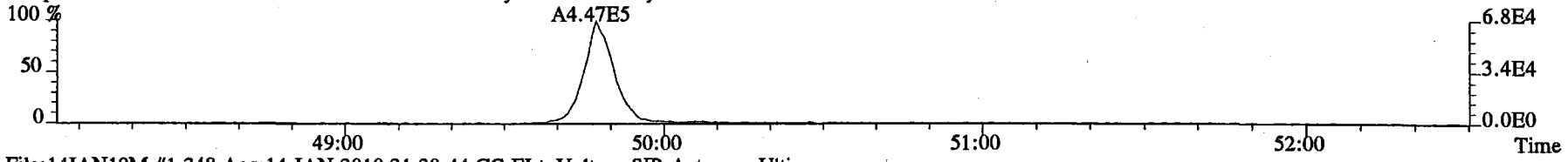


File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:10 F:4 Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory

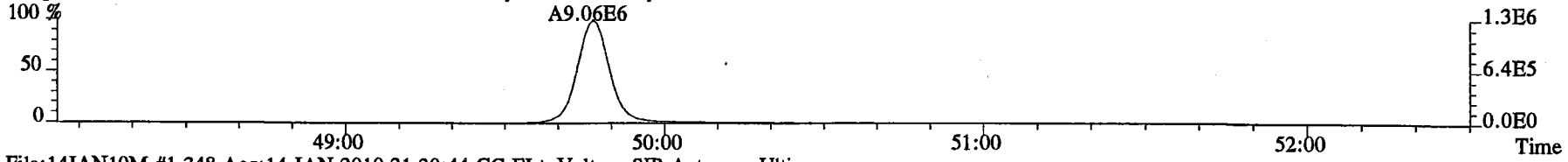


File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory

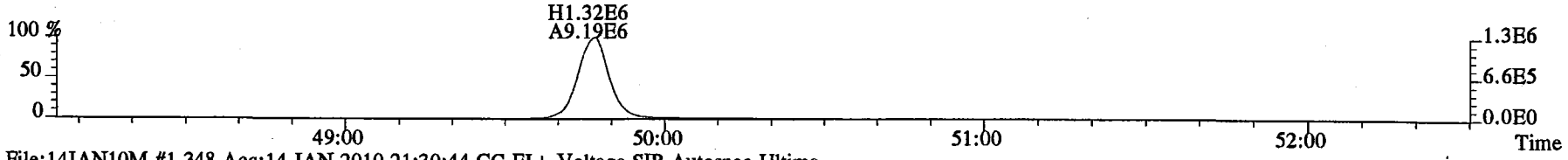
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



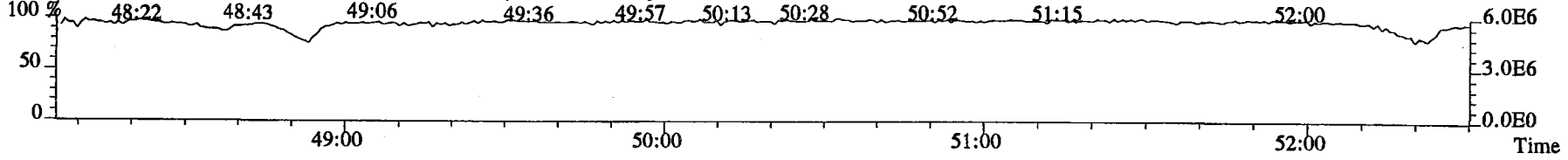
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



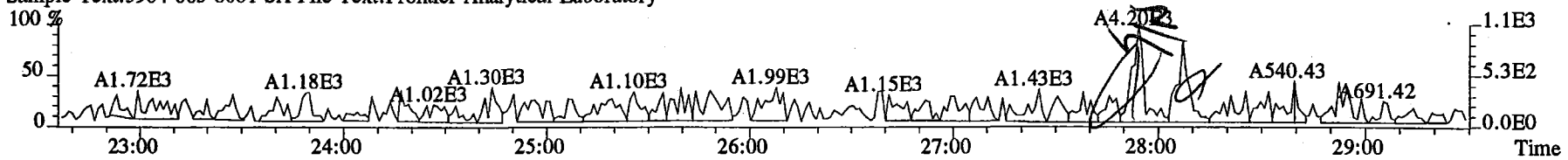
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



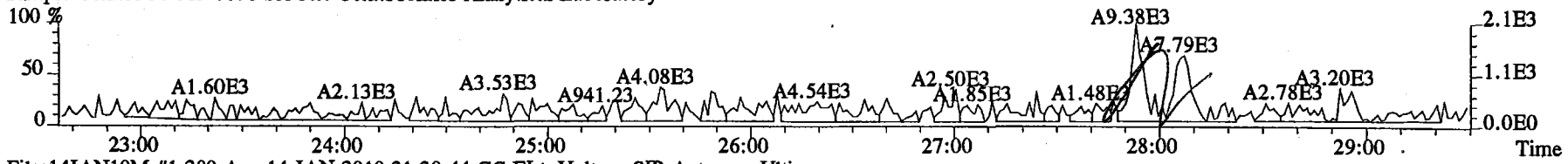
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:10 F:5 Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



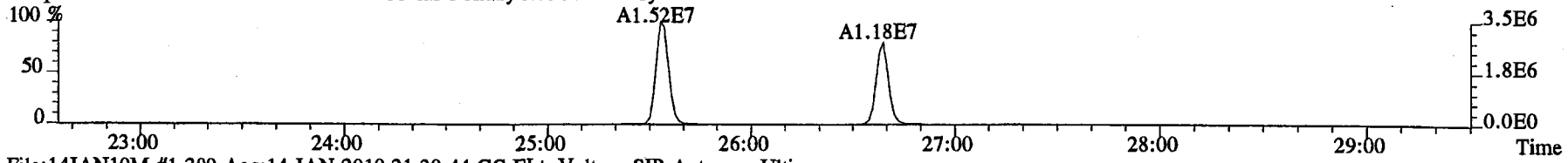
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



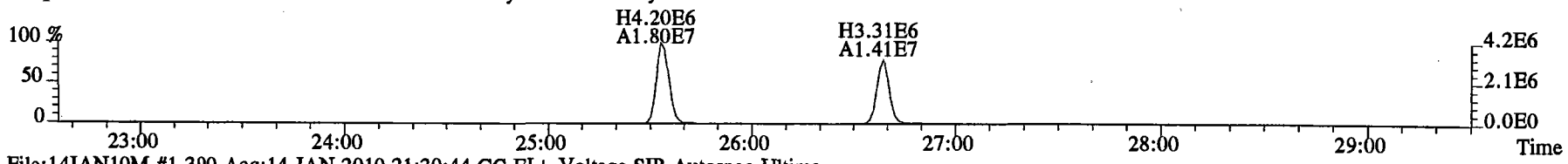
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



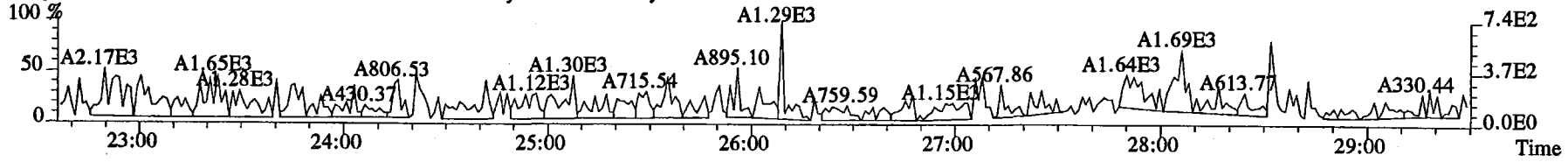
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



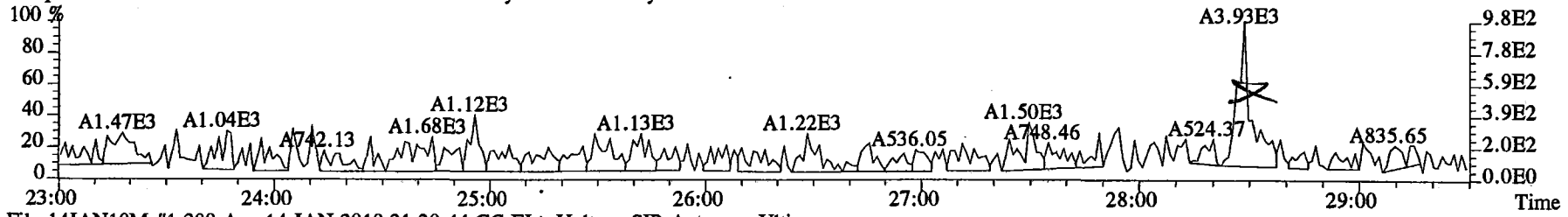
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



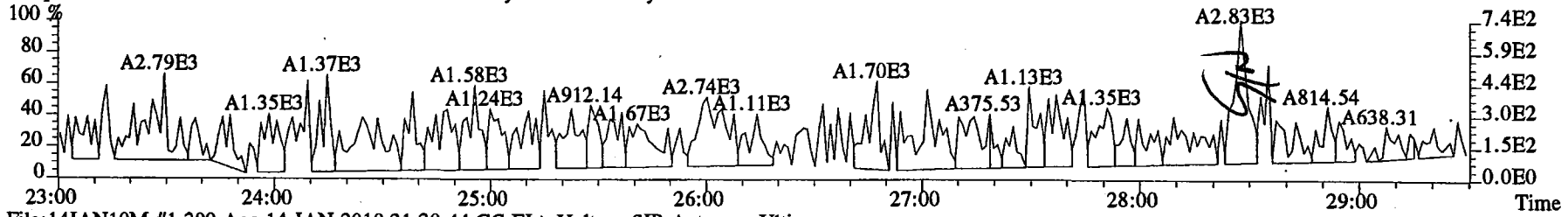
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



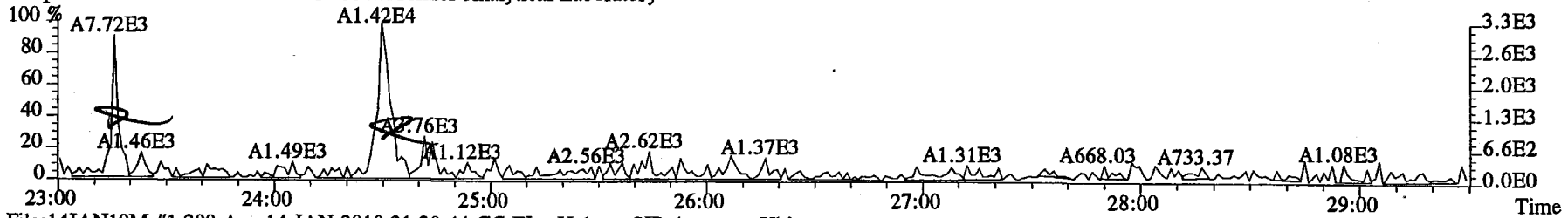
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



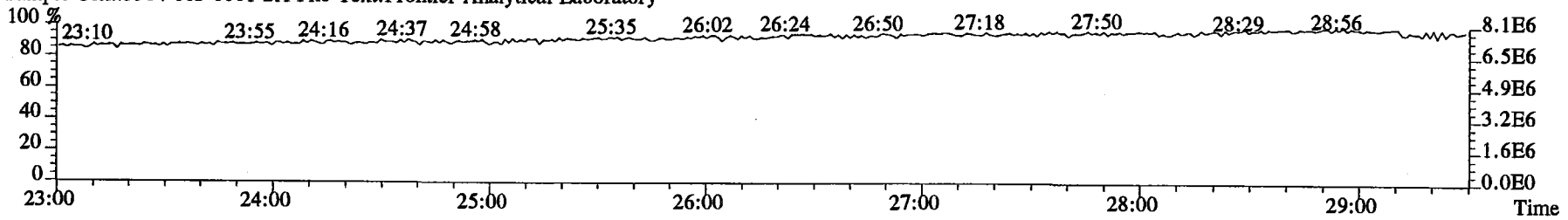
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



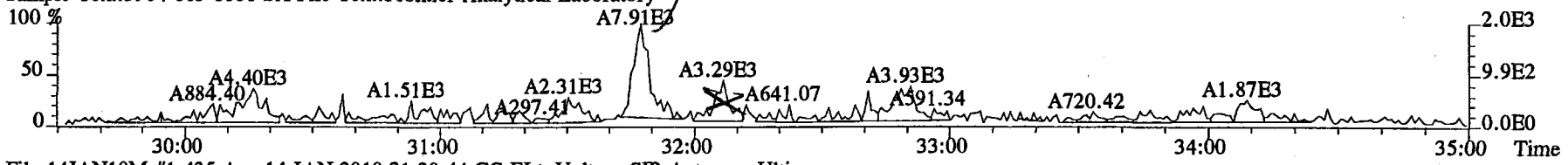
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



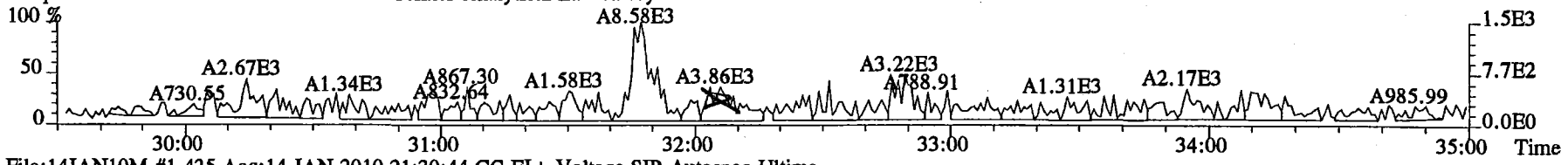
File:14JAN10M #1-390 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:10 Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



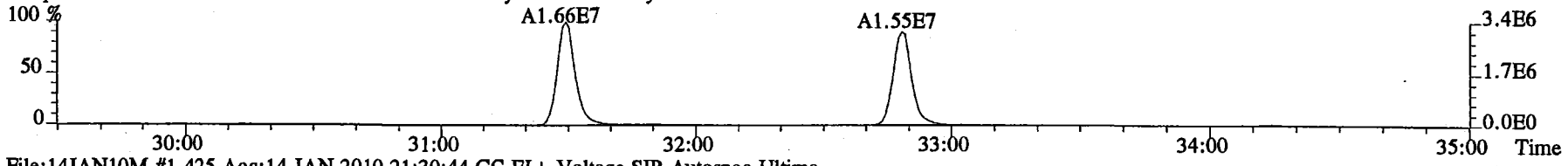
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



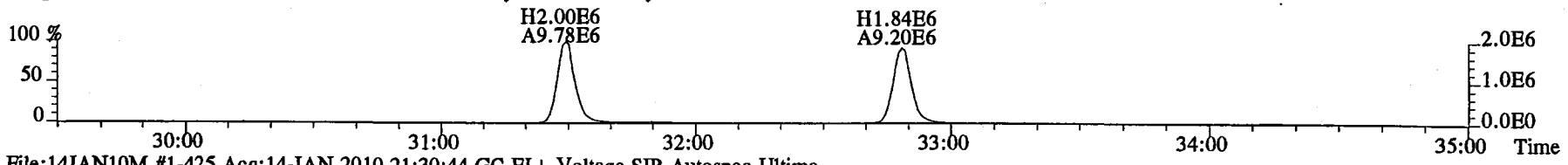
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



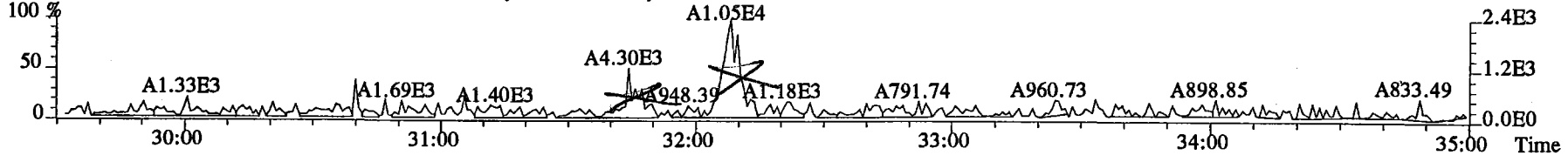
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



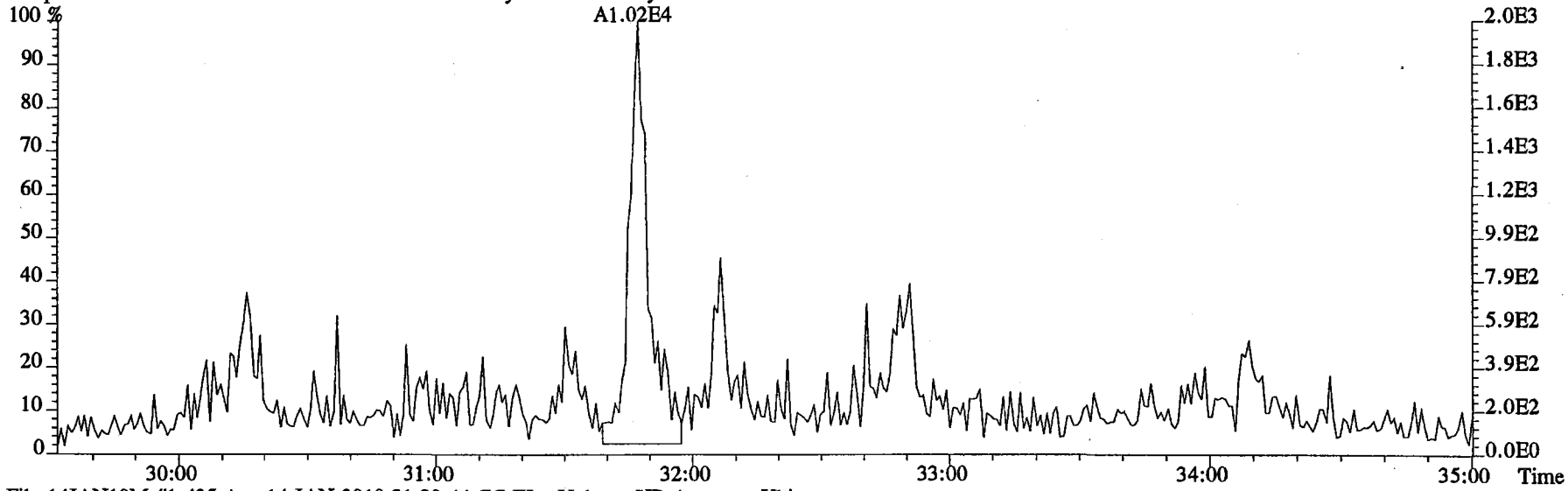
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



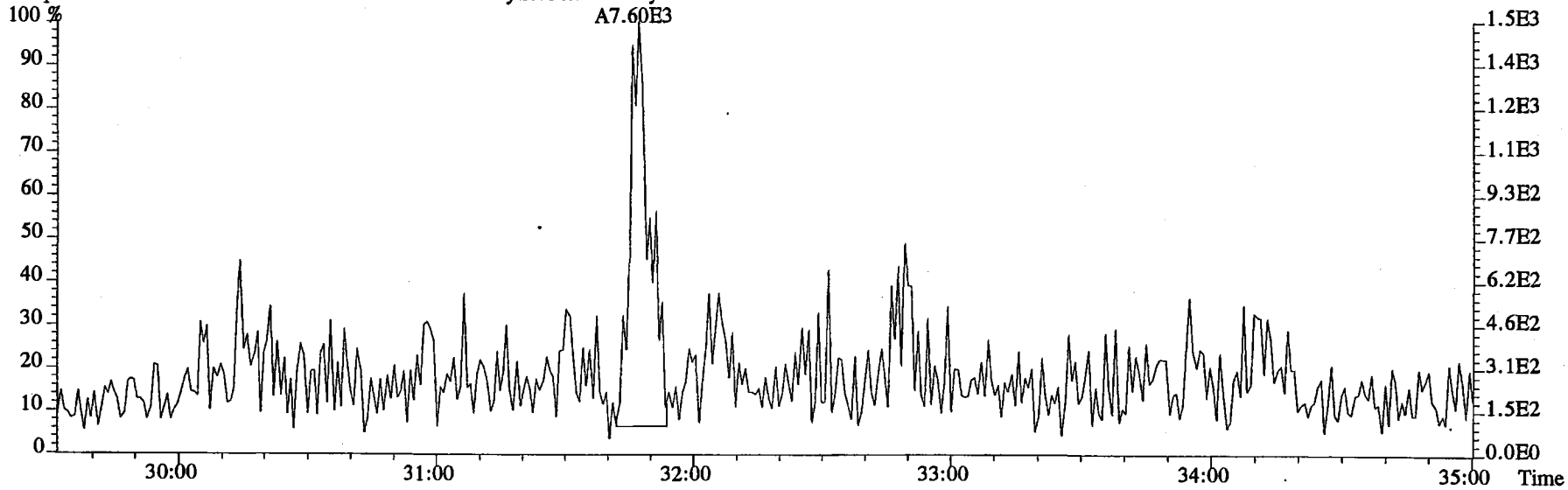
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



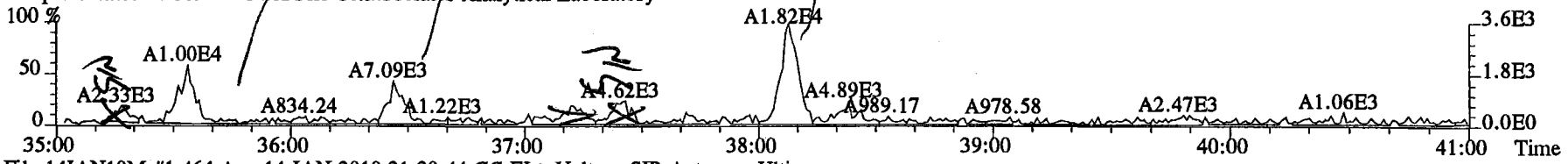
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



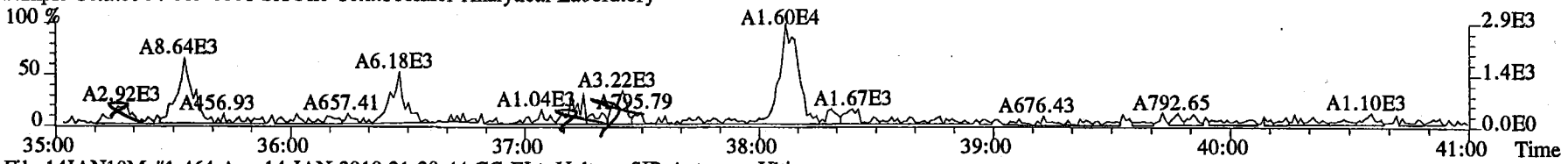
File:14JAN10M #1-425 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



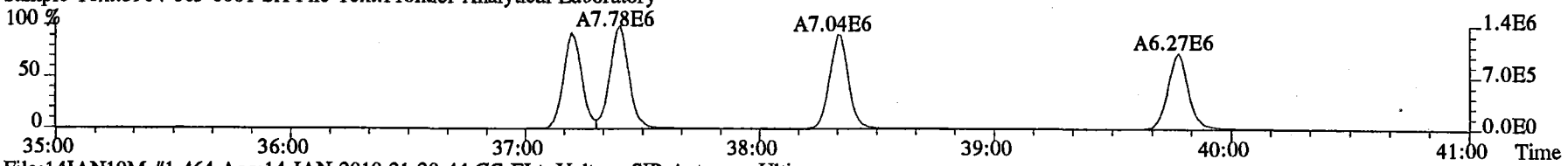
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



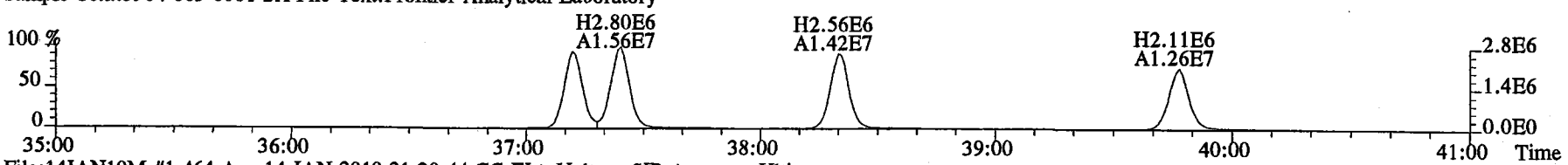
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



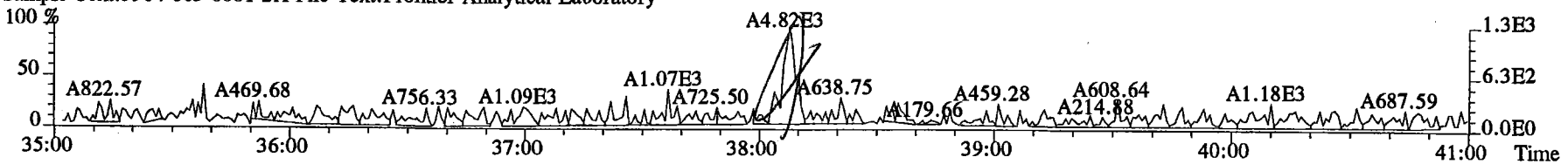
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



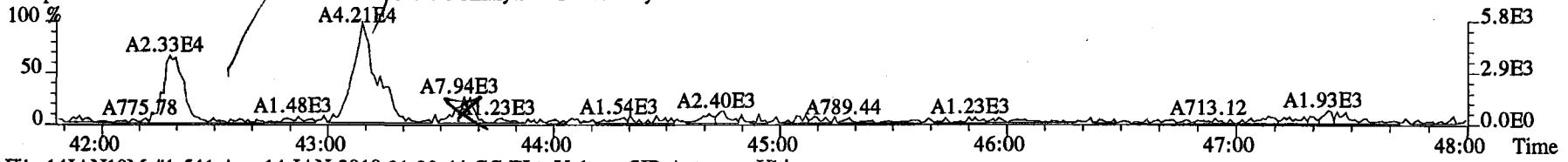
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



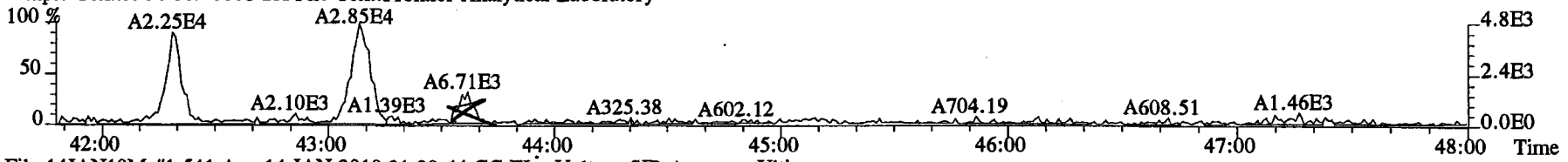
File:14JAN10M #1-464 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



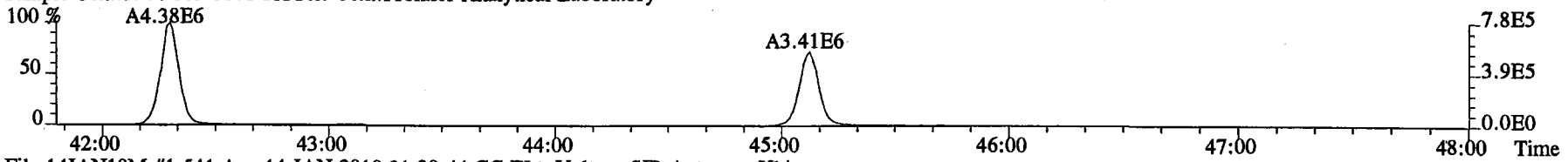
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



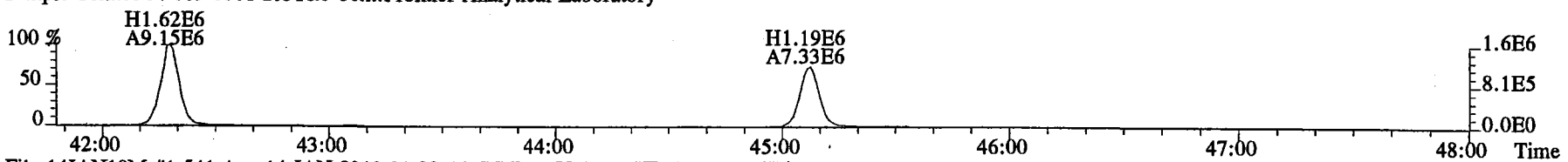
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



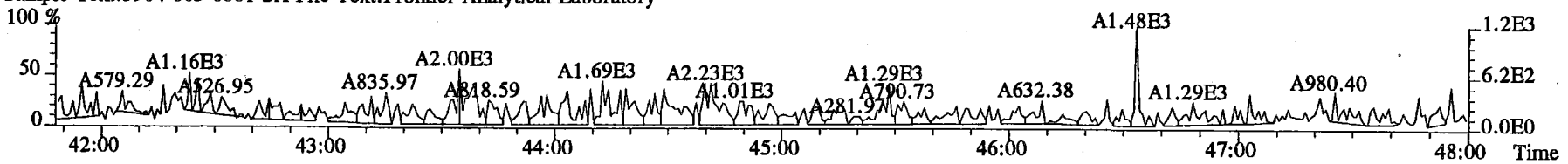
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



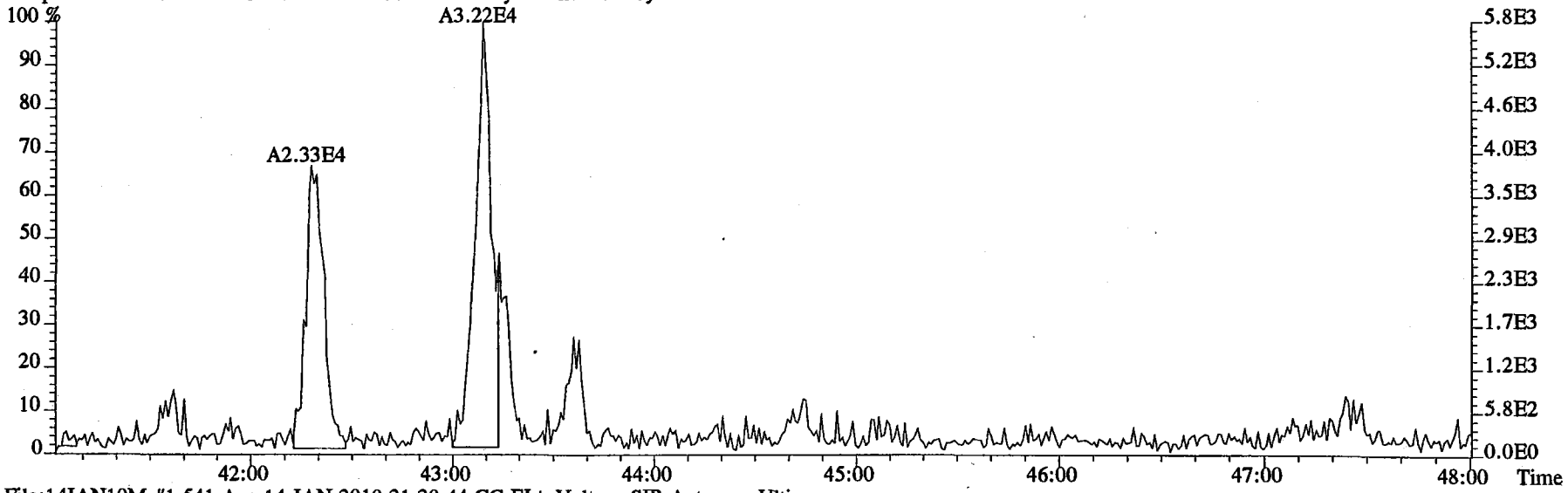
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



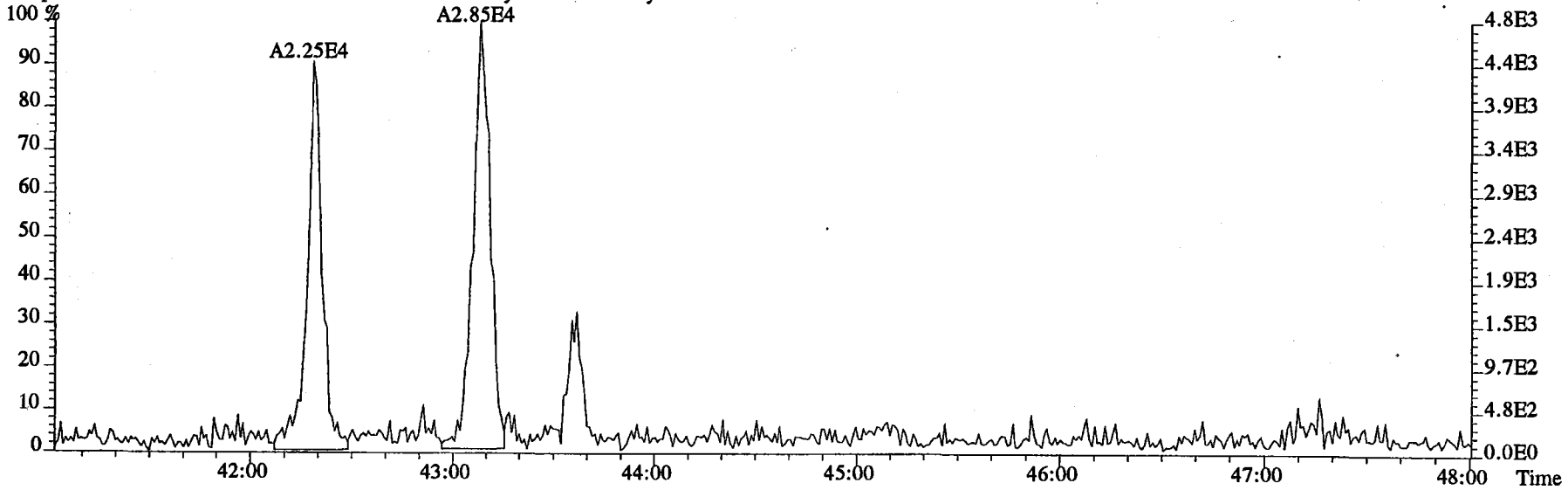
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



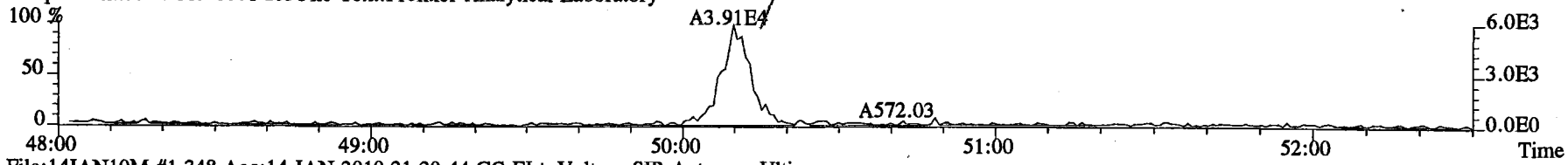
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



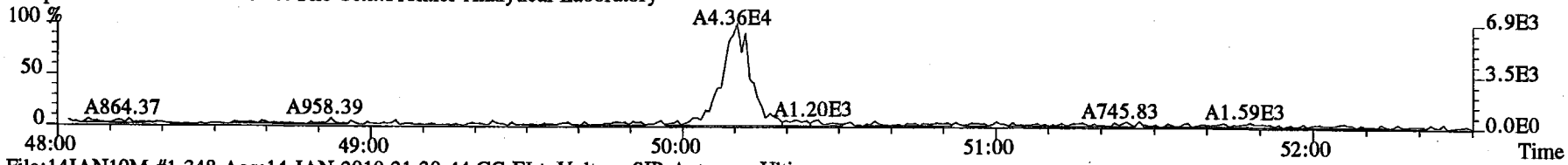
File:14JAN10M #1-541 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



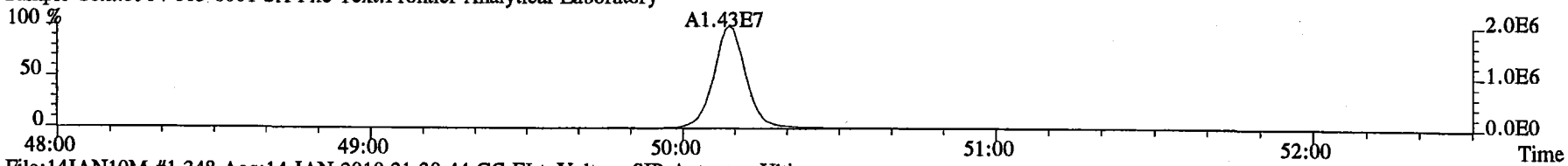
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



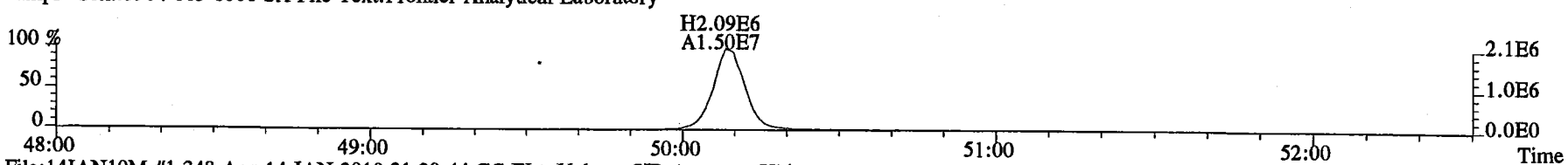
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



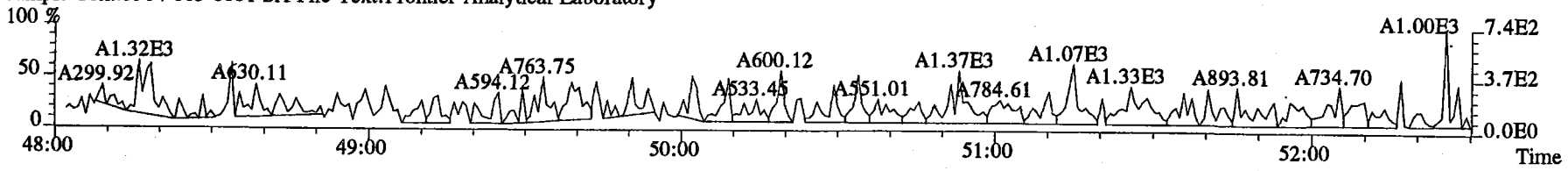
File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:5904-003-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 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:5904-003-0001-SA File Text:Frontier Analytical Laboratory



File:14JAN10M #1-348 Acq:14-JAN-2010 21:30:44 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:5904-003-0001-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: ST111809MO 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)
NATIVE ANALYTES	CS1	CS2	CS3	CS4	CS5	CS6		
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

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-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

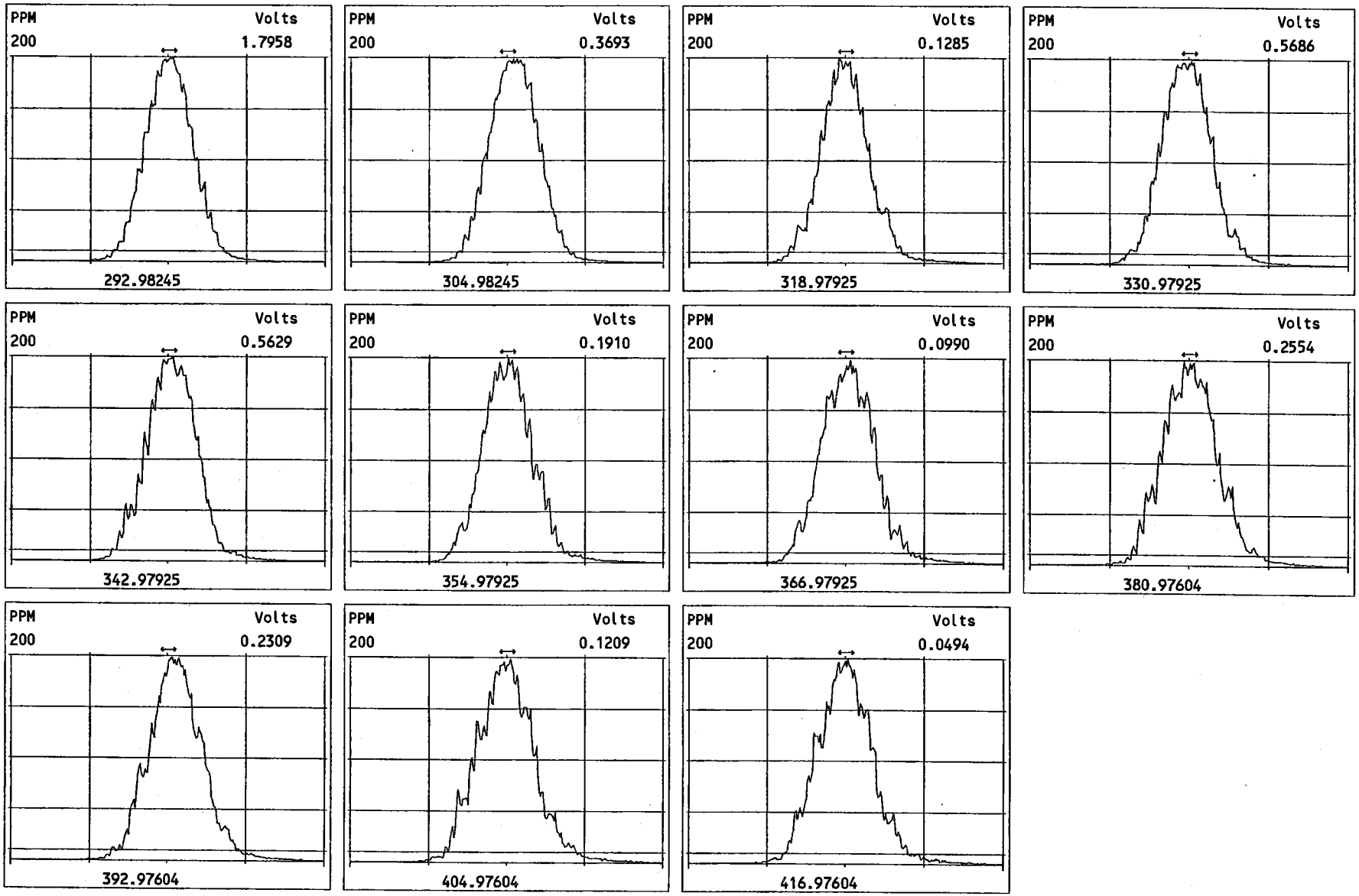
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
18NOV09M	1	ST111809M3	1613 CS3 090918J	18-NOV-09 13:45:10	ST111809M3	ST111809M6	BS
18NOV09M	2	ST111809M0	1613 CS0 090918G	18-NOV-09 14:40:53	ST111809M3	ST111809M6	BS
18NOV09M	3	ST111809M1	1613 CS1 090918H	18-NOV-09 15:36:11	ST111809M3	ST111809M6	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

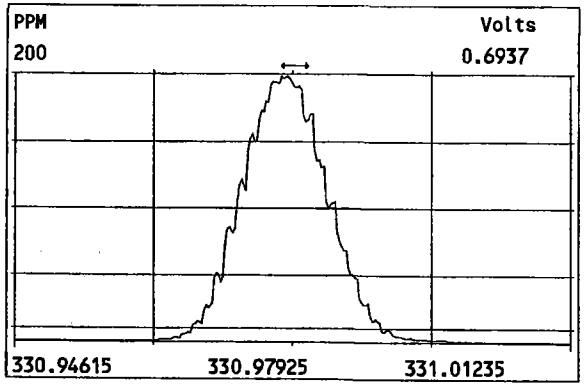
Data Backed Up:_____

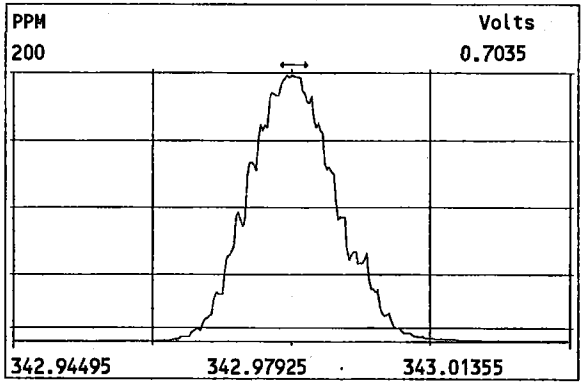
Date:_____

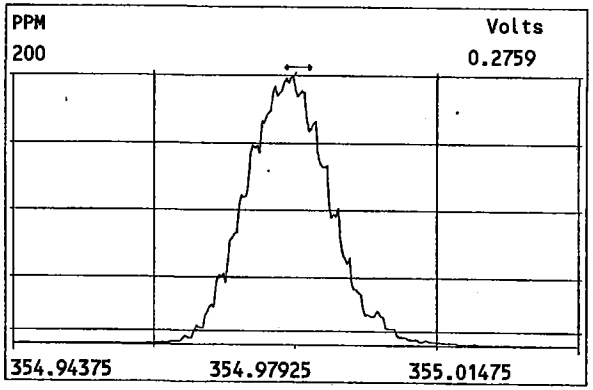
Peak Locate Examination:18-NOV-2009:13:42 File:18NOV09M
Experiment:PCDD Function:1 Reference:PFK

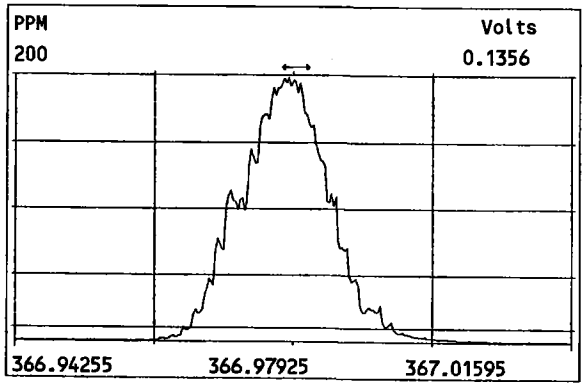


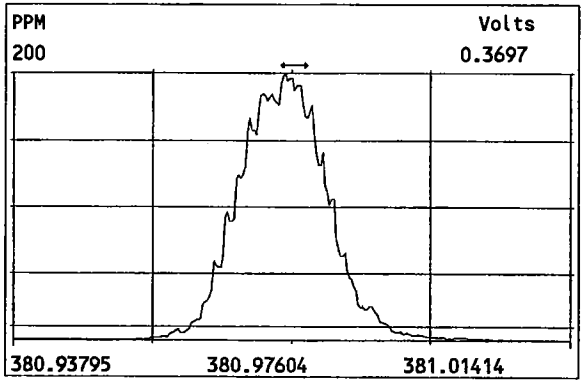
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:2 Reference:PFK

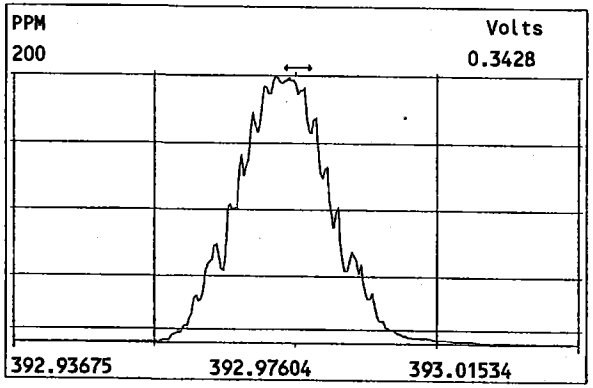


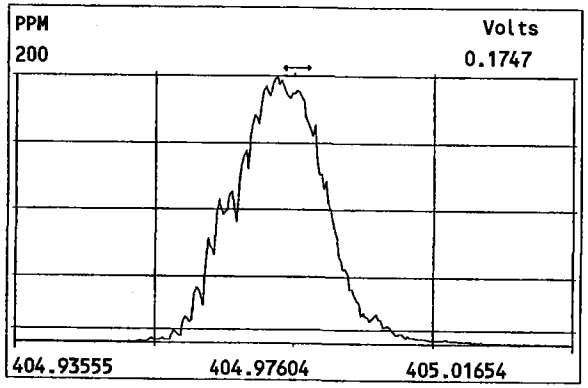


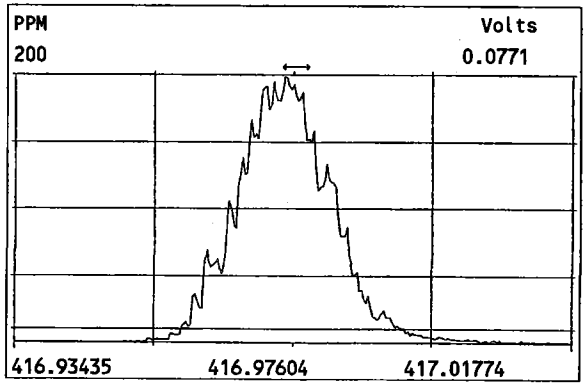




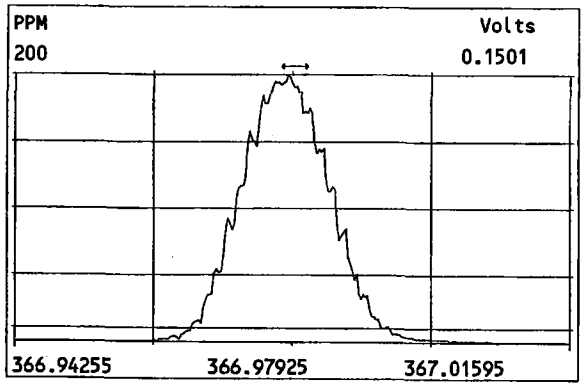


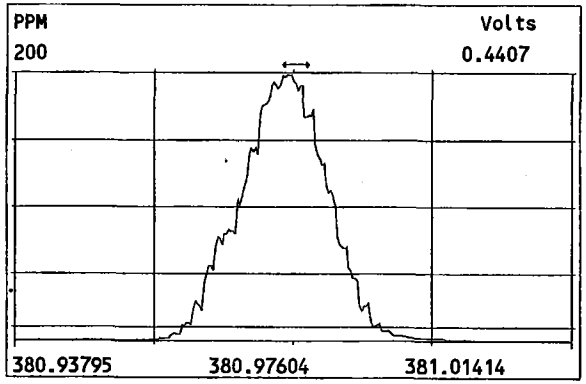


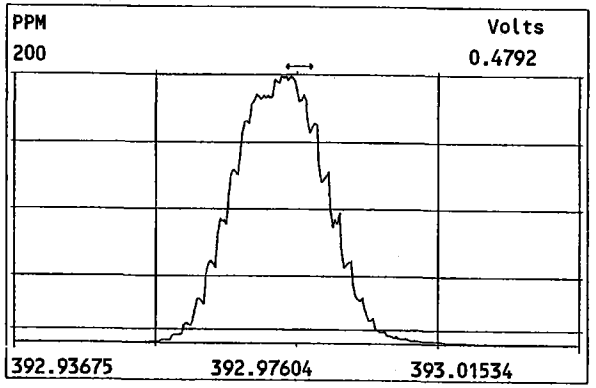


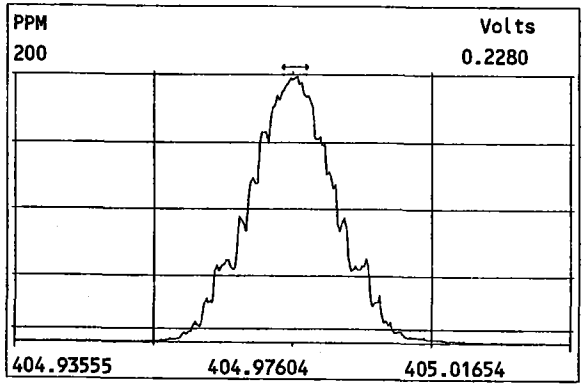


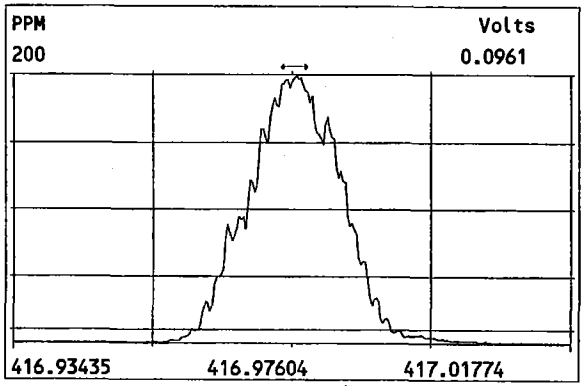
Peak Locate Examination:18-NOV-2009:13:43 File:18NOV09M
Experiment:PCDD Function:3 Reference:PFK

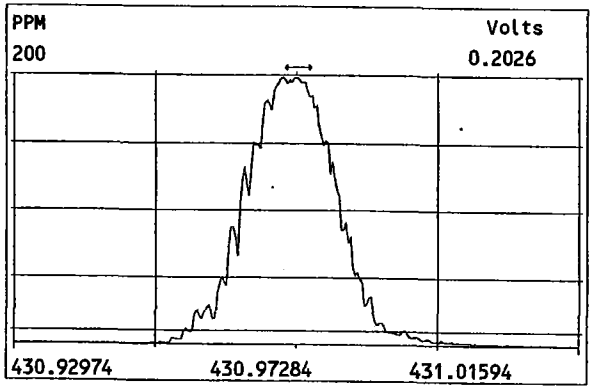


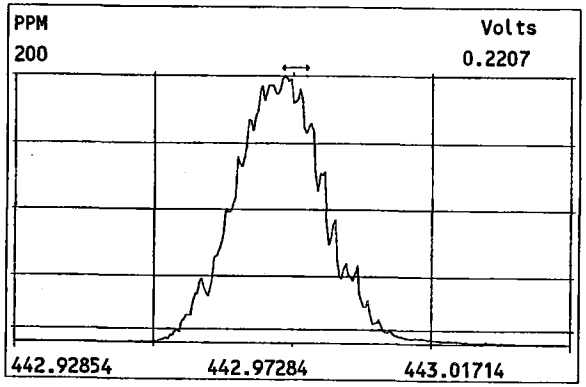


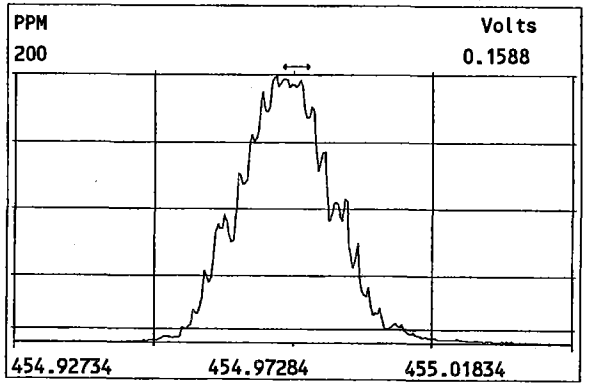




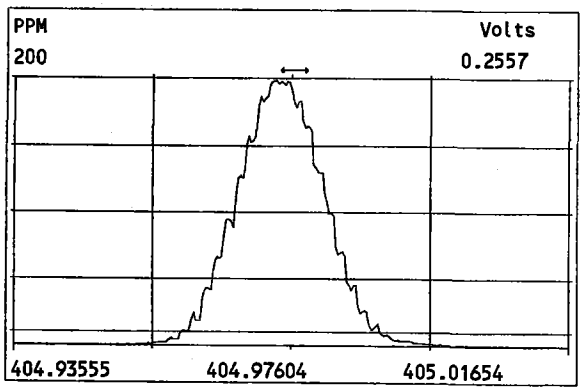


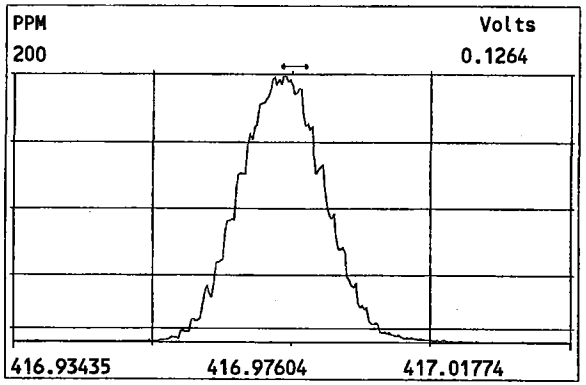


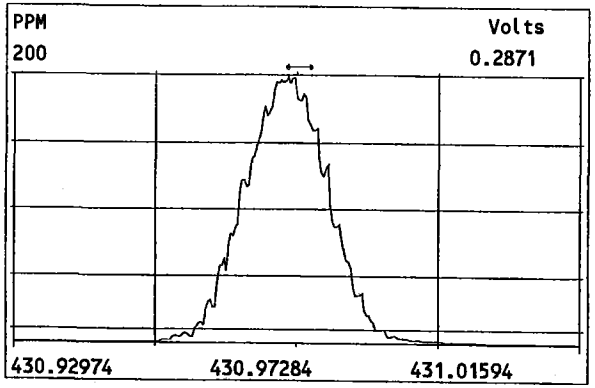


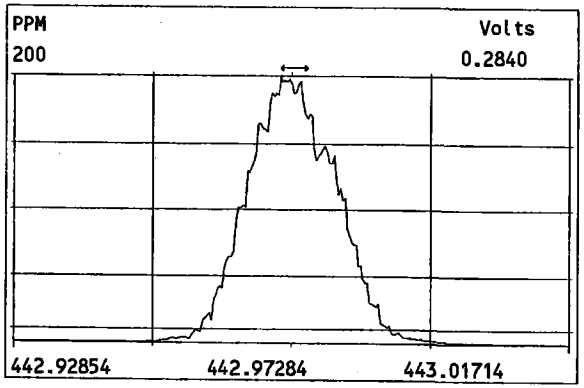


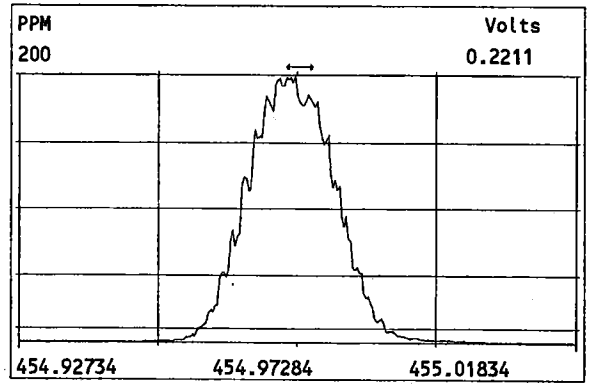
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:4 Reference:PFK

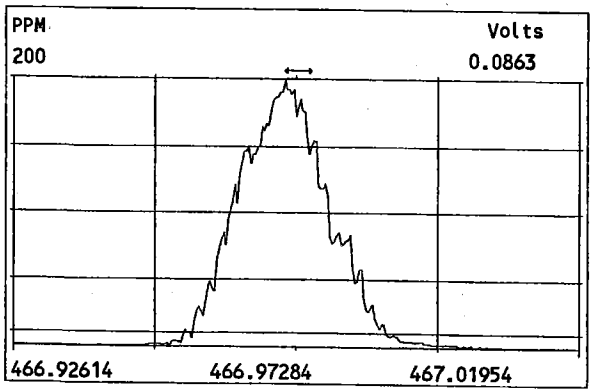


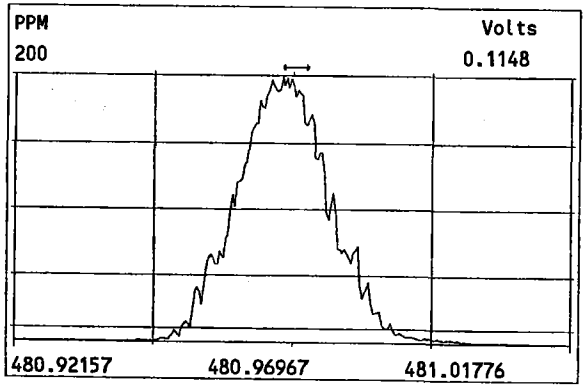




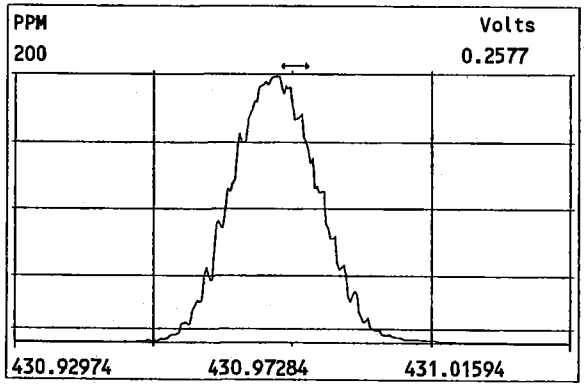


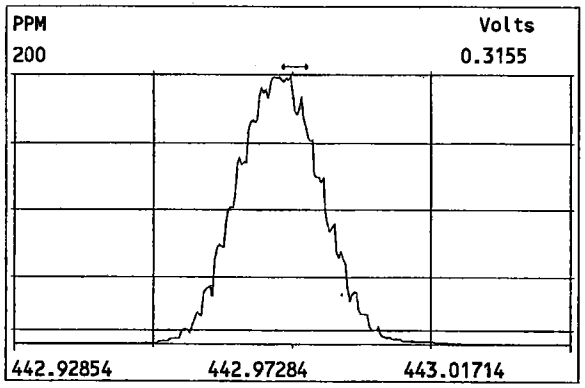


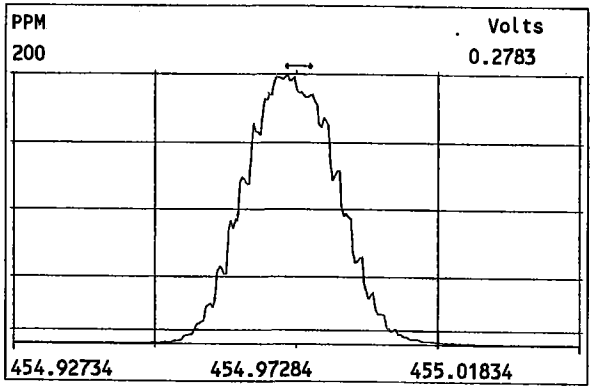


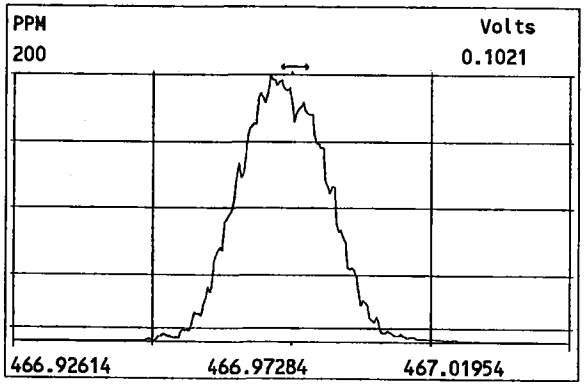


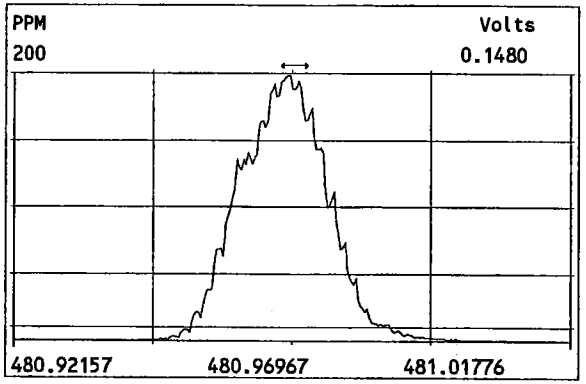
Peak Locate Examination:18-NOV-2009:13:44 File:18NOV09M
Experiment:PCDD Function:5 Reference:PFK

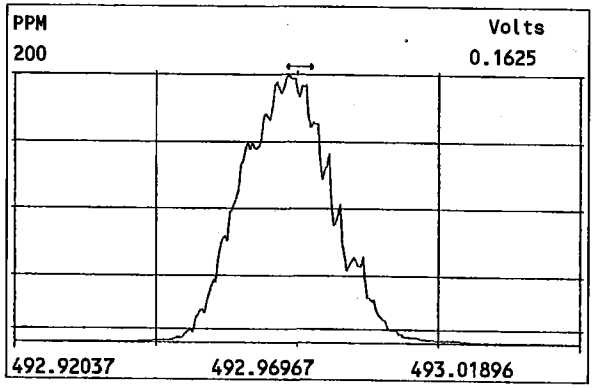


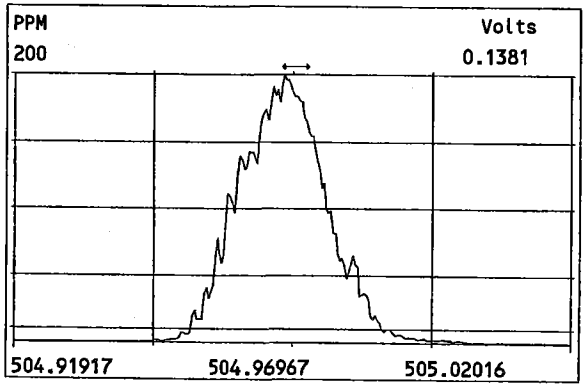


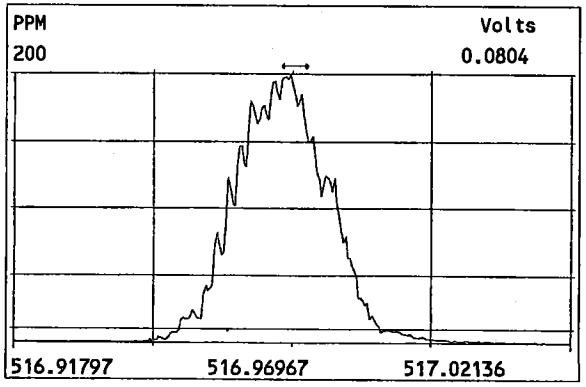












File:18NOV09M #1-372 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
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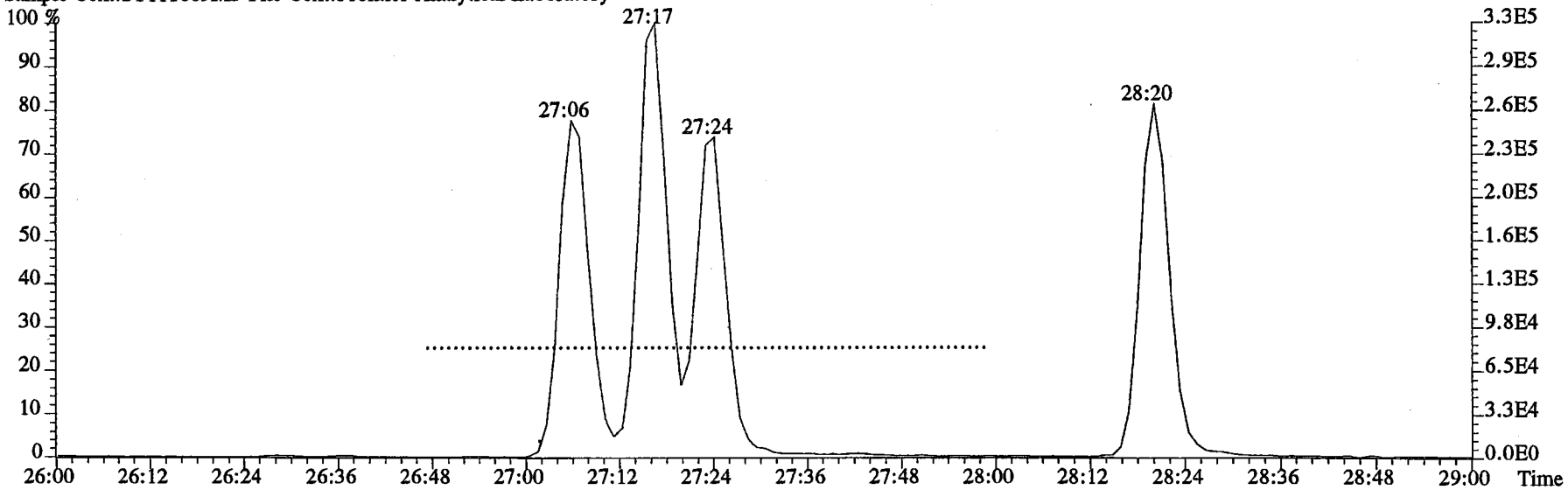
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



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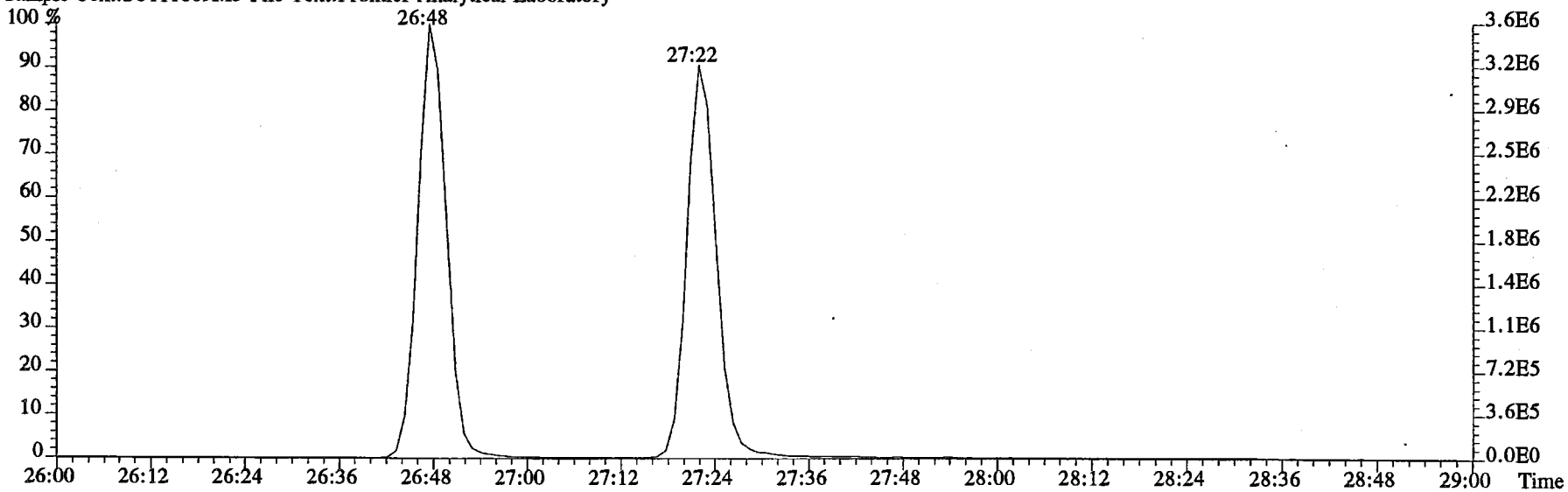
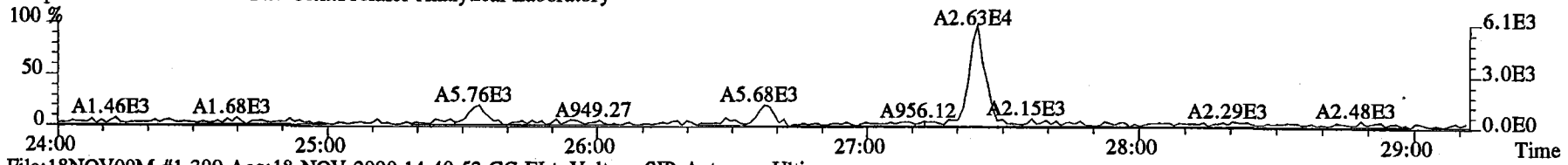
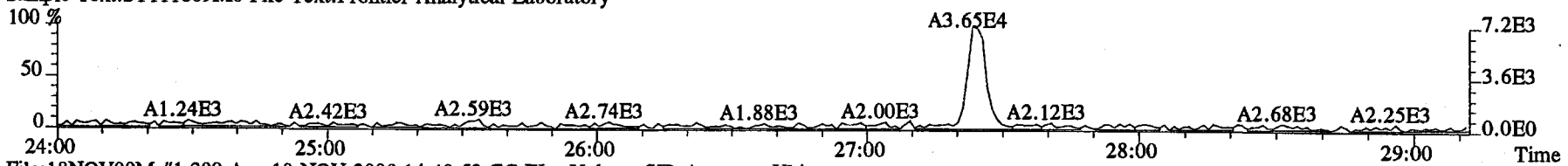
333.9339 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



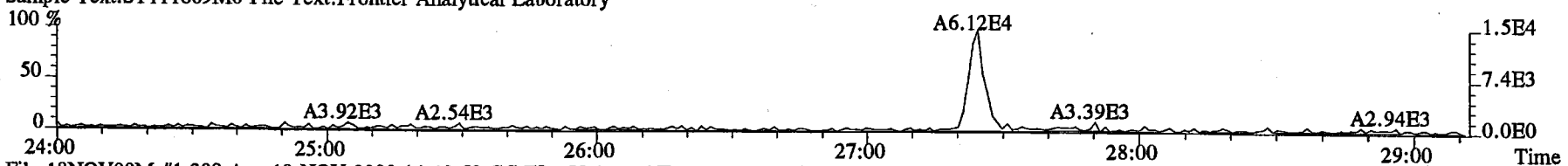
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



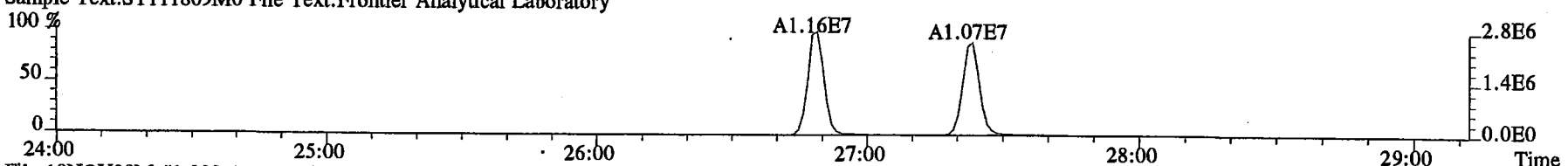
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



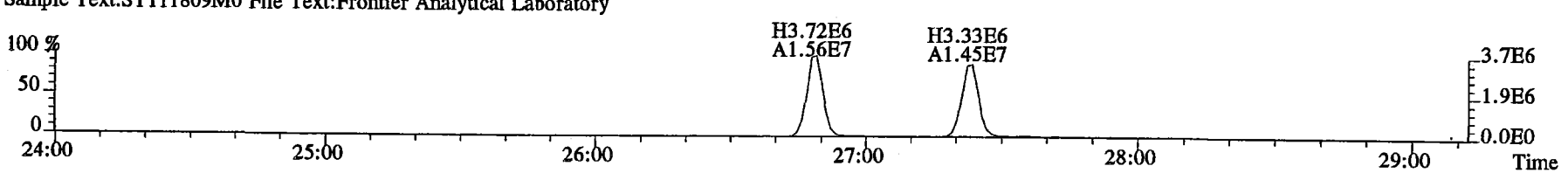
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



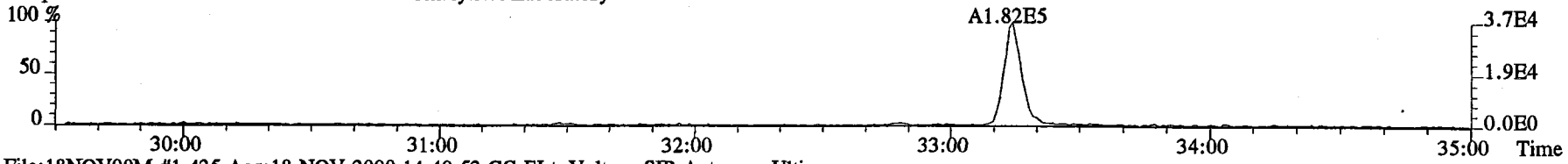
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



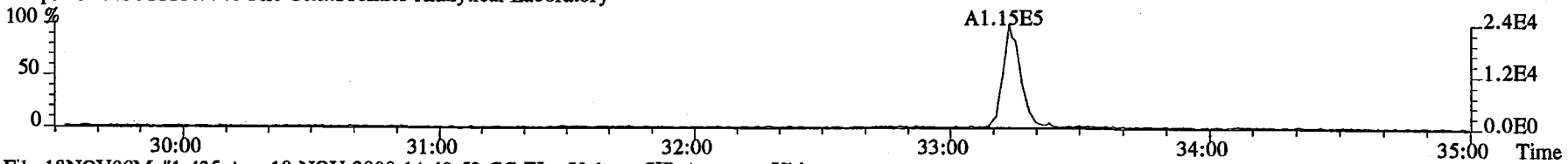
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



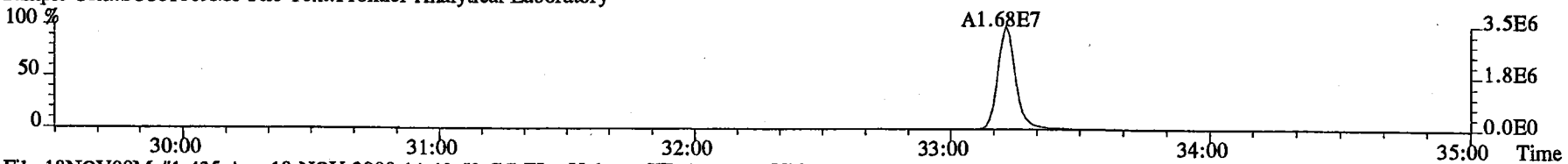
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



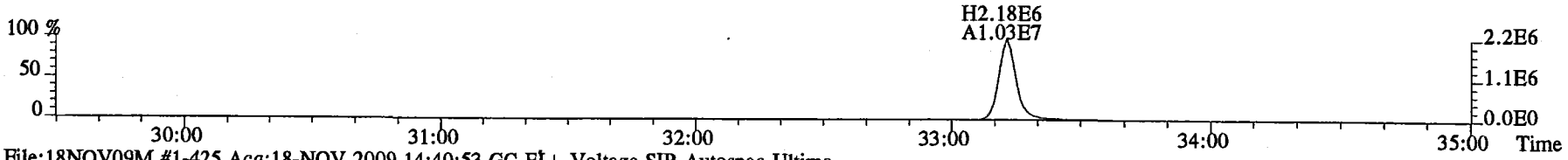
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



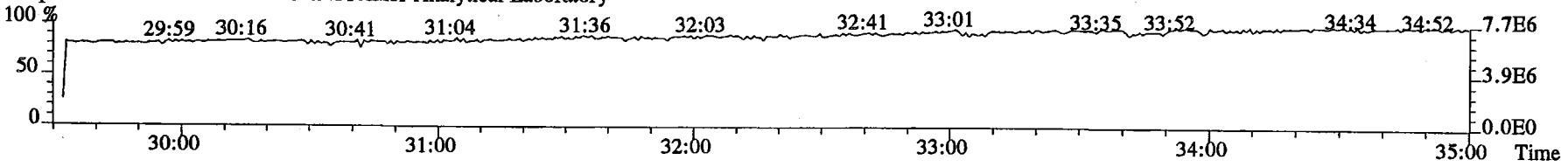
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



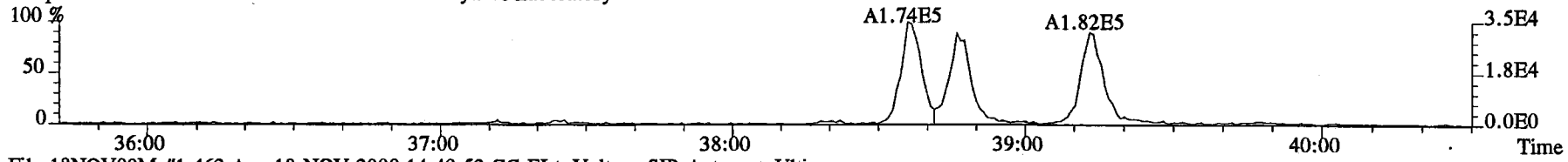
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



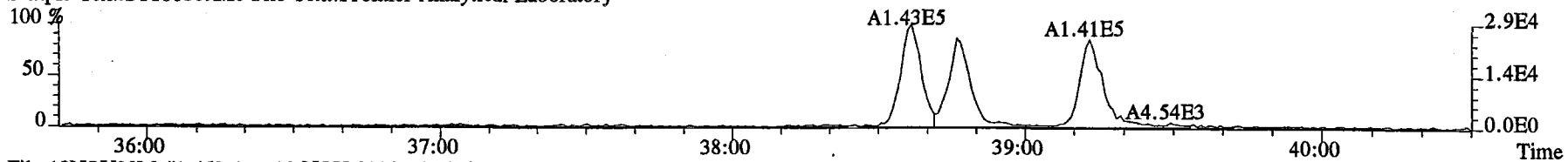
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



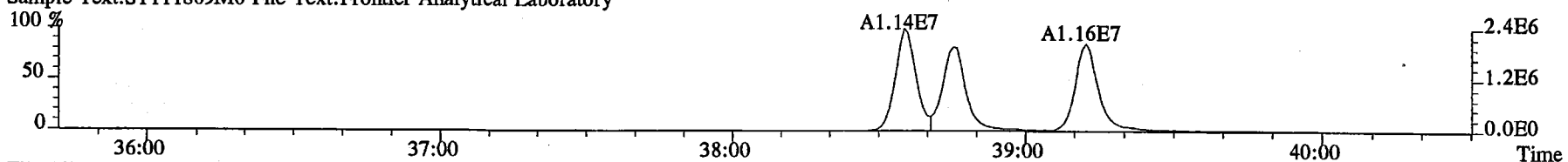
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



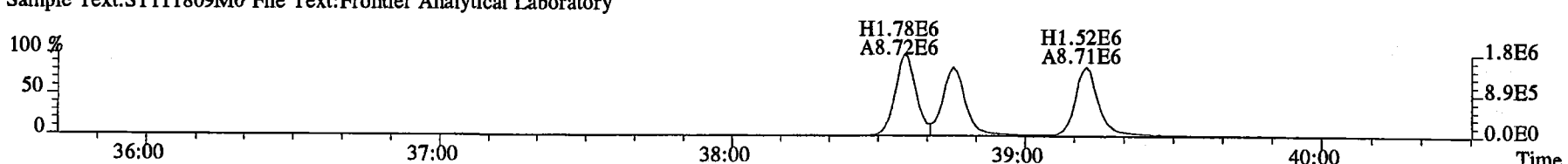
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



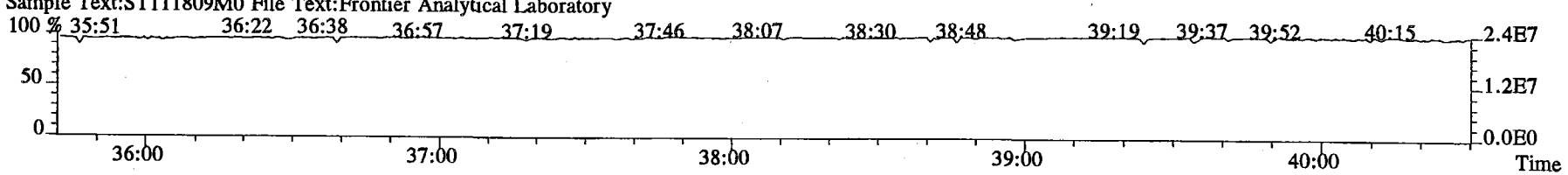
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



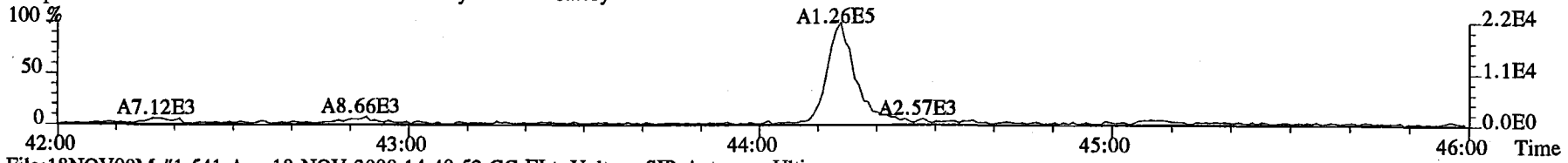
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



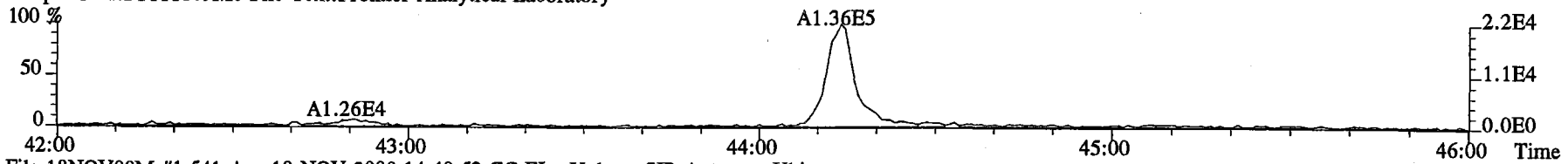
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



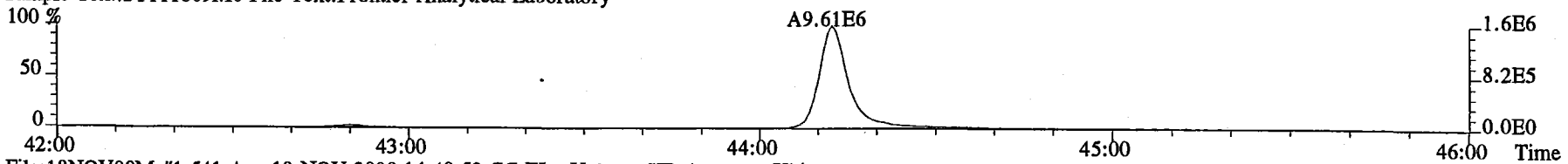
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



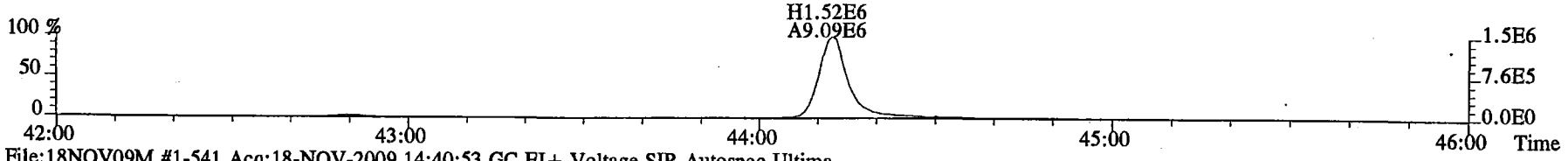
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



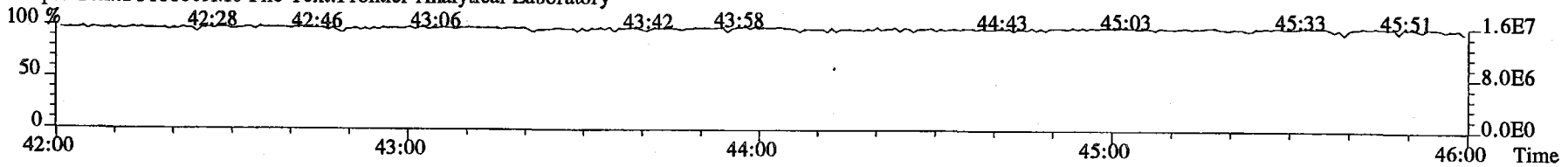
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



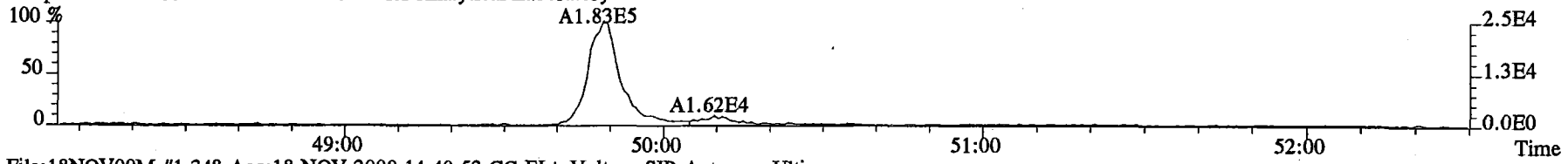
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



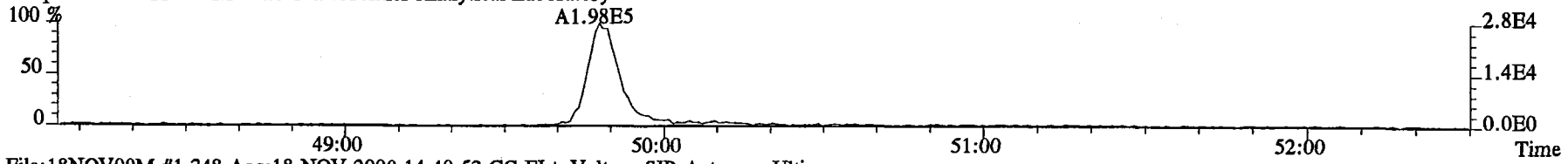
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



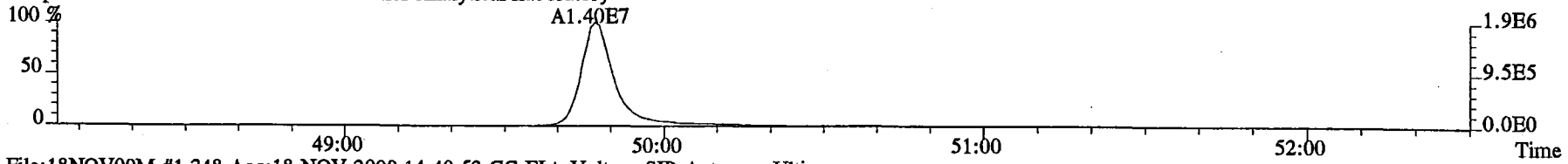
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



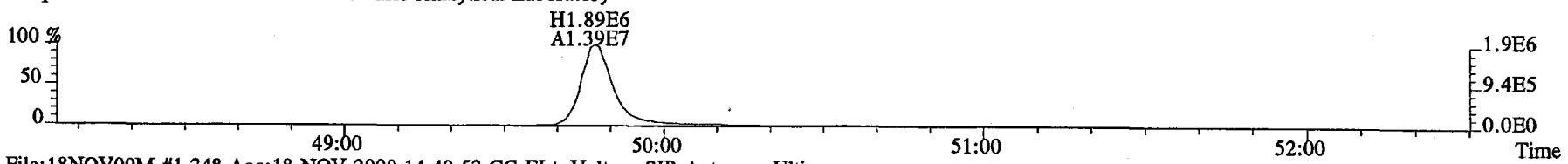
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



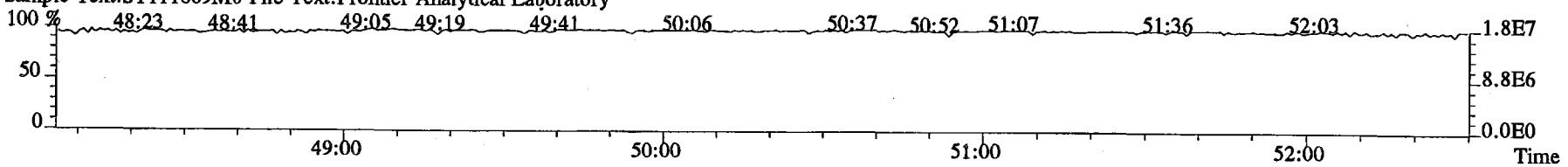
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



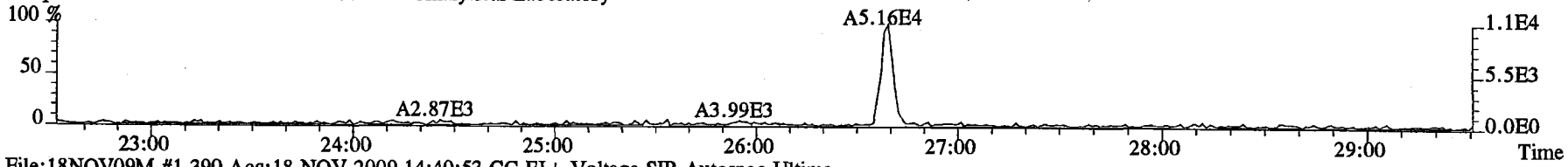
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



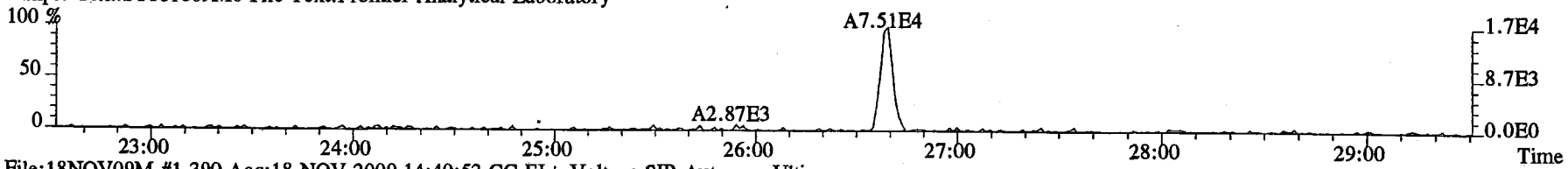
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



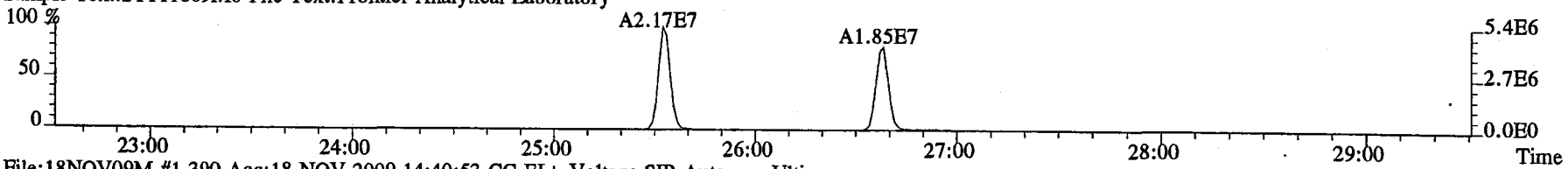
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



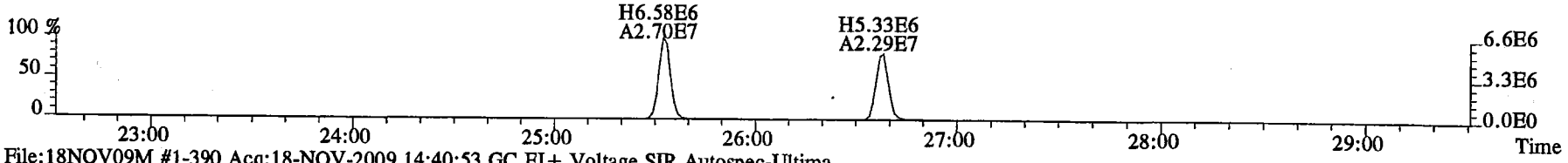
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,0.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



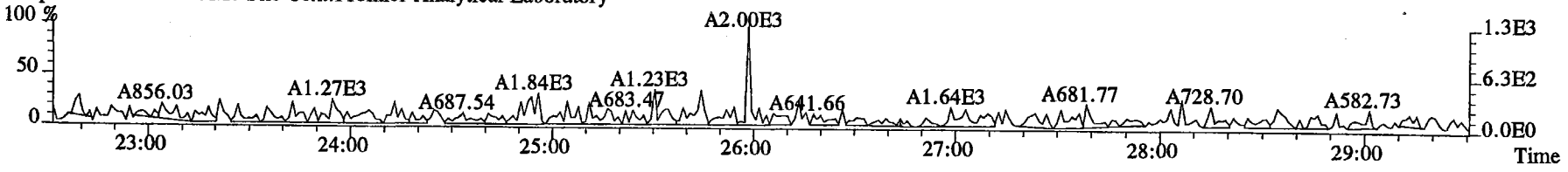
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



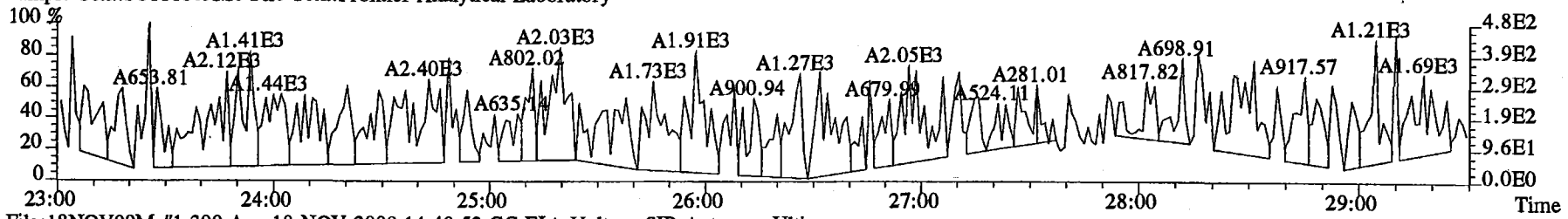
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



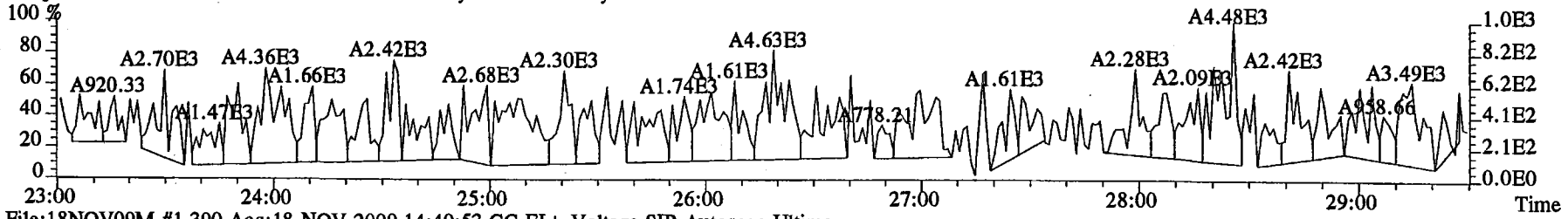
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



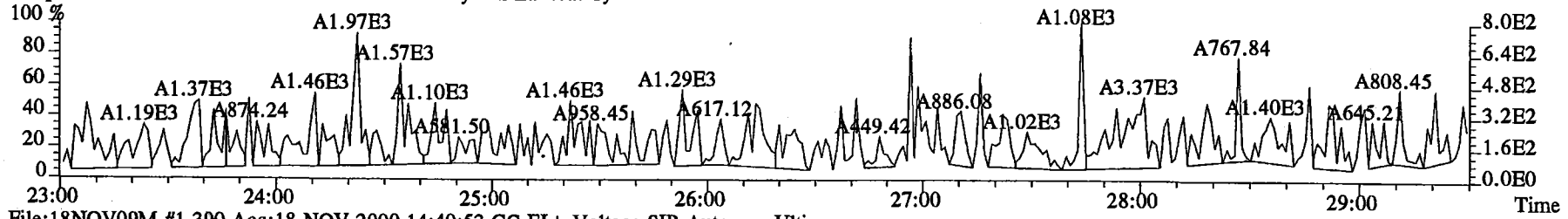
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



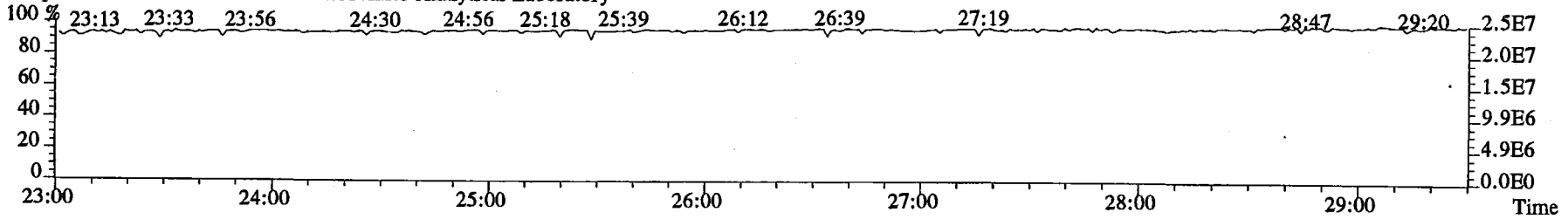
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



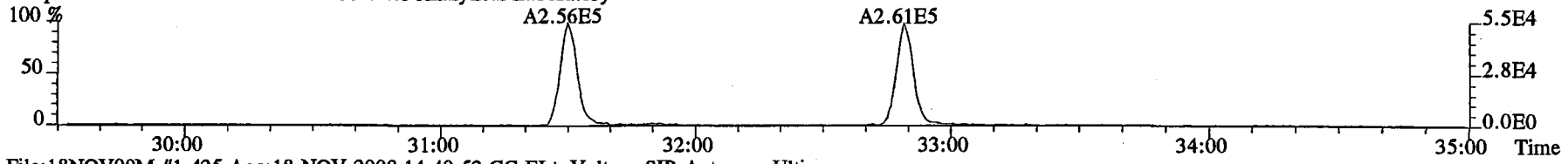
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



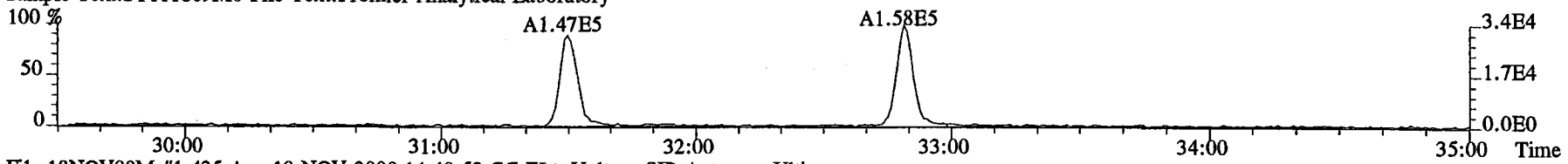
File:18NOV09M #1-390 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



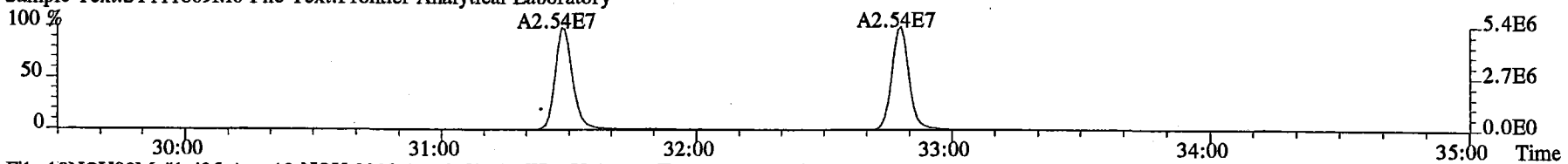
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



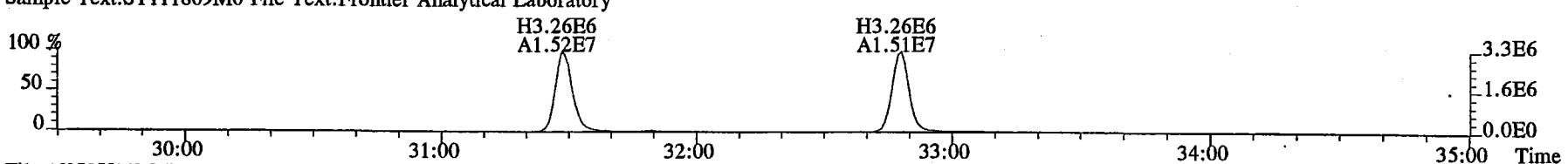
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



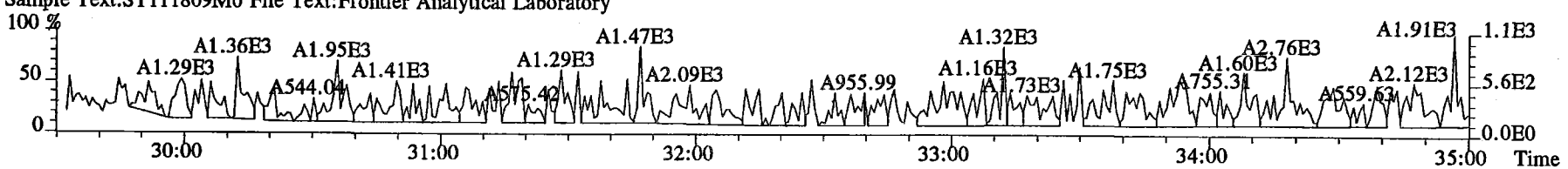
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



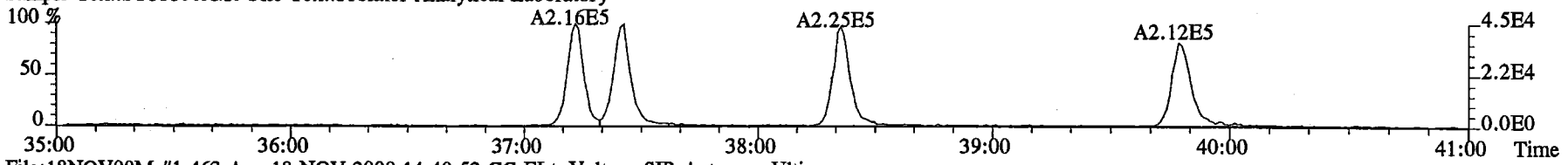
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



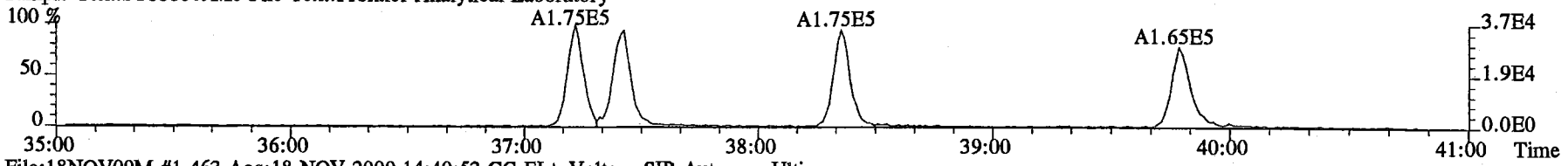
File:18NOV09M #1-425 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



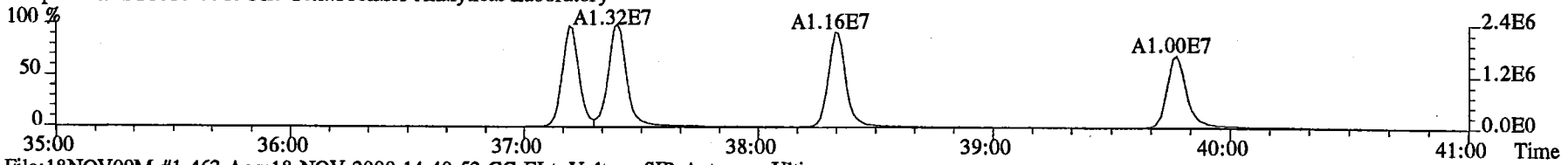
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



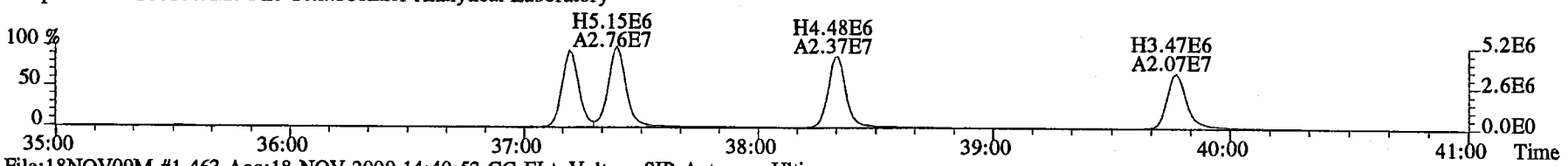
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



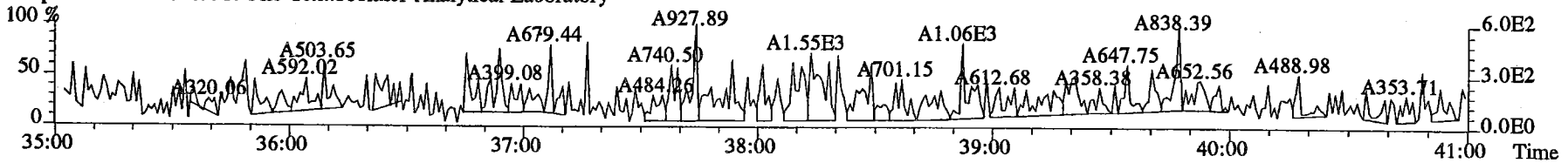
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



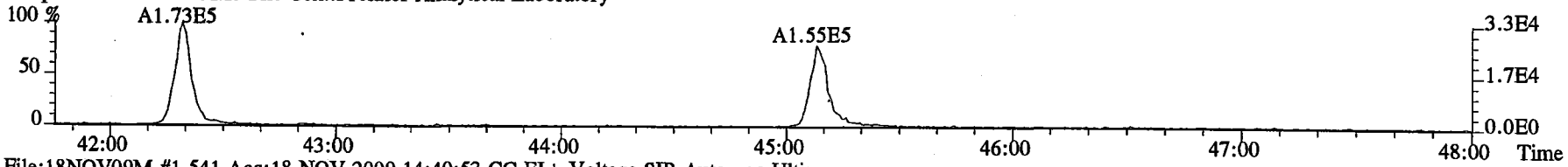
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



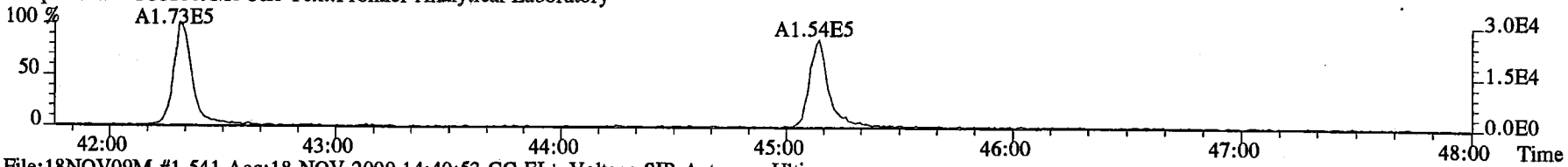
File:18NOV09M #1-463 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



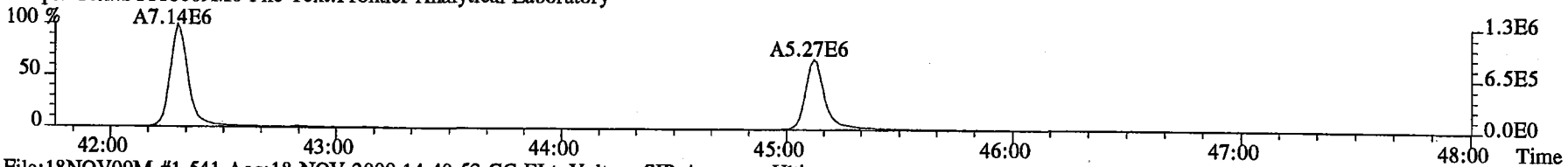
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



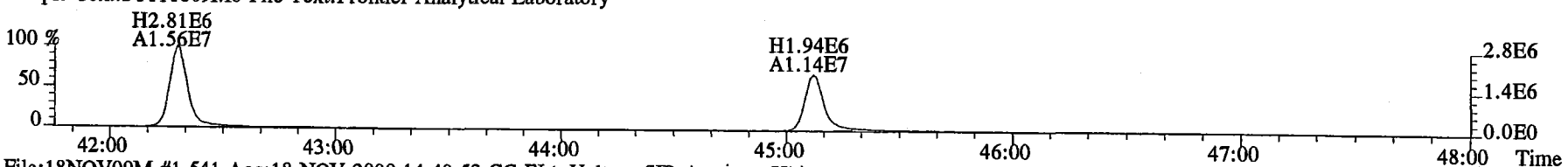
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



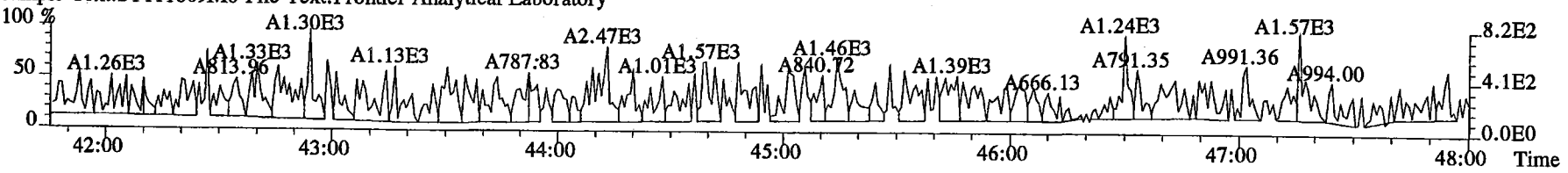
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



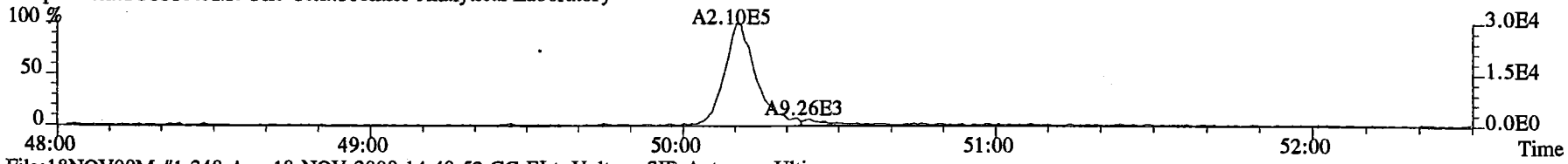
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



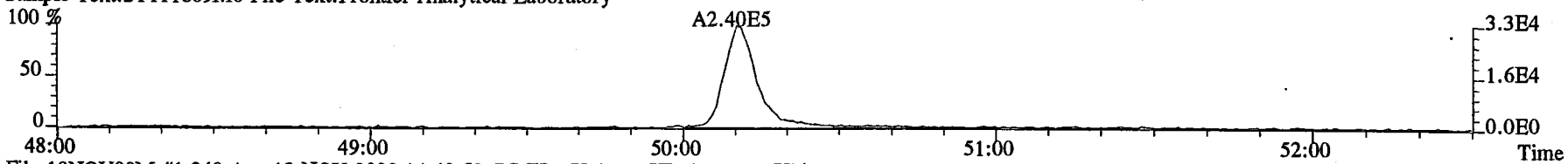
File:18NOV09M #1-541 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



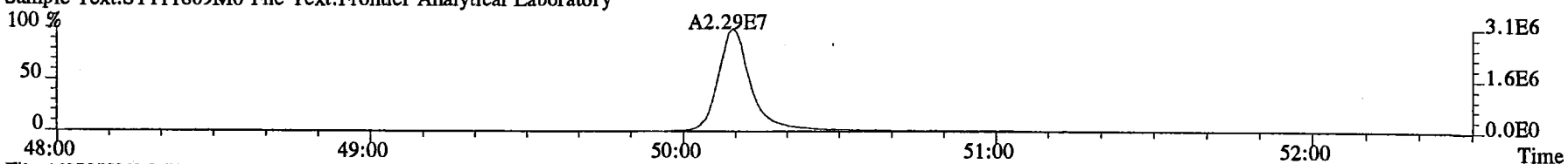
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



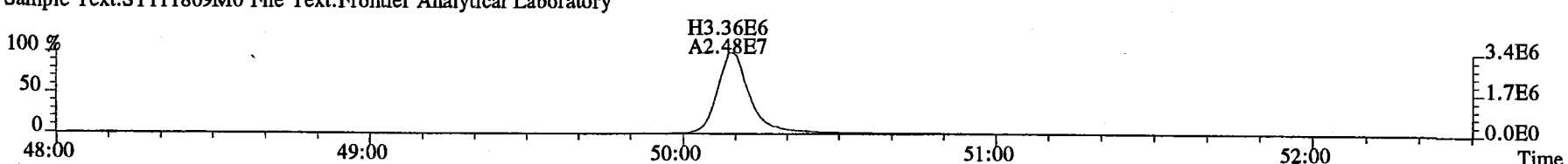
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



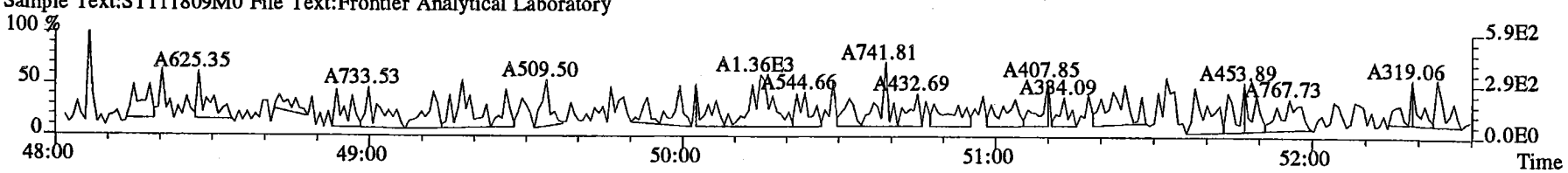
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



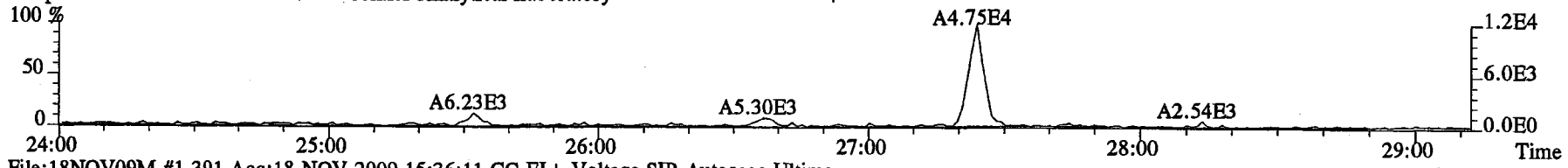
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



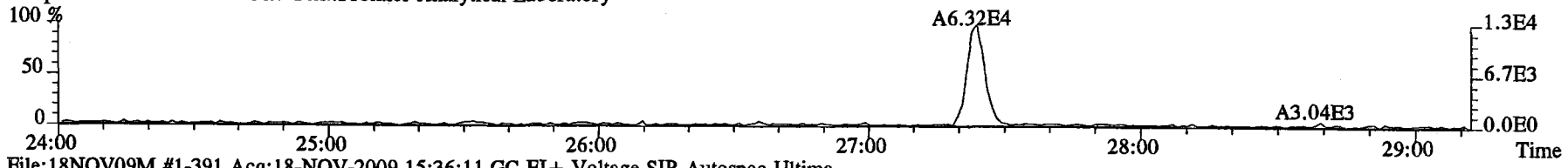
File:18NOV09M #1-348 Acq:18-NOV-2009 14:40:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M0 File Text:Frontier Analytical Laboratory



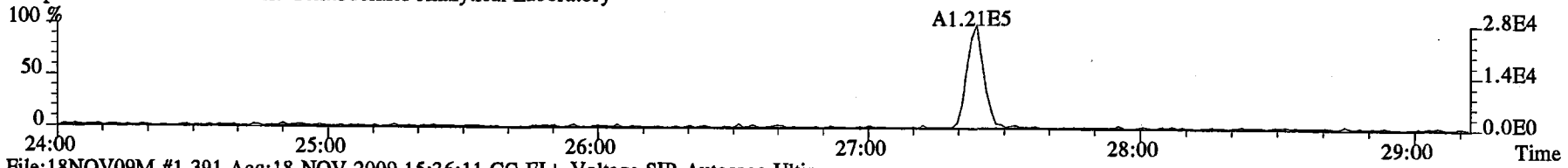
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



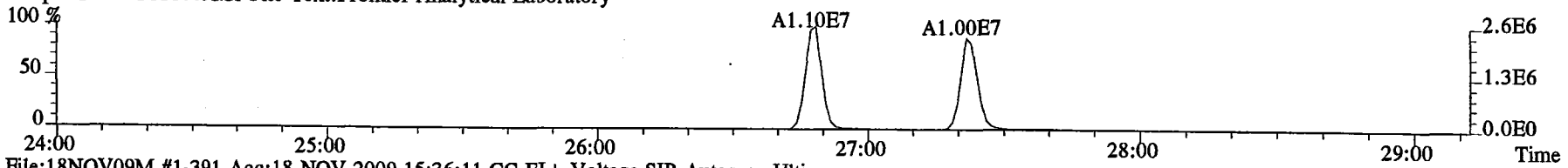
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



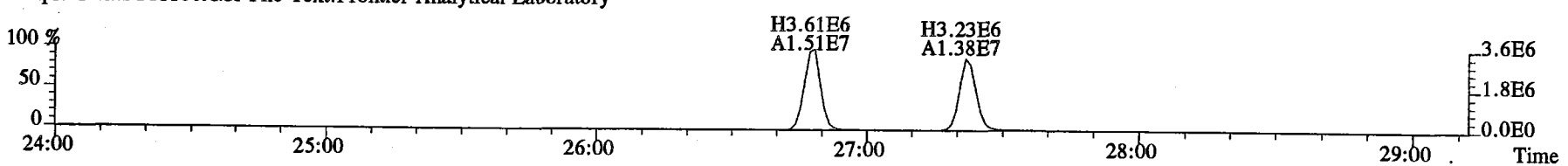
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



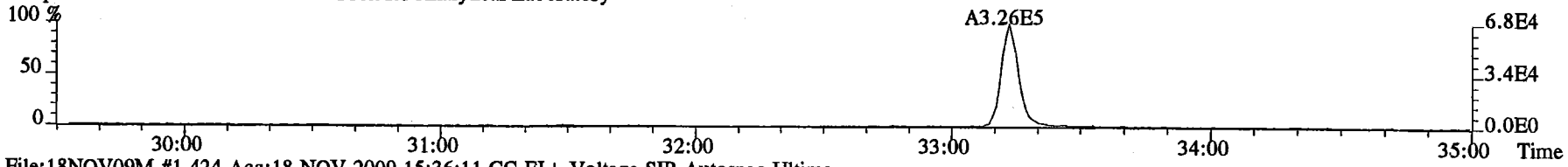
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



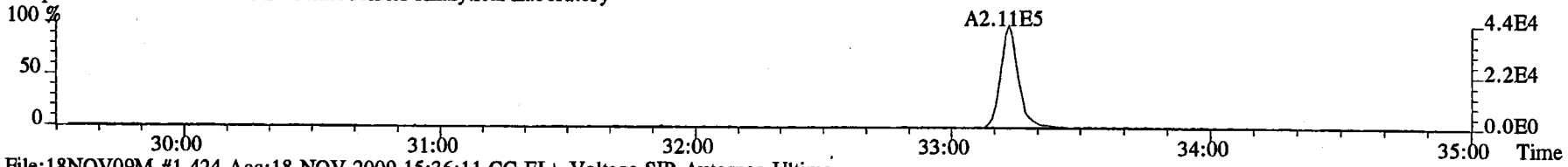
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



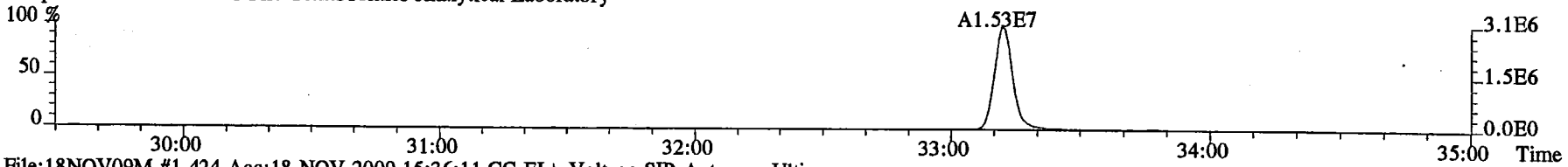
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



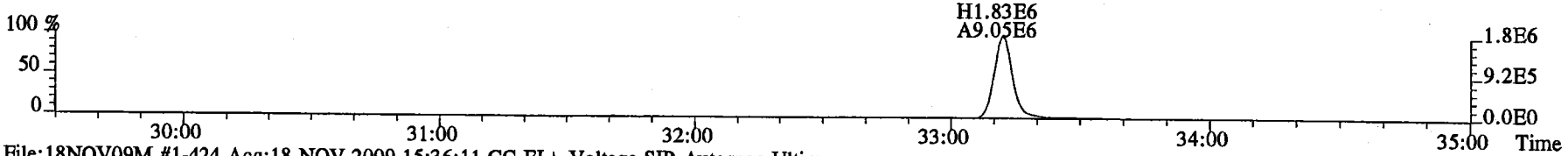
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



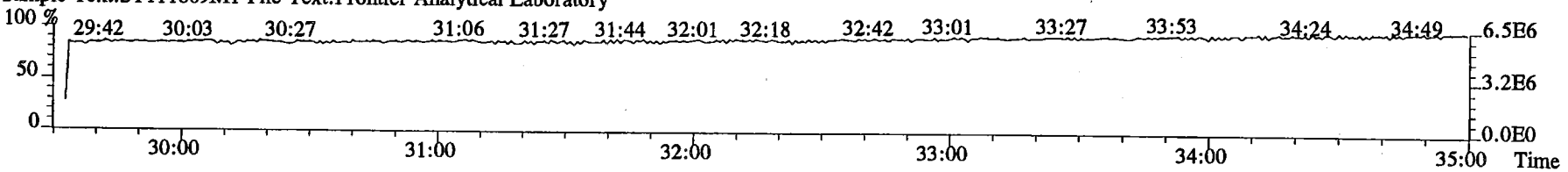
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



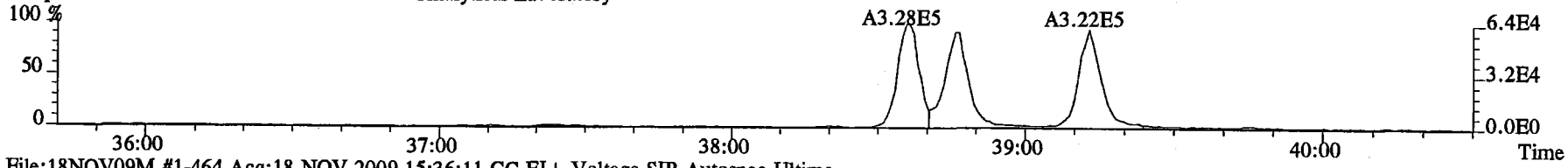
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



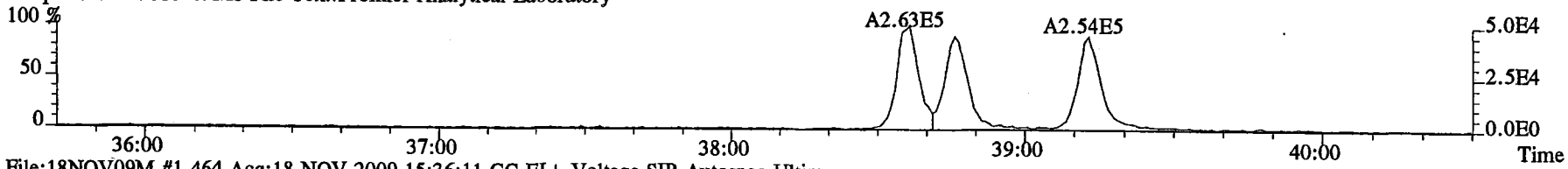
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



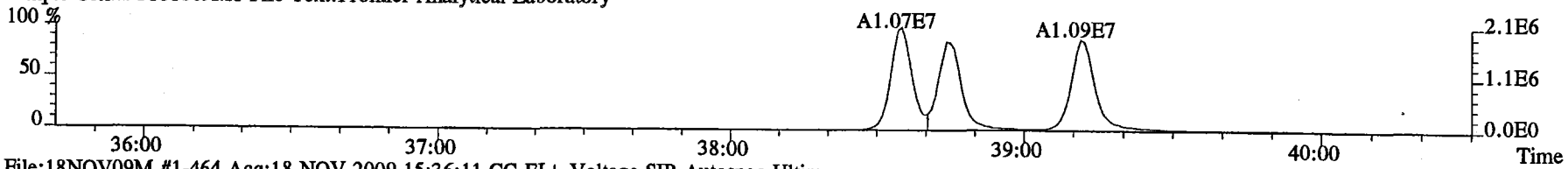
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



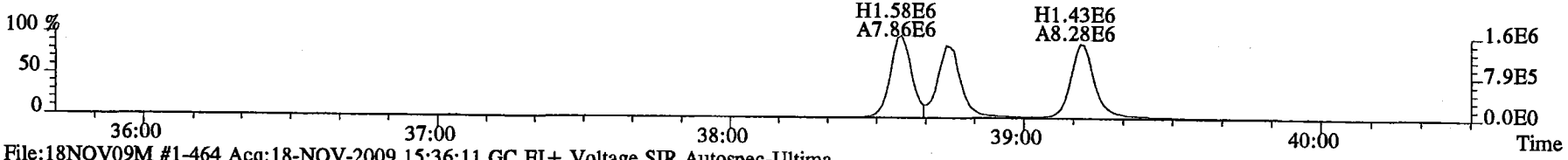
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



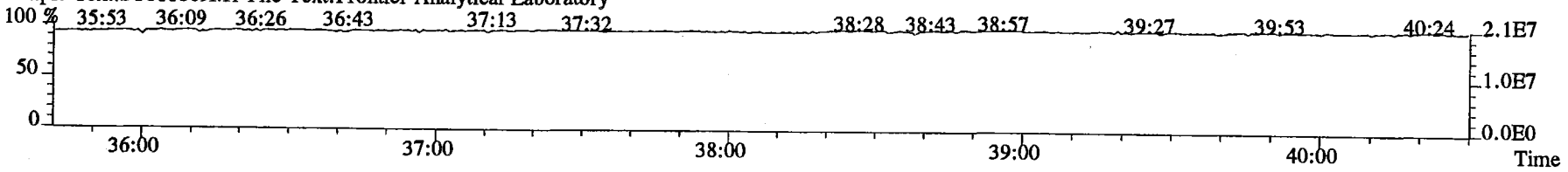
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



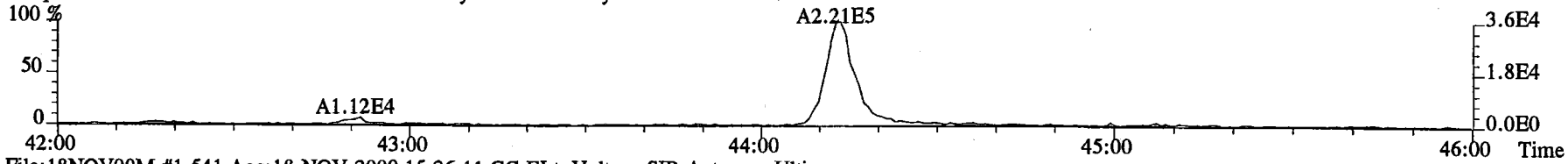
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



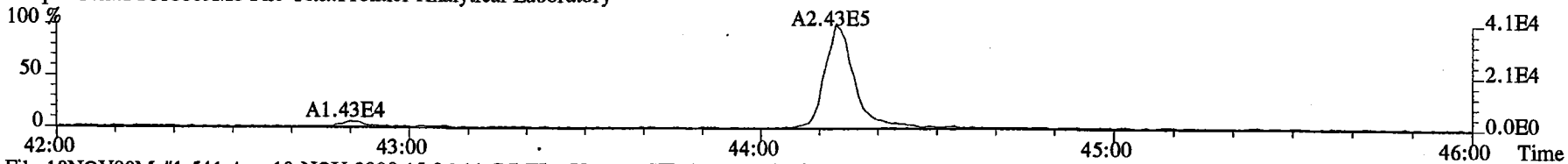
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



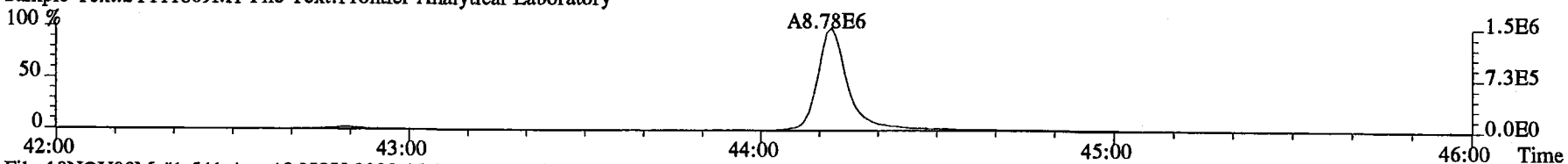
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



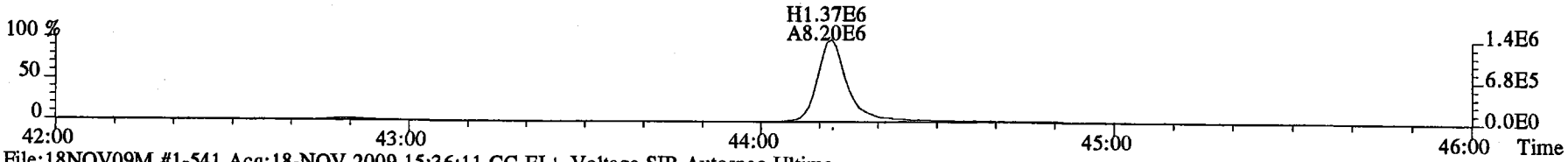
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



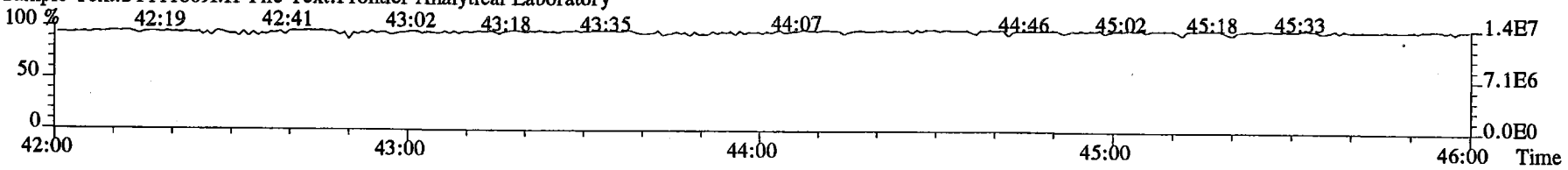
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



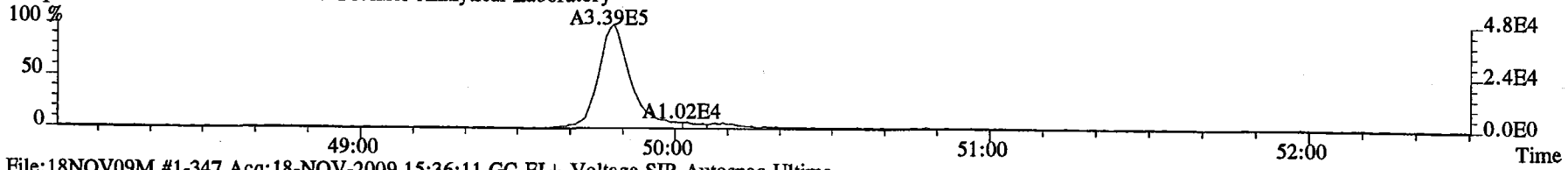
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



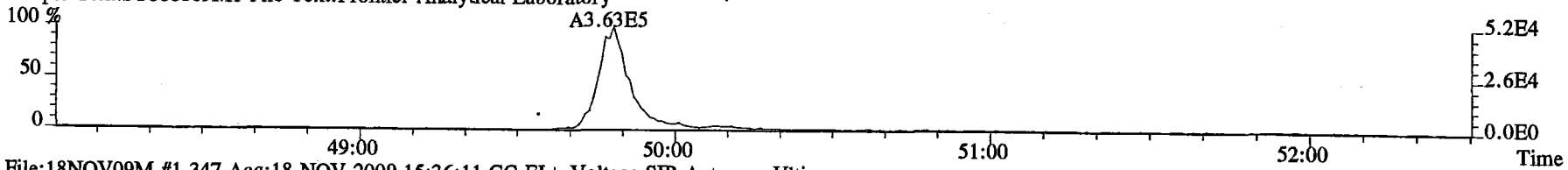
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



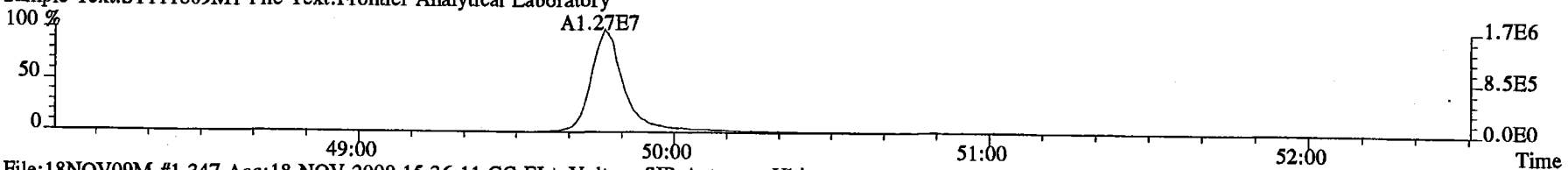
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



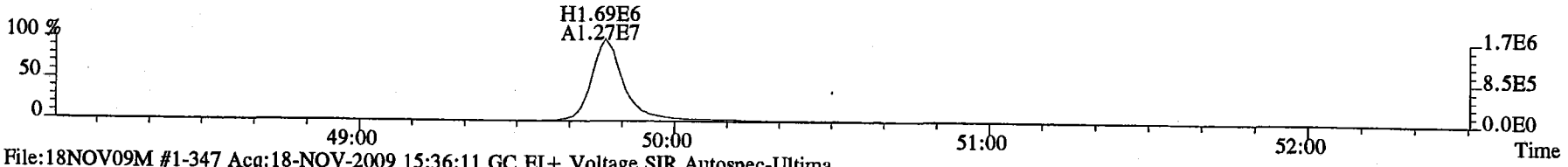
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



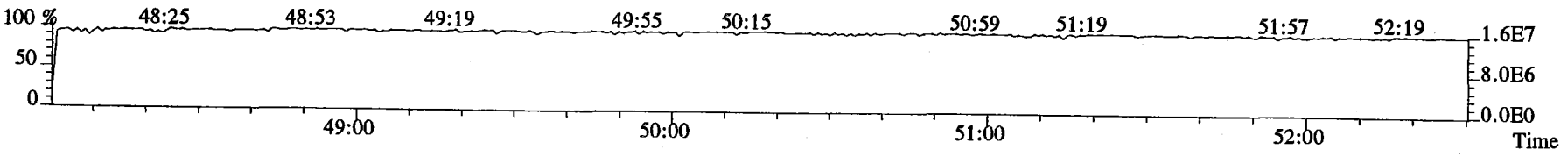
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



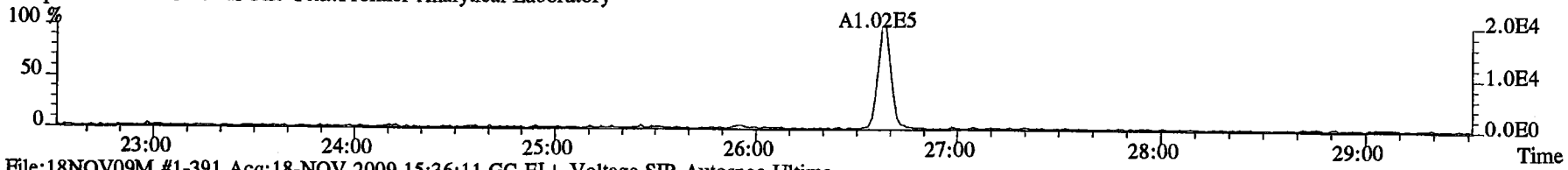
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



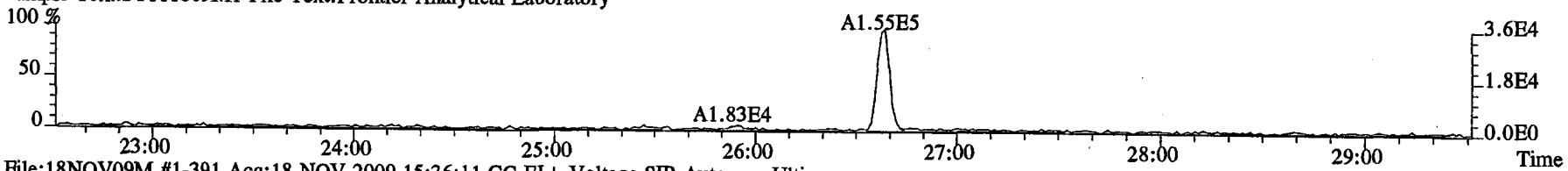
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



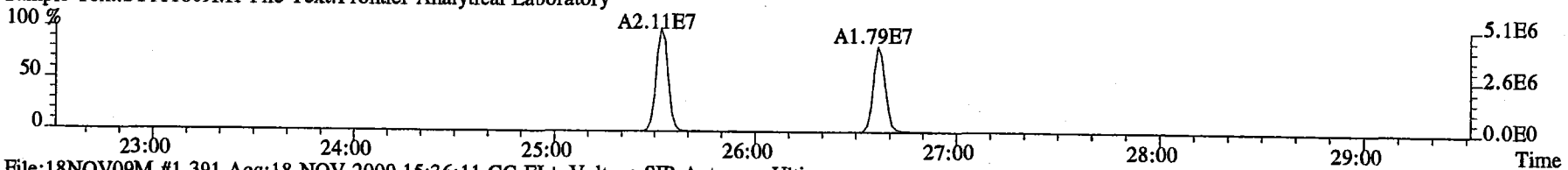
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



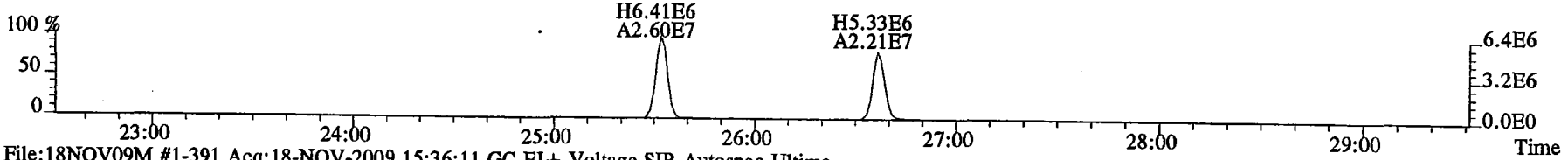
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



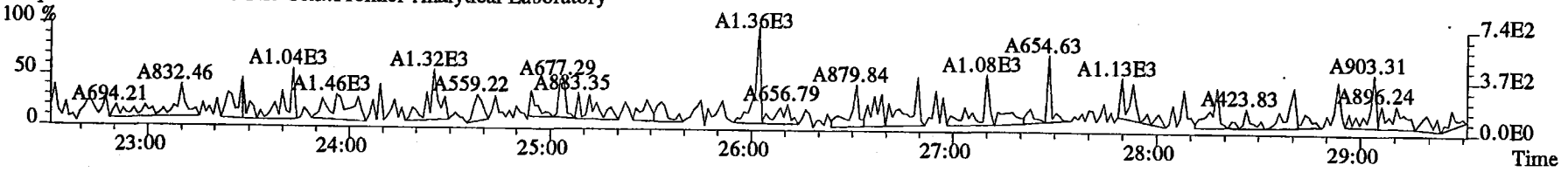
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



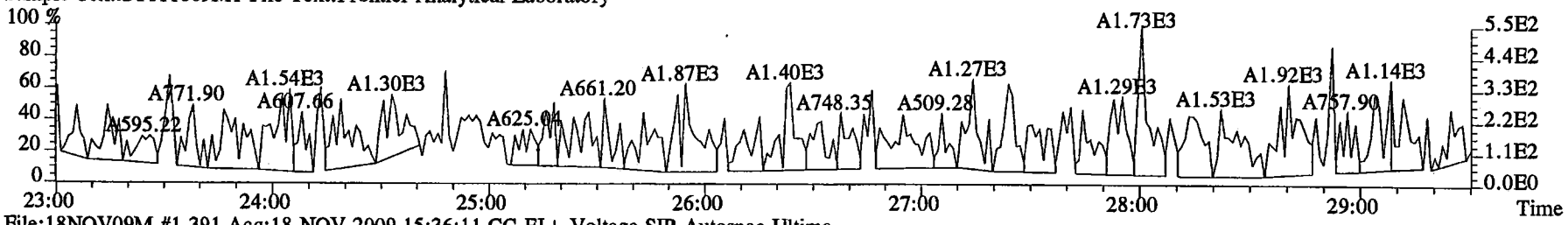
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



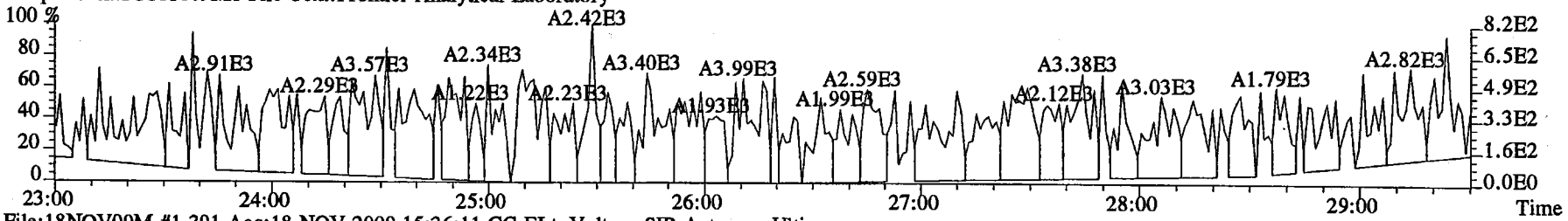
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



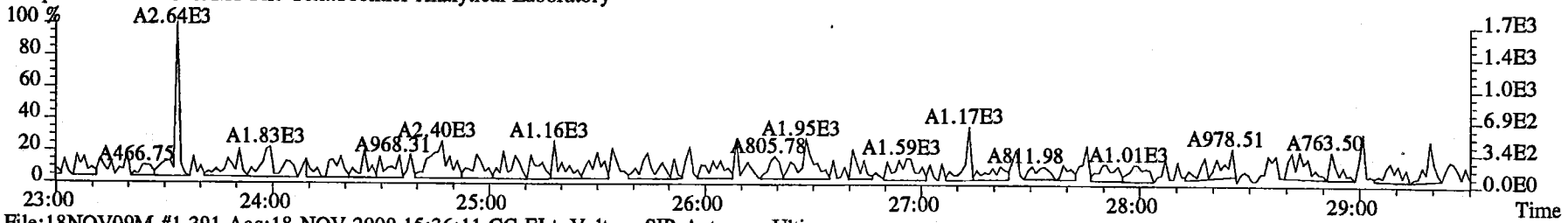
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



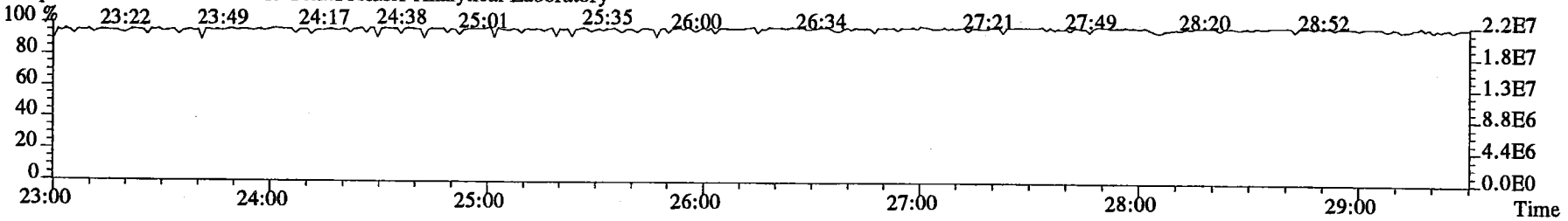
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



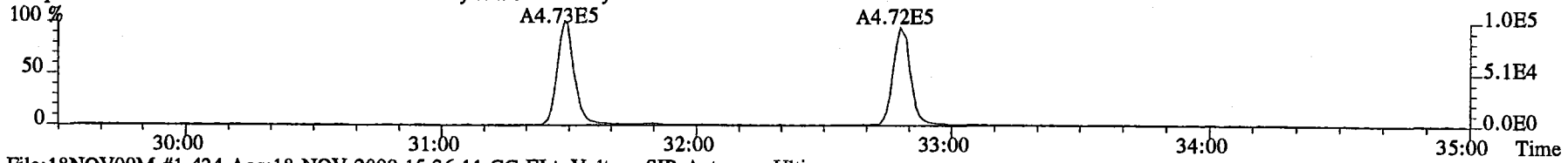
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



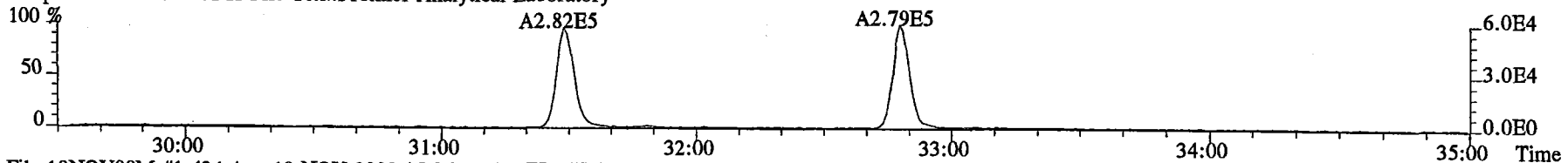
File:18NOV09M #1-391 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



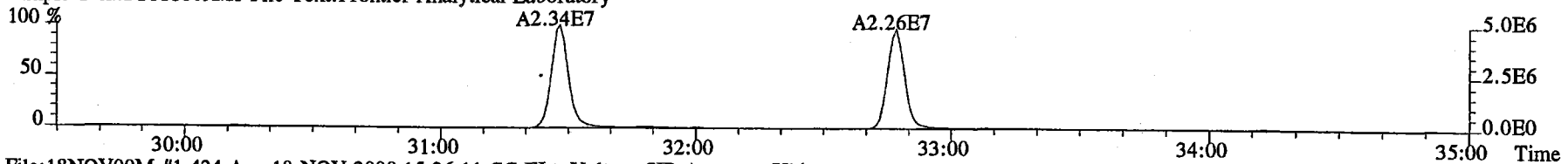
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



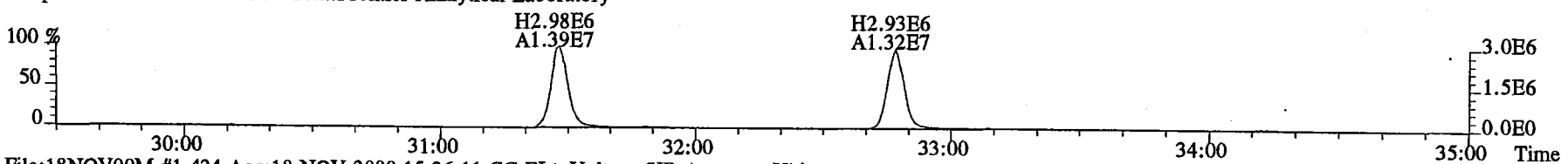
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



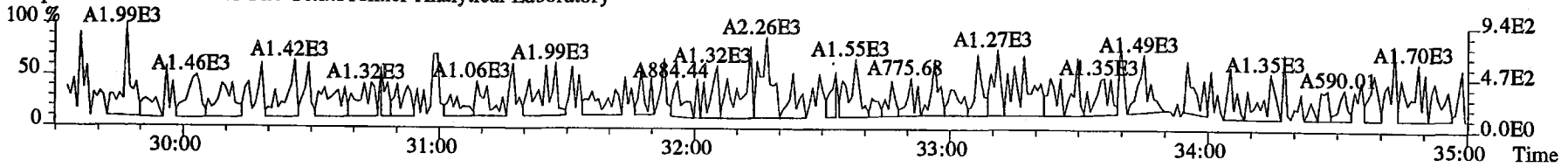
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



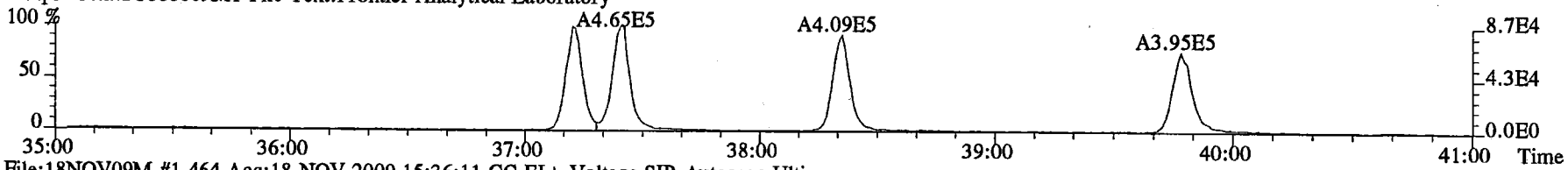
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



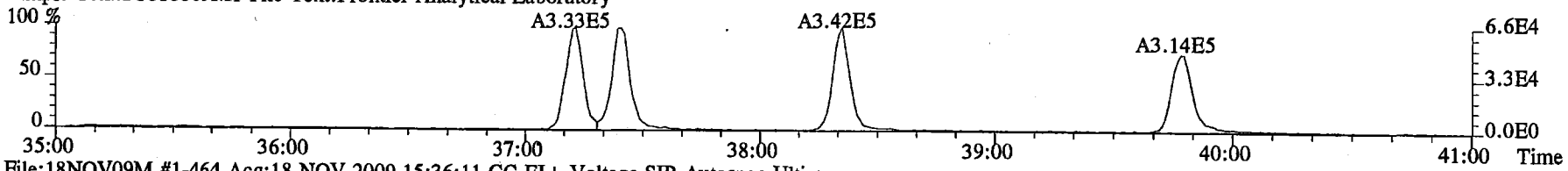
File:18NOV09M #1-424 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



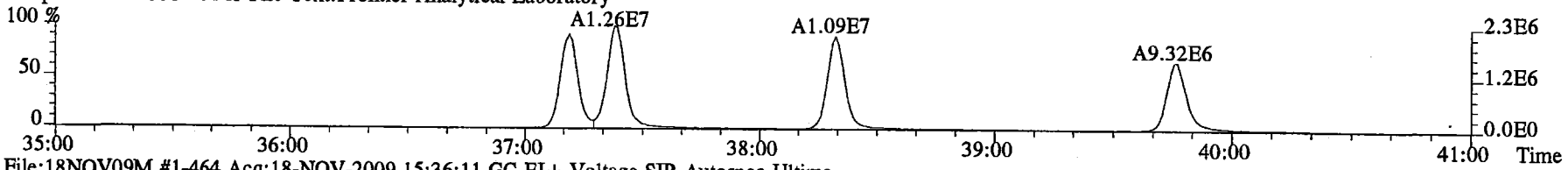
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



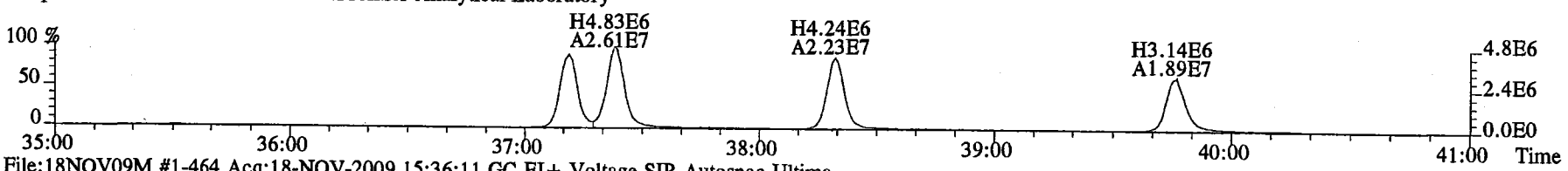
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



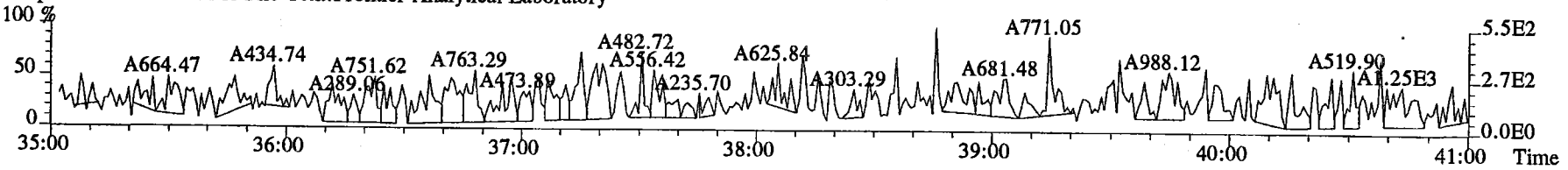
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



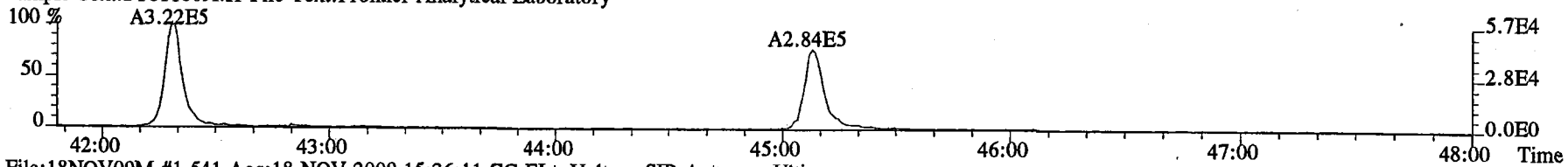
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



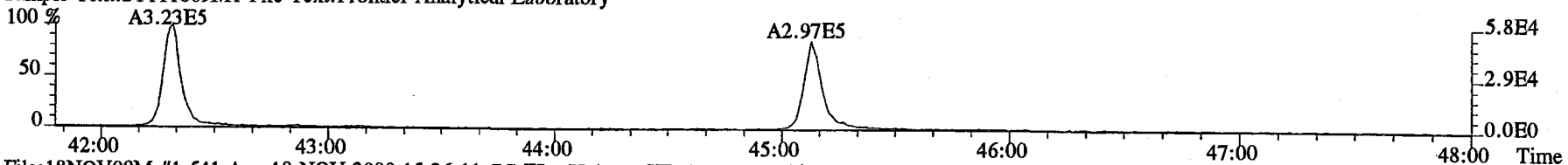
File:18NOV09M #1-464 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



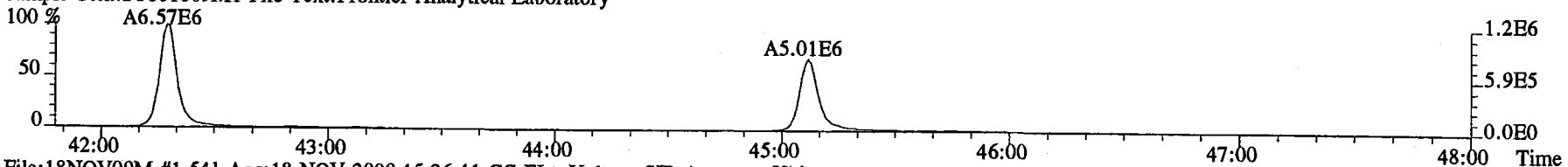
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



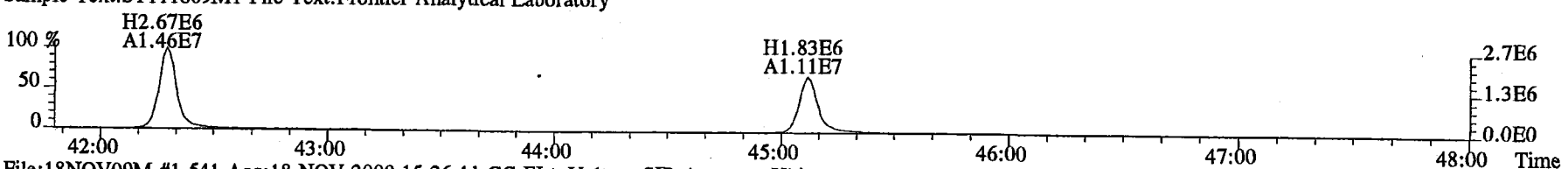
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



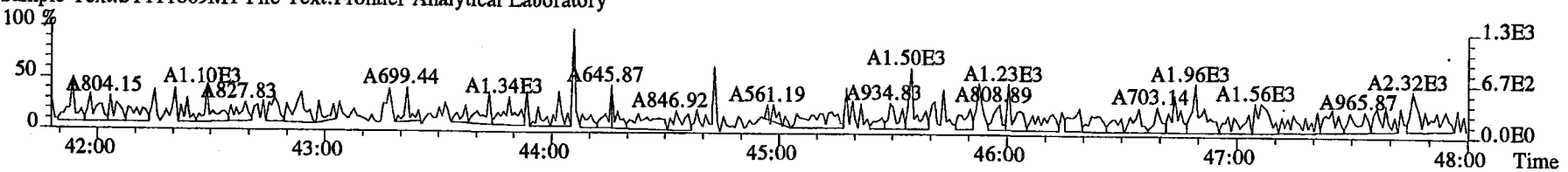
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



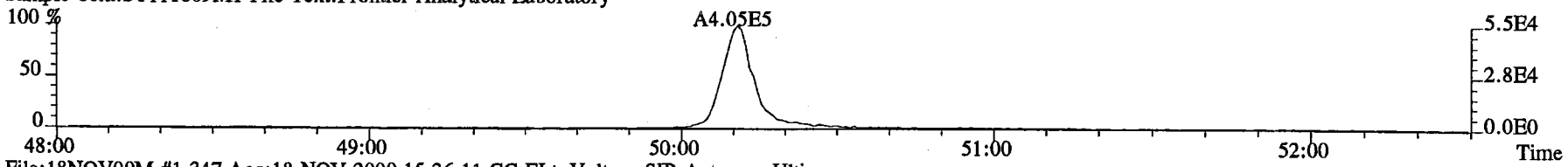
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



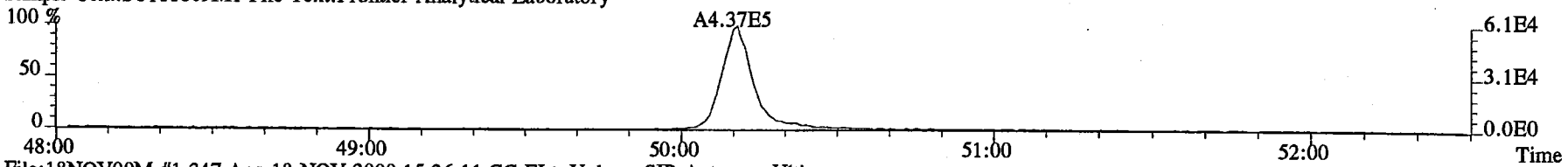
File:18NOV09M #1-541 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



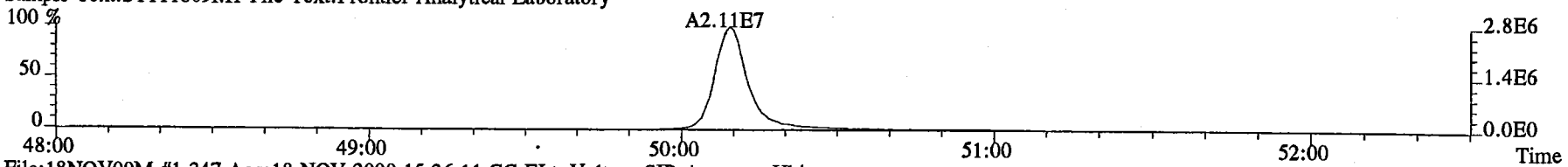
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



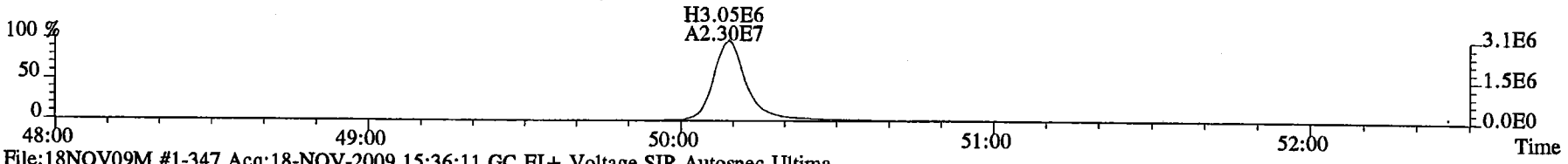
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



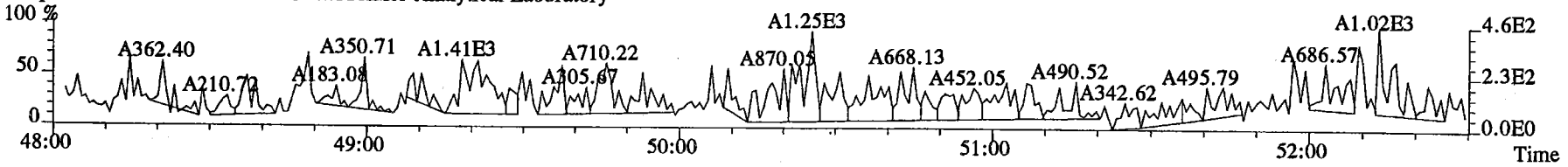
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



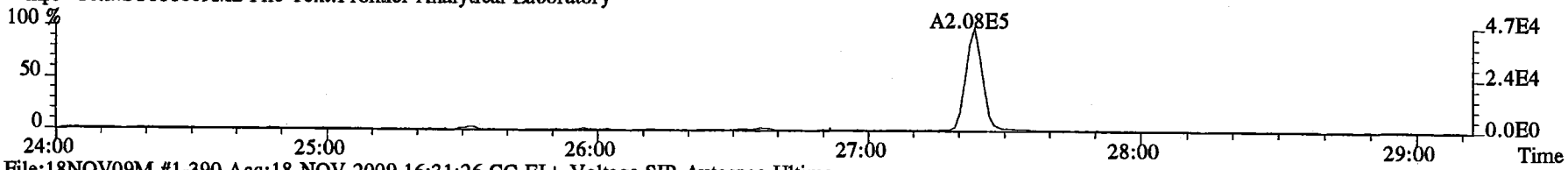
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



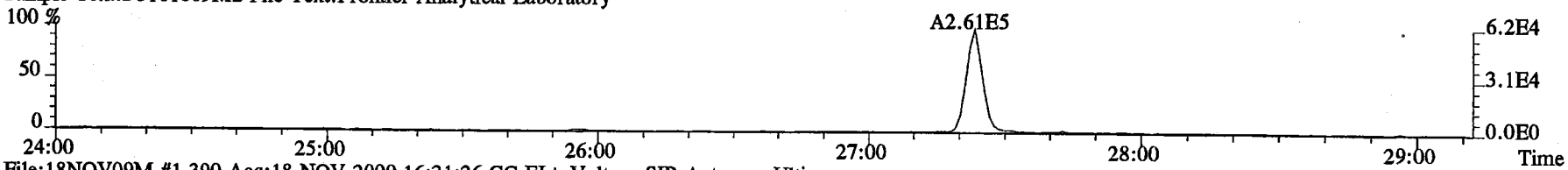
File:18NOV09M #1-347 Acq:18-NOV-2009 15:36:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M1 File Text:Frontier Analytical Laboratory



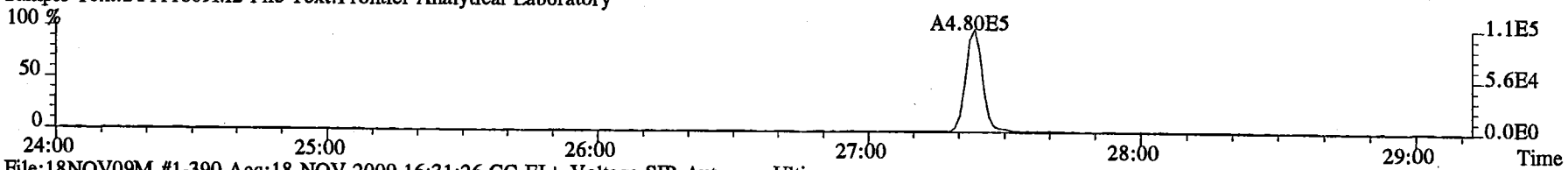
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



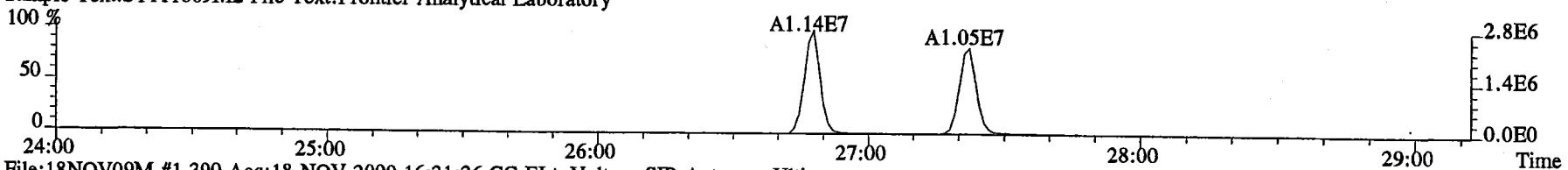
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



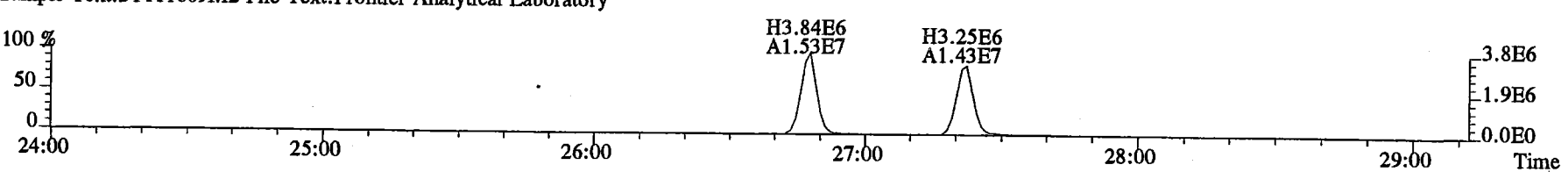
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



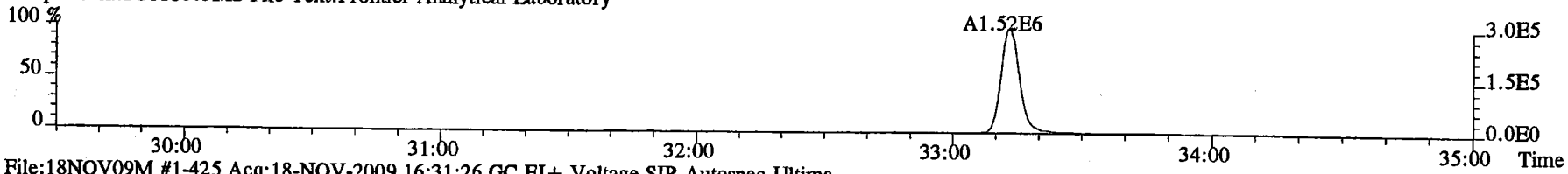
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



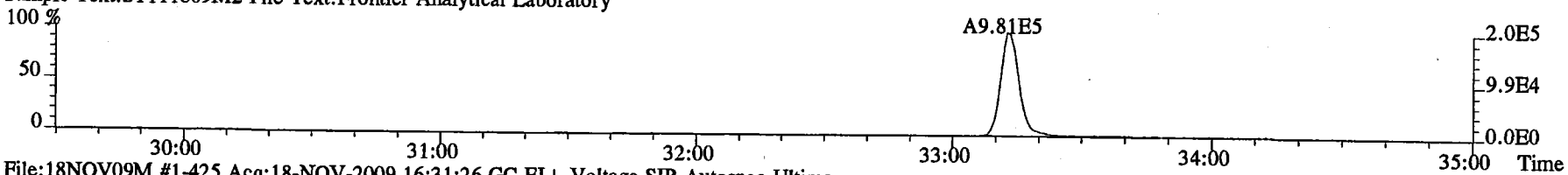
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



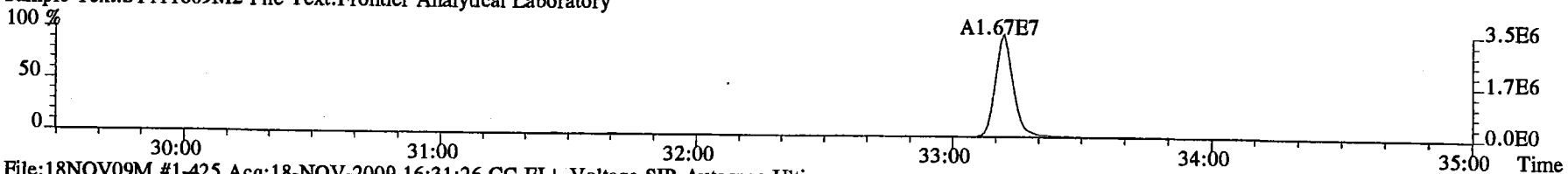
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



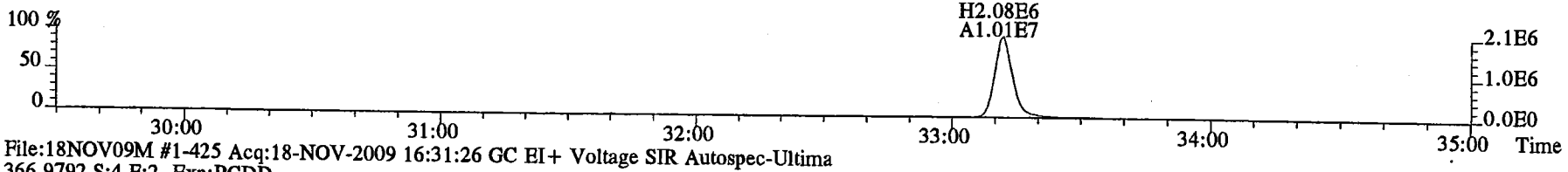
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



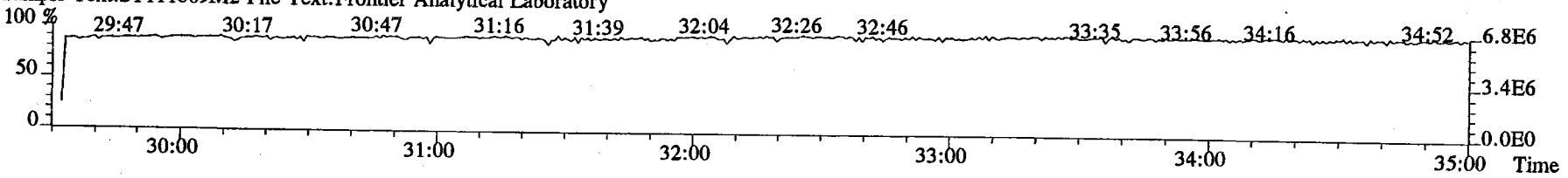
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



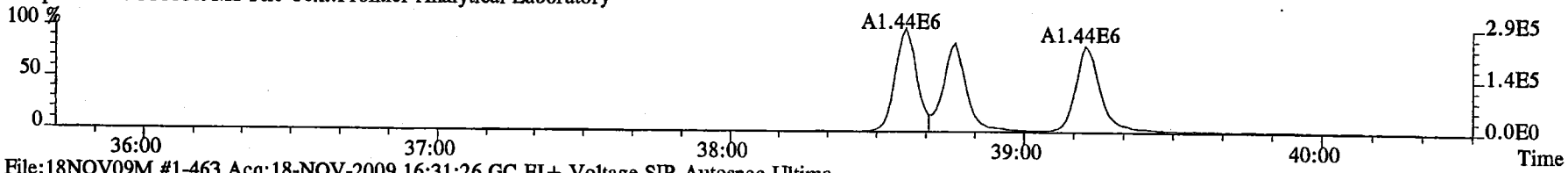
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



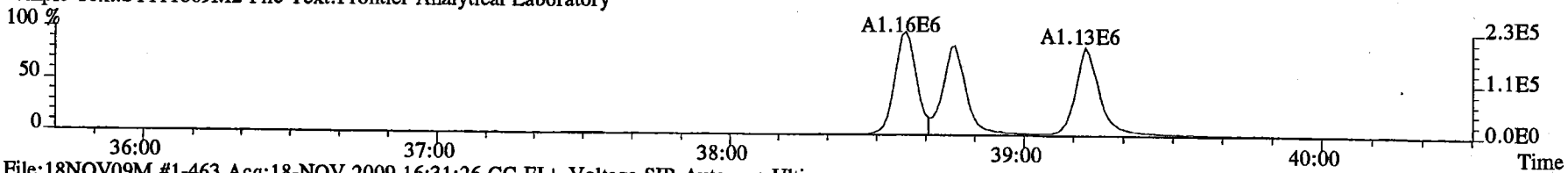
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



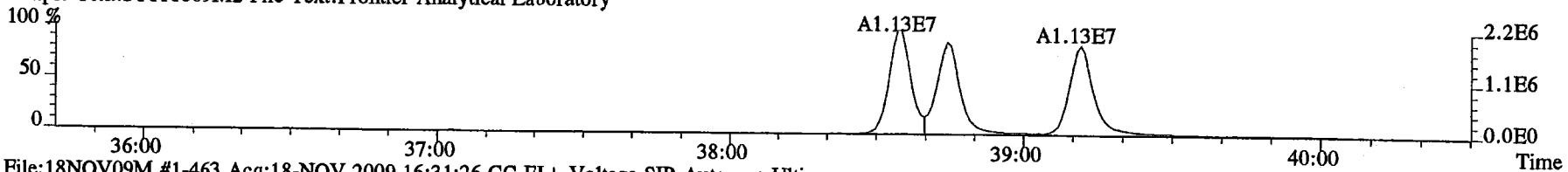
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



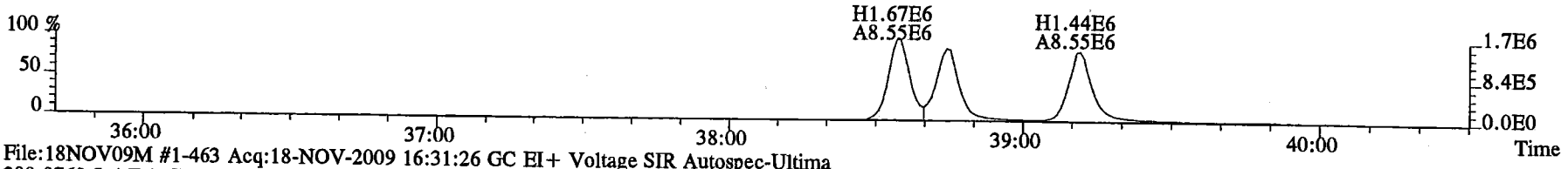
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



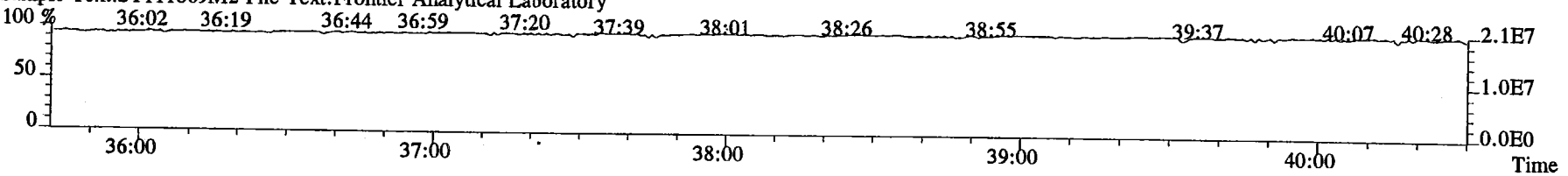
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



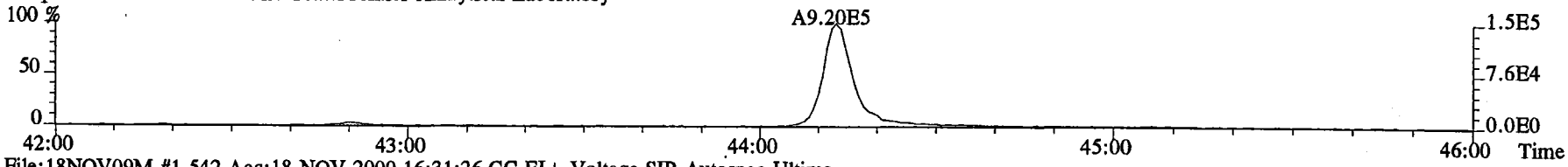
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



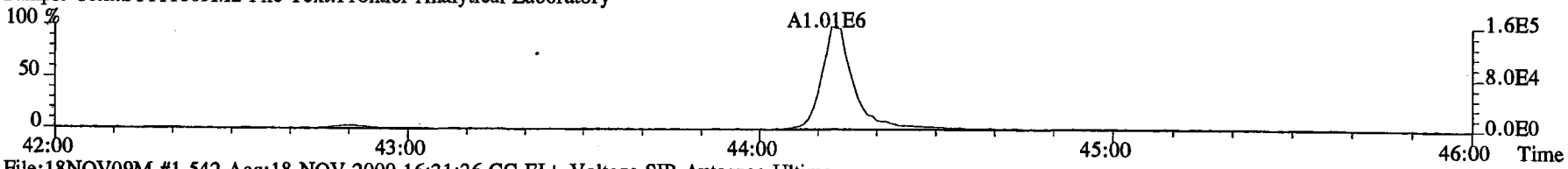
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



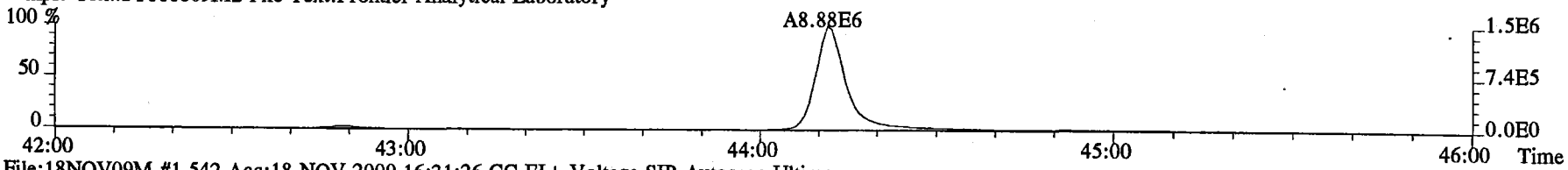
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



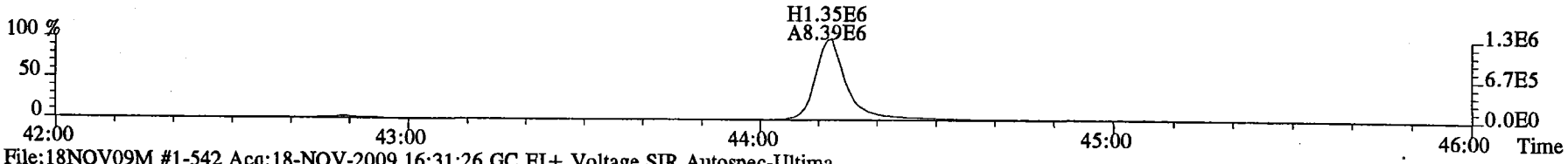
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



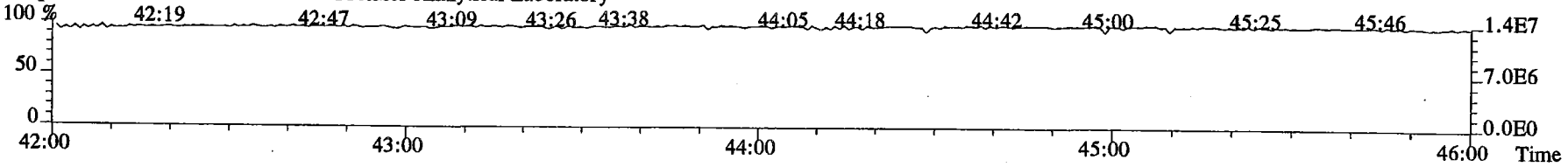
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



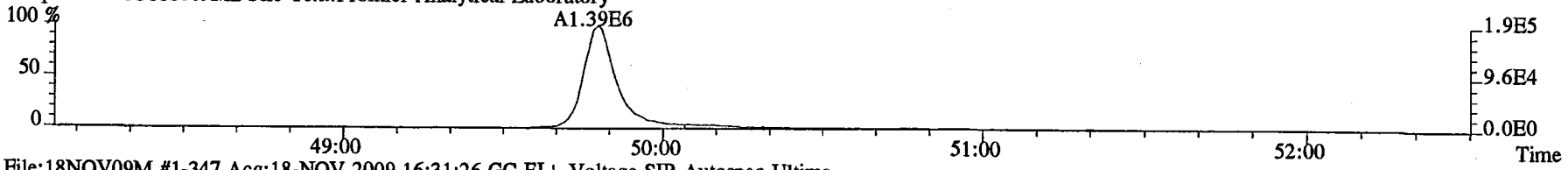
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



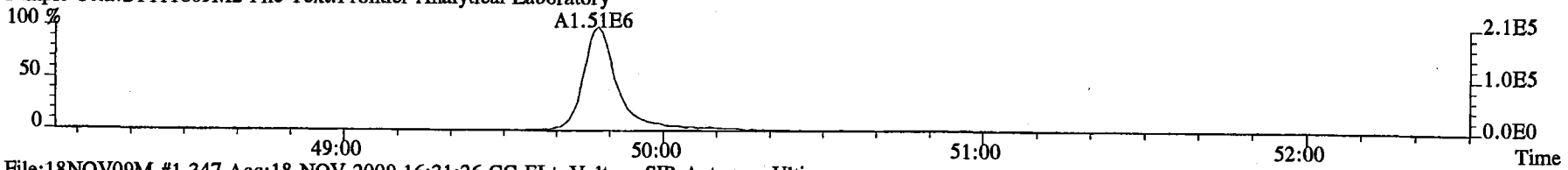
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



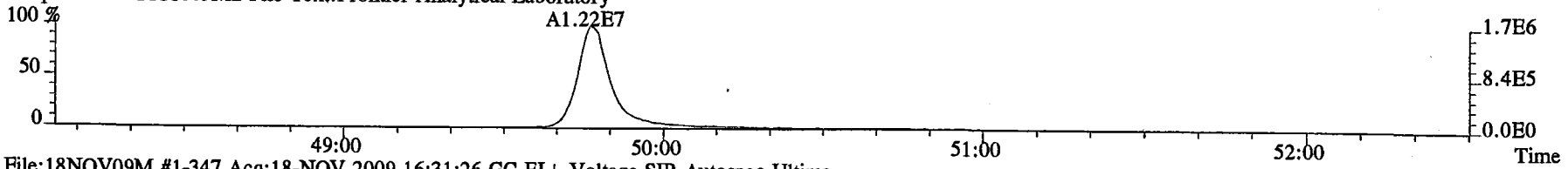
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



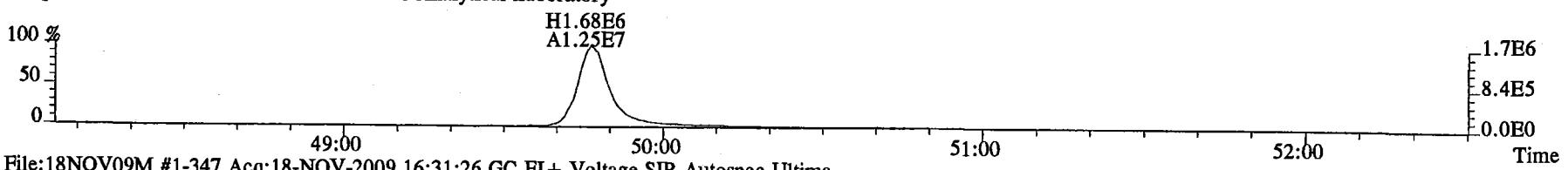
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



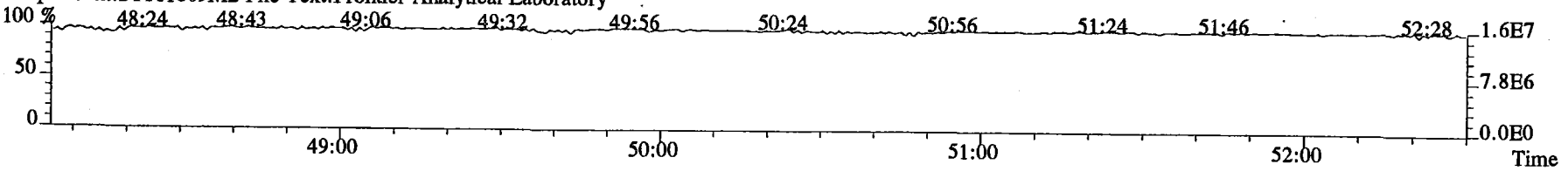
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



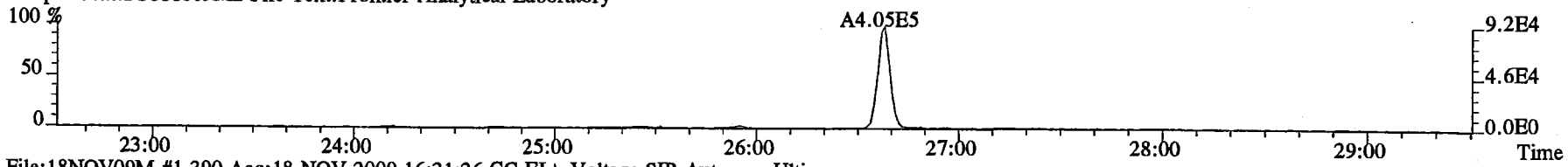
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



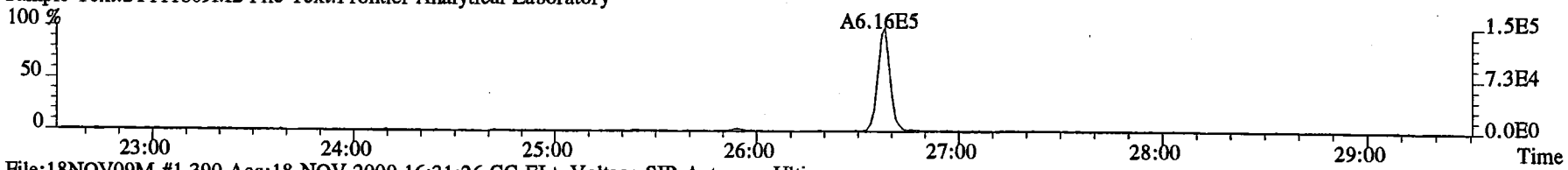
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



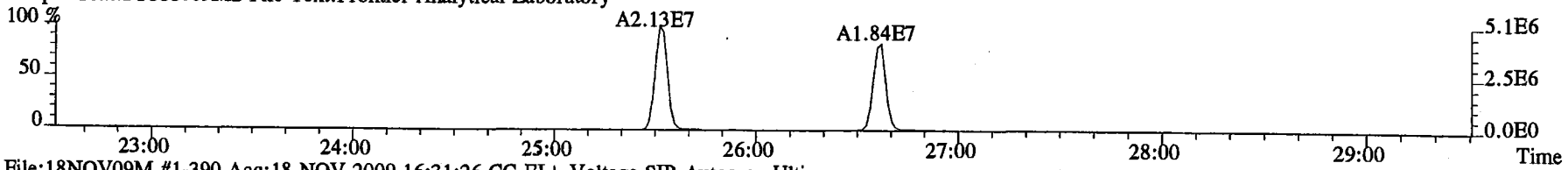
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



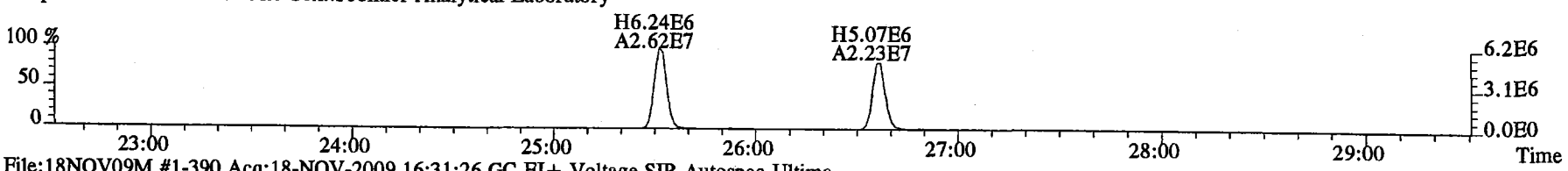
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



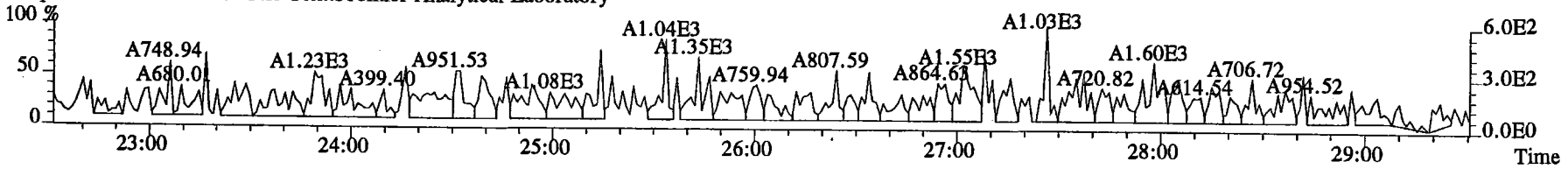
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



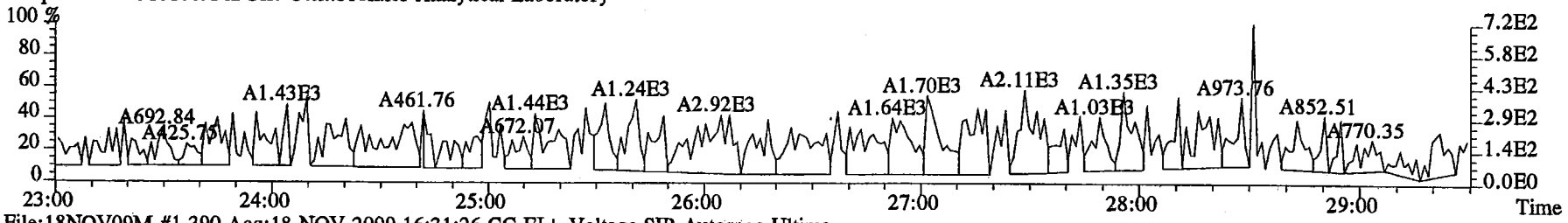
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



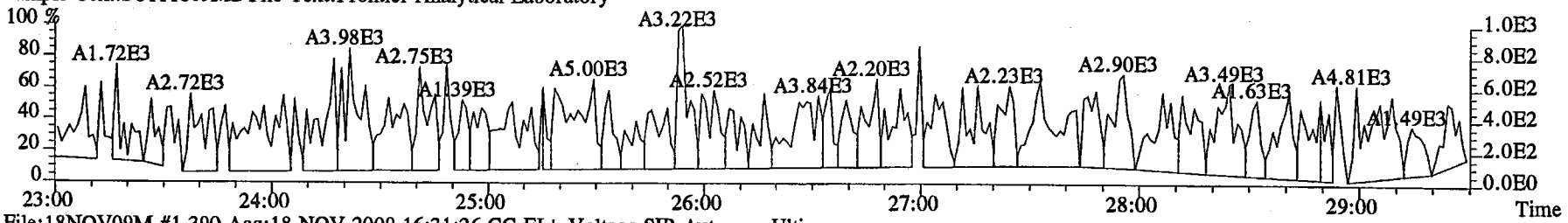
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



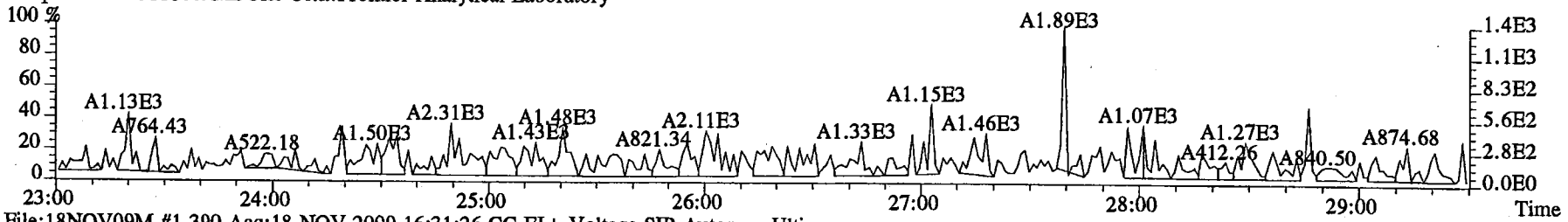
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



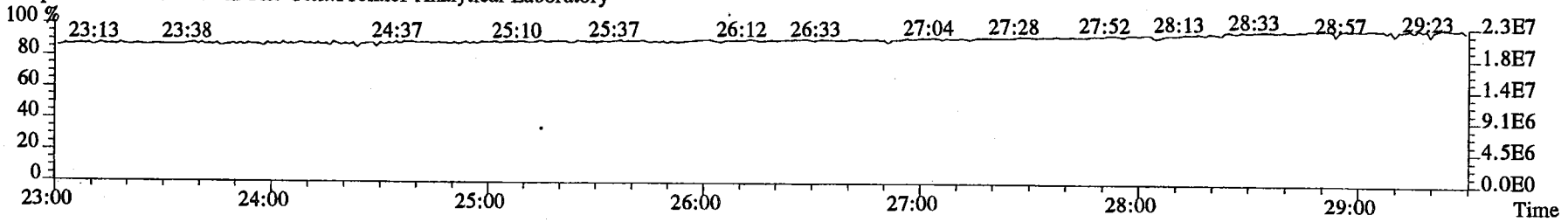
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



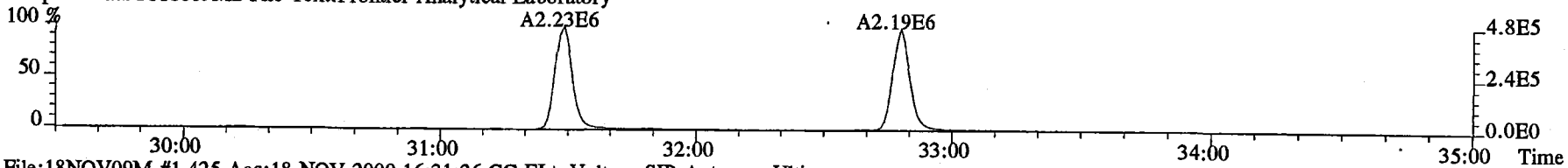
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



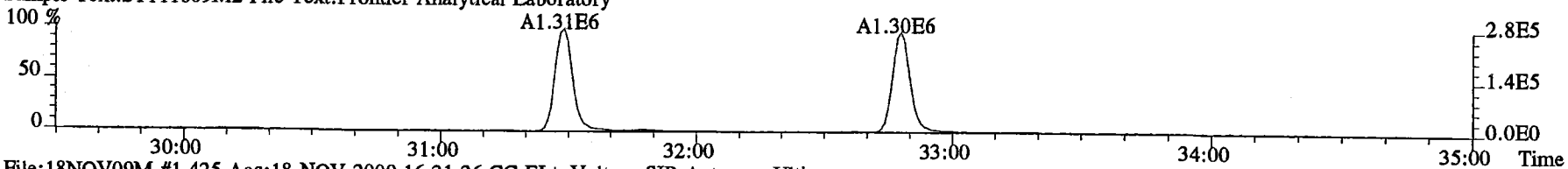
File:18NOV09M #1-390 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



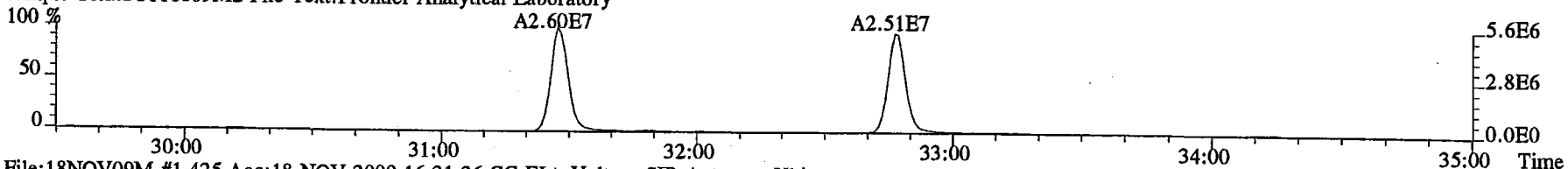
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



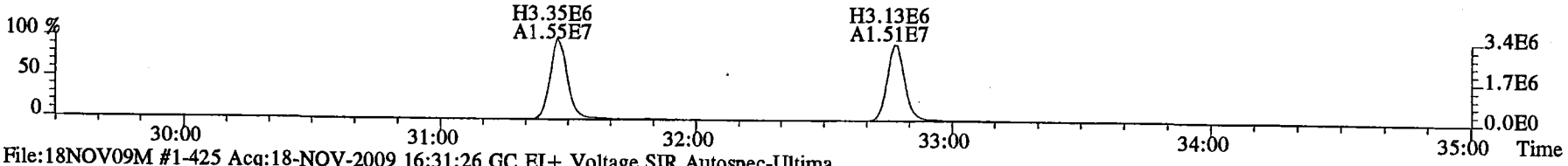
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



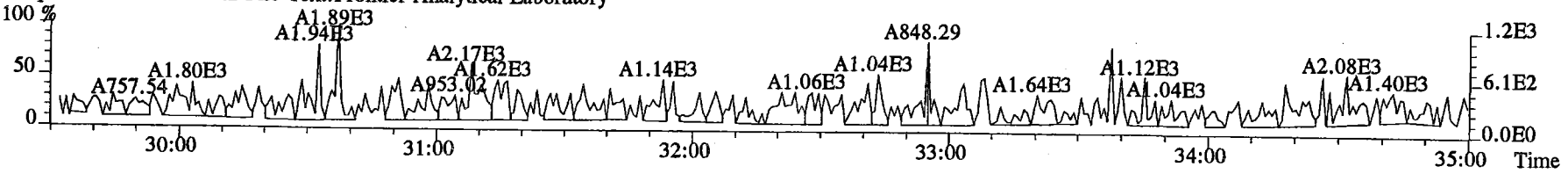
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



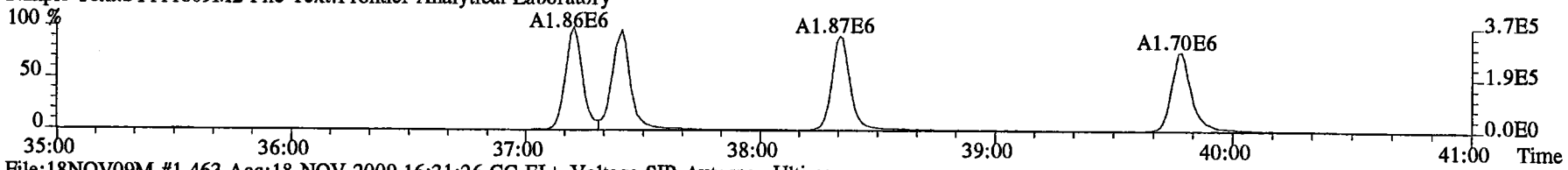
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



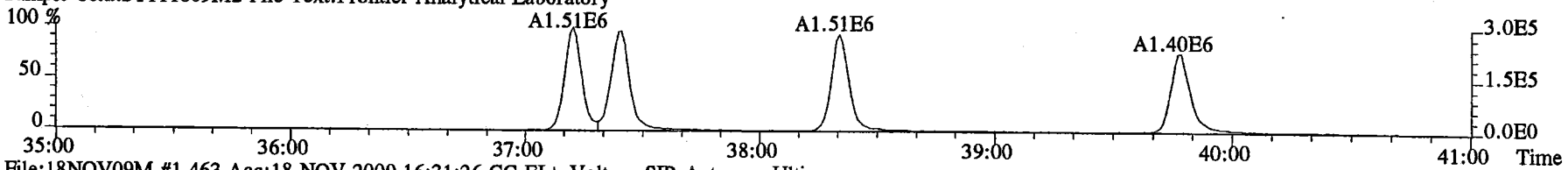
File:18NOV09M #1-425 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



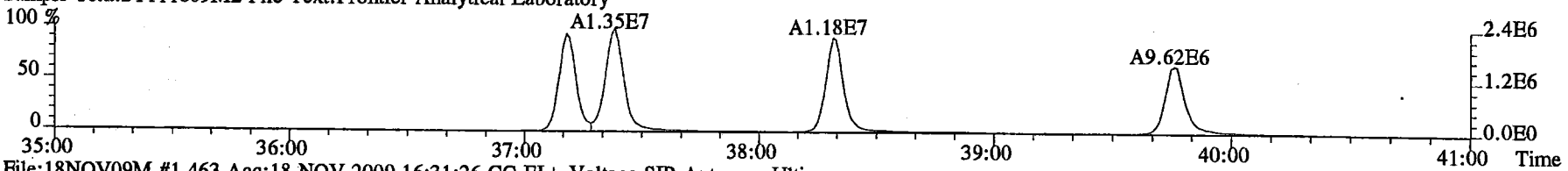
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



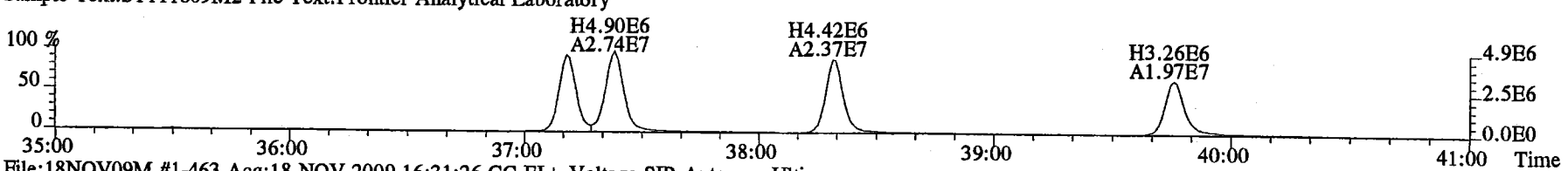
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



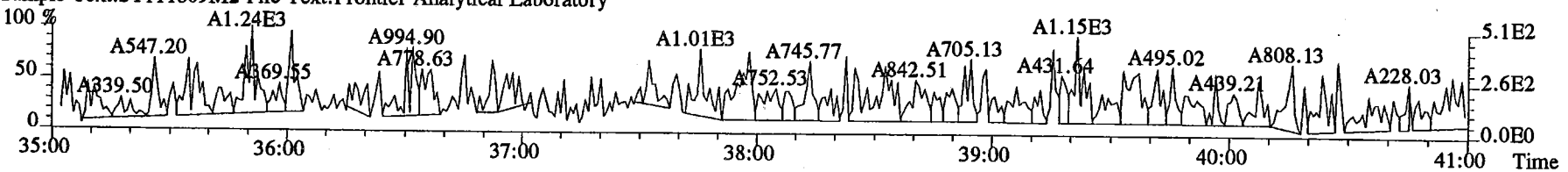
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



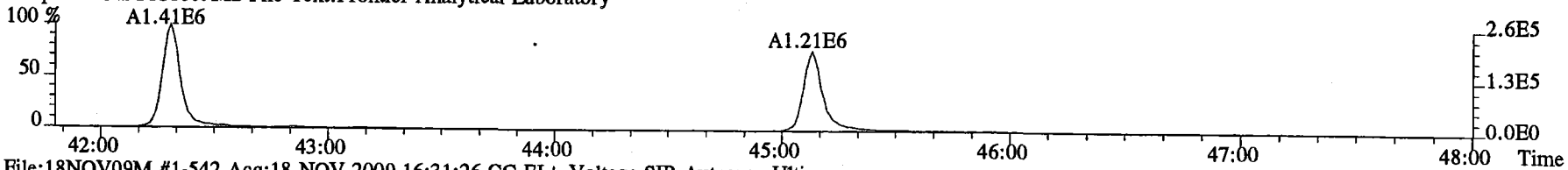
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



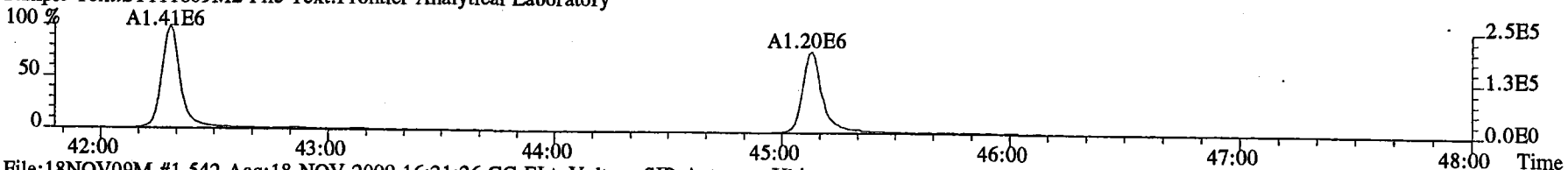
File:18NOV09M #1-463 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



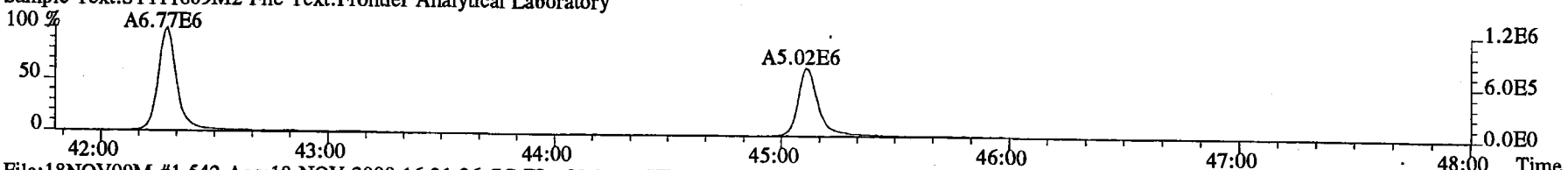
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



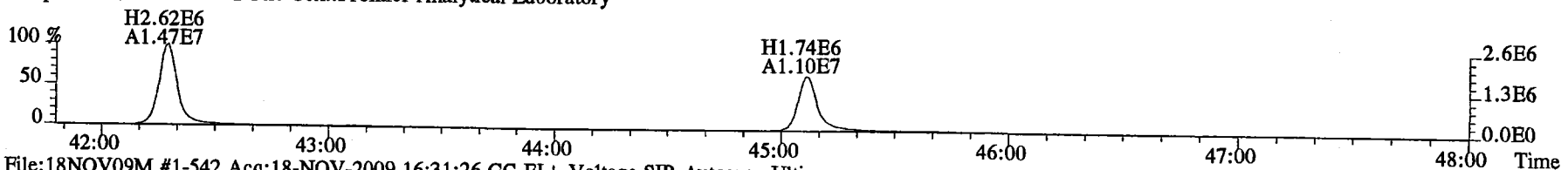
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



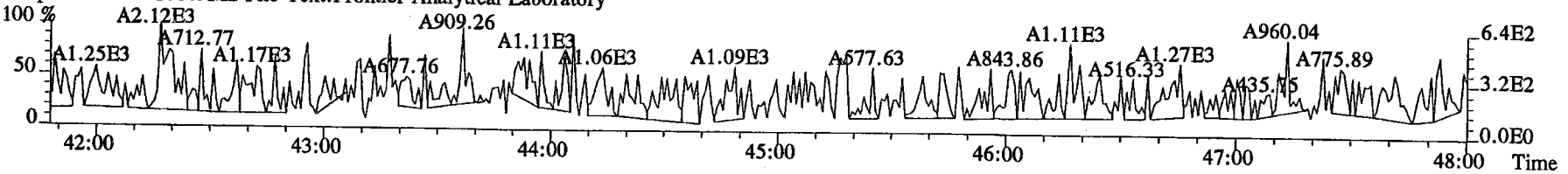
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



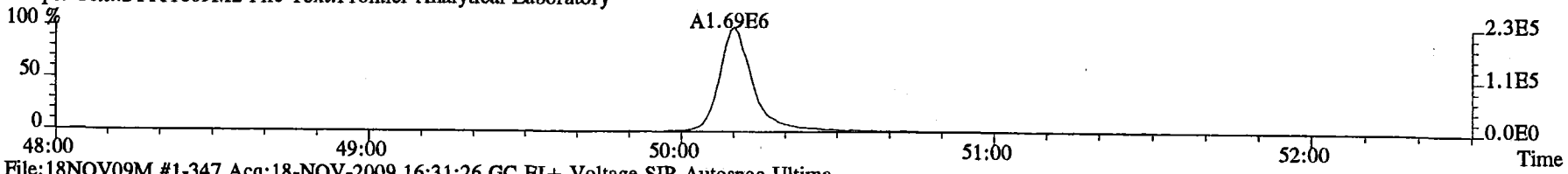
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



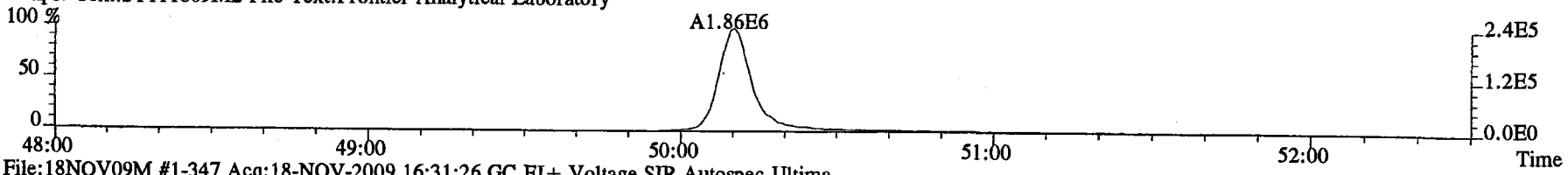
File:18NOV09M #1-542 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



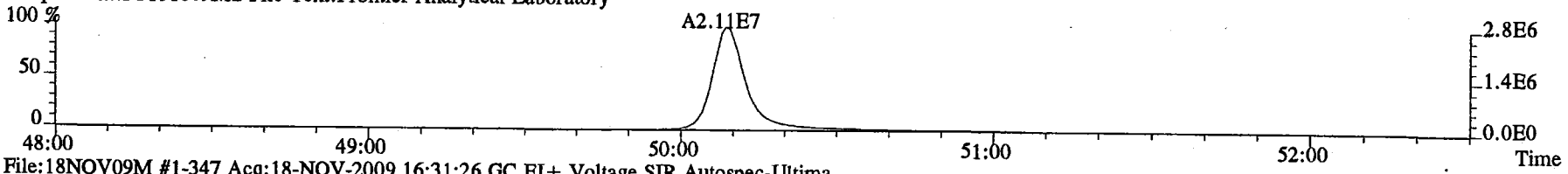
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



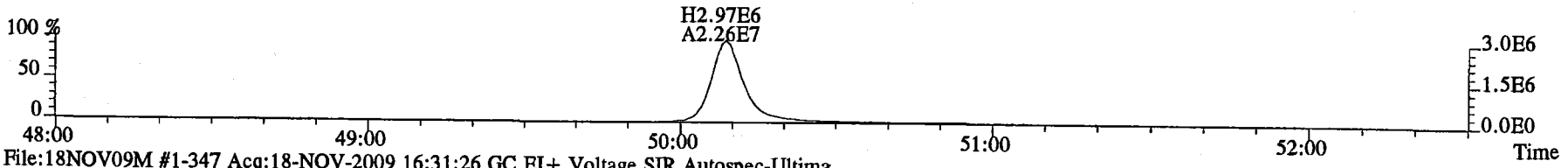
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



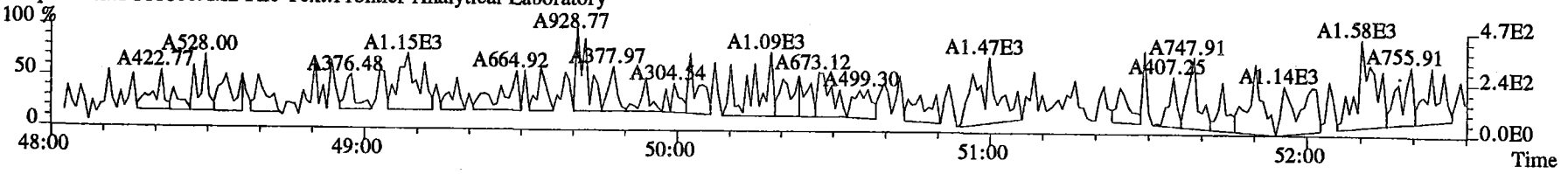
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



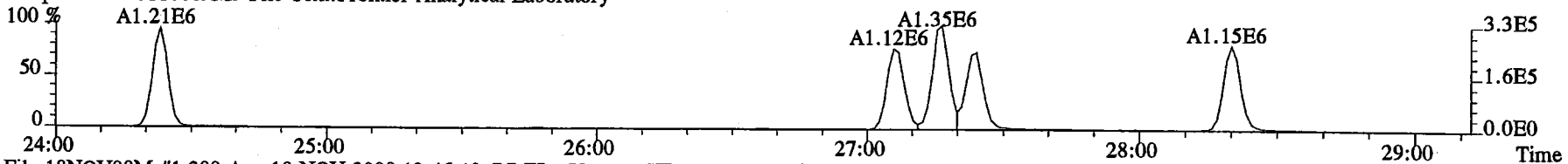
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



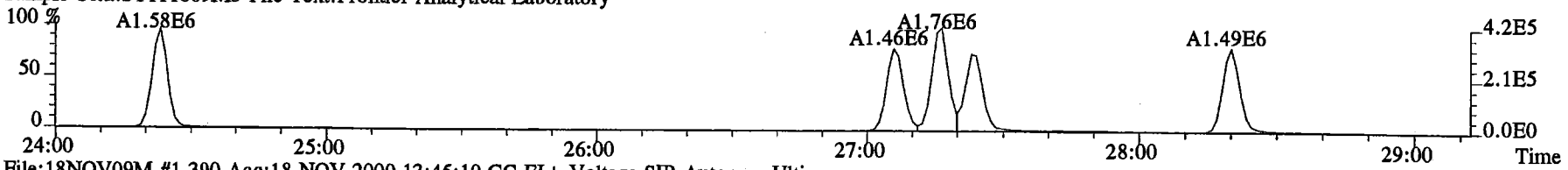
File:18NOV09M #1-347 Acq:18-NOV-2009 16:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M2 File Text:Frontier Analytical Laboratory



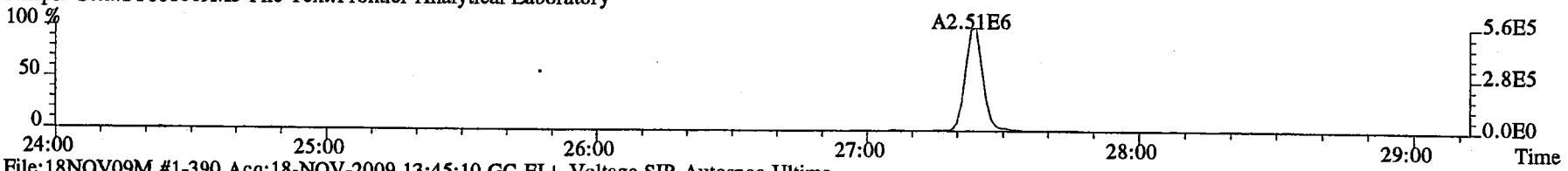
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



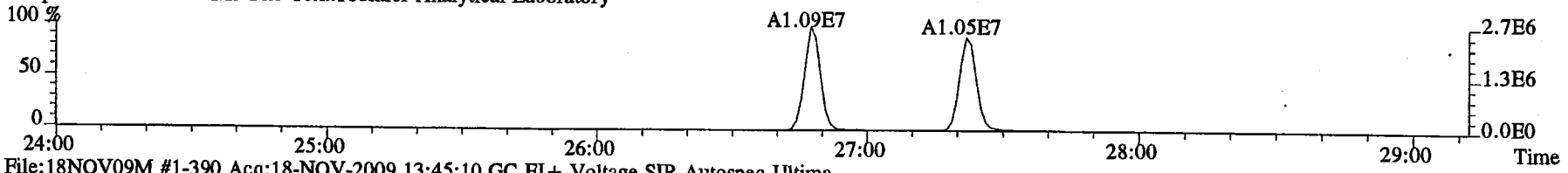
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



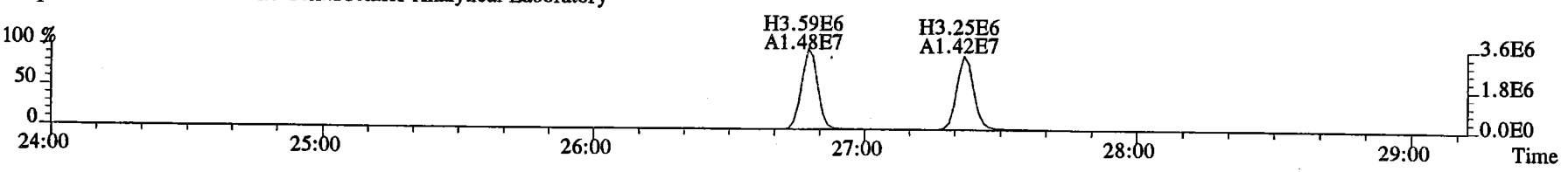
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



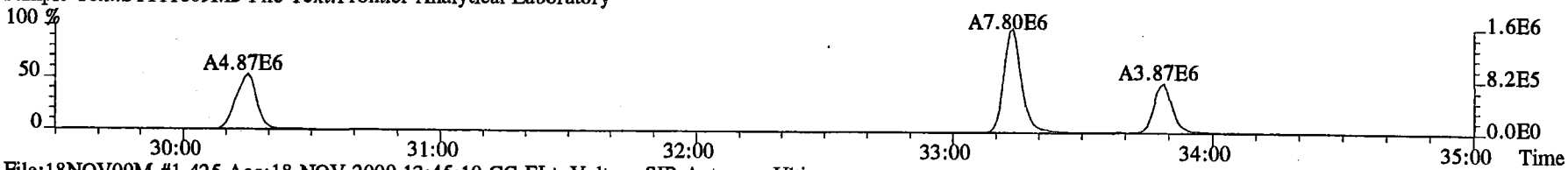
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



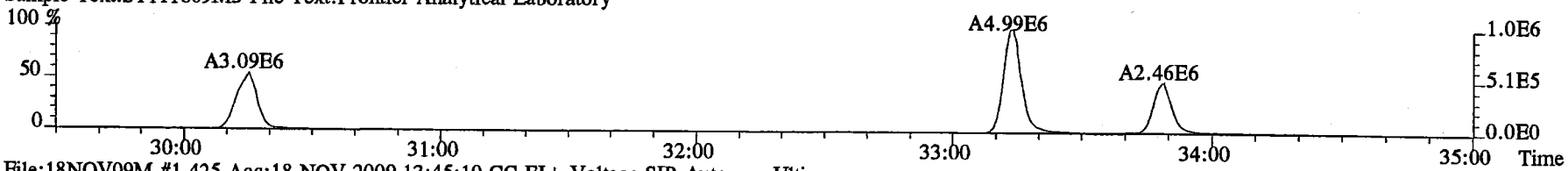
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



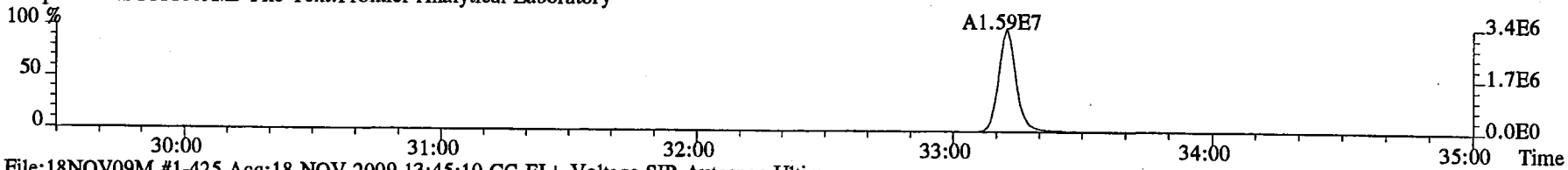
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



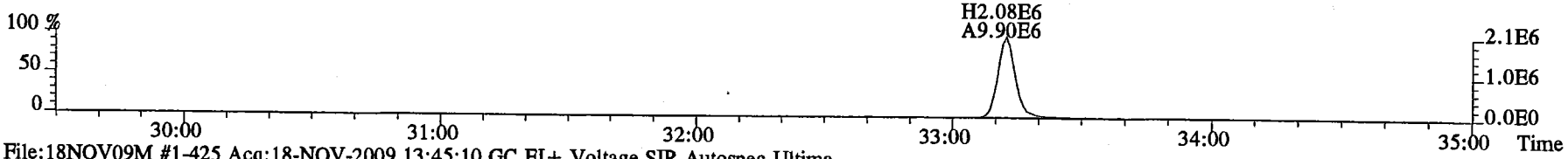
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



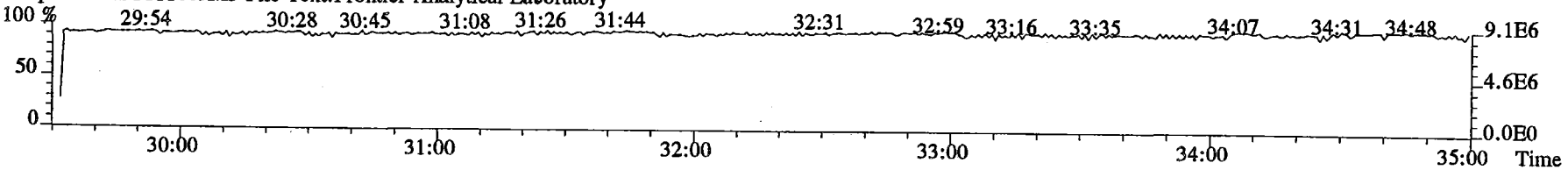
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



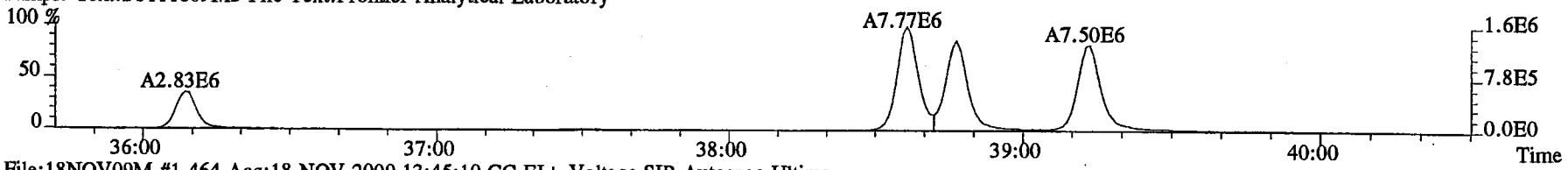
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



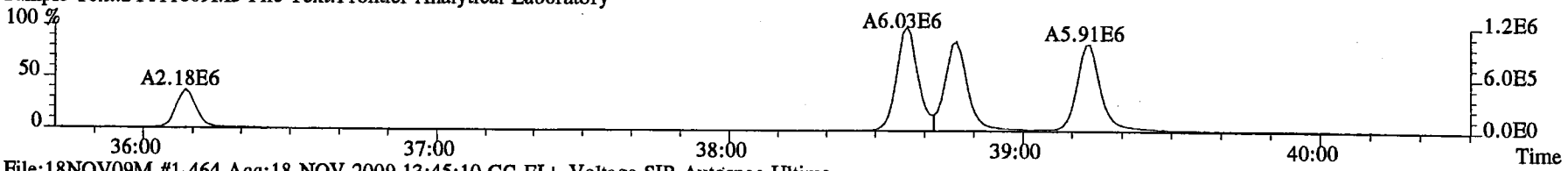
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



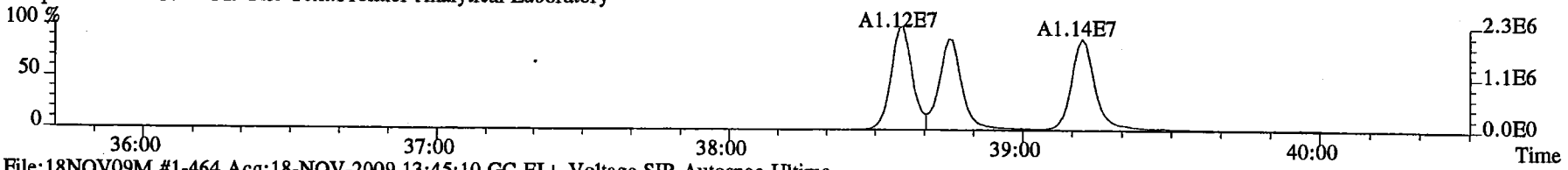
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



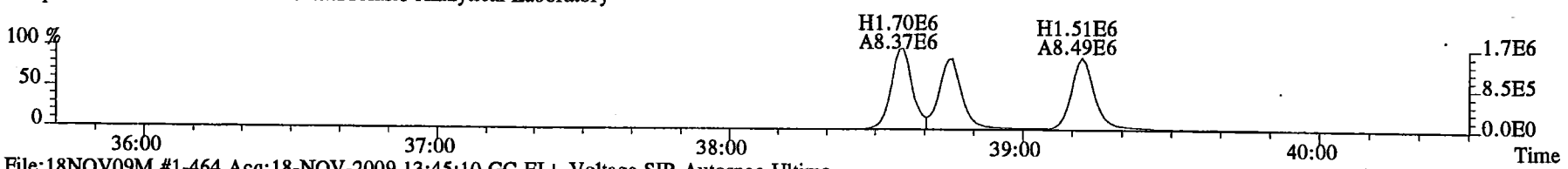
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



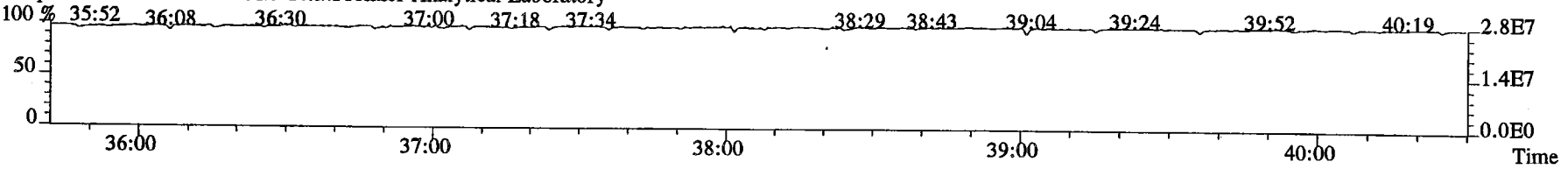
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



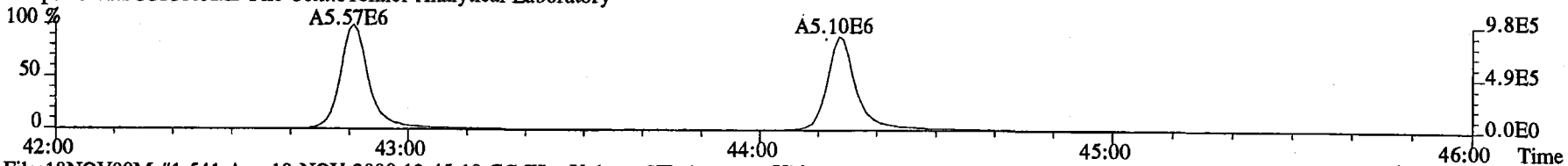
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



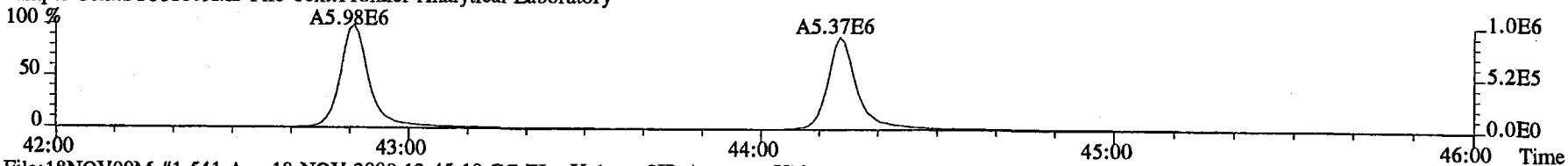
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



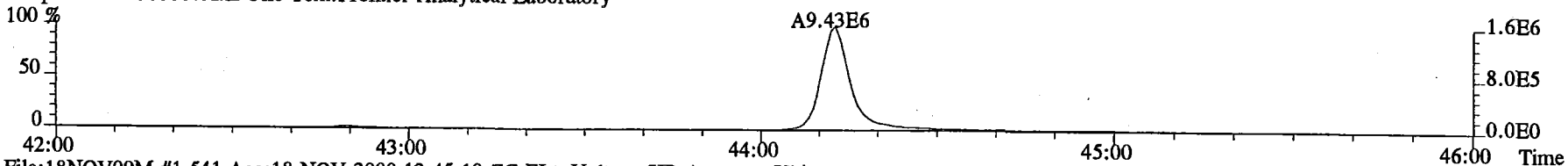
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



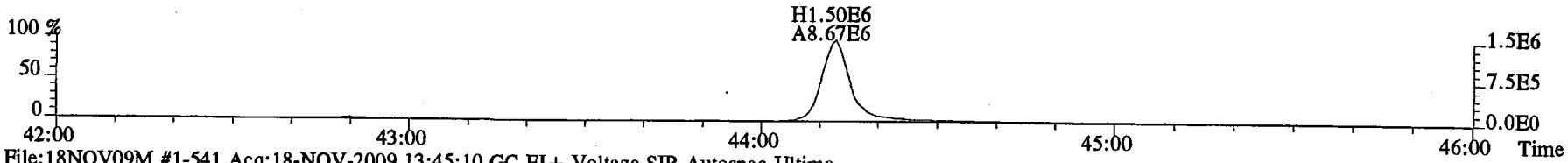
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



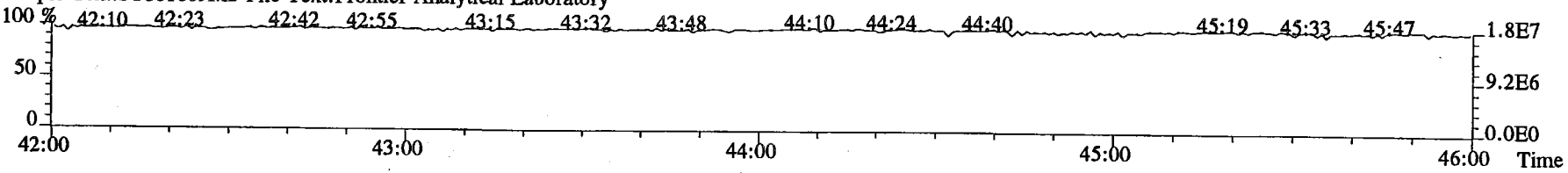
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



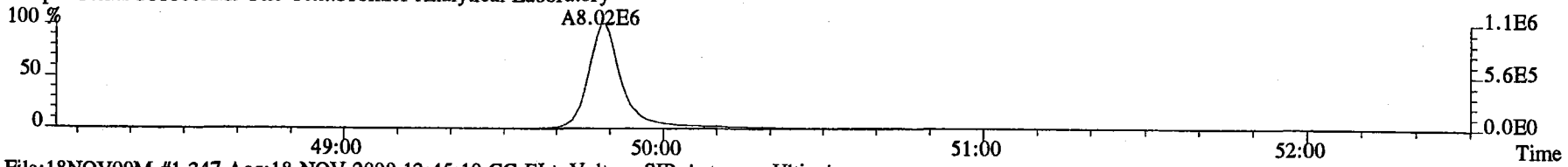
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



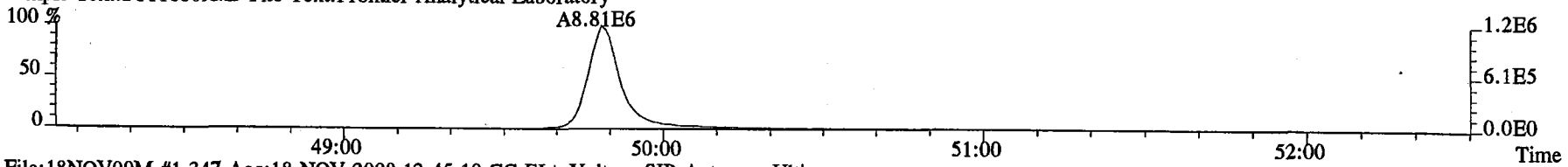
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



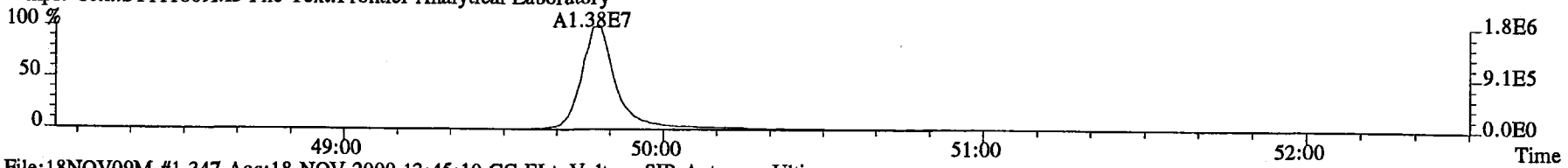
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



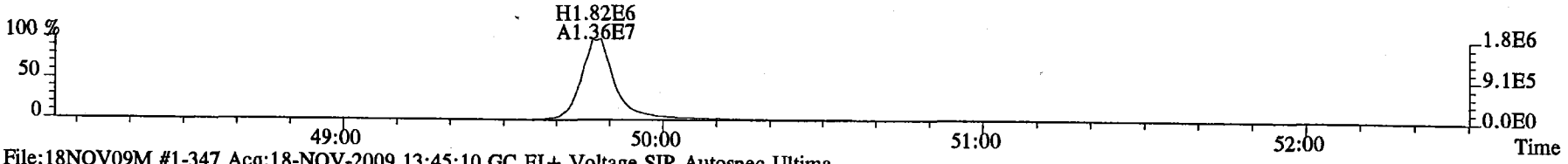
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



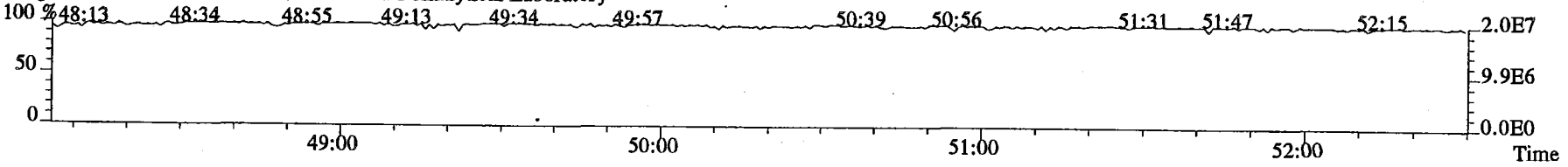
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



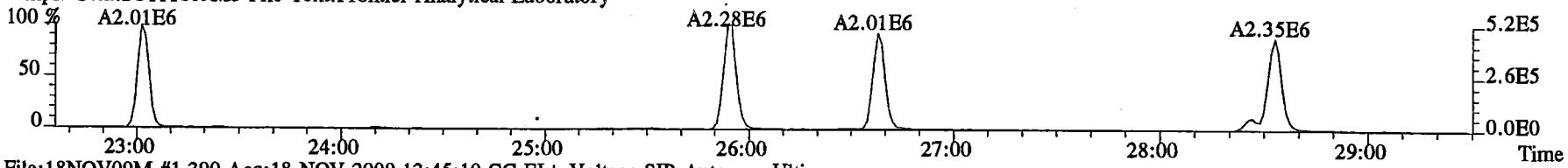
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



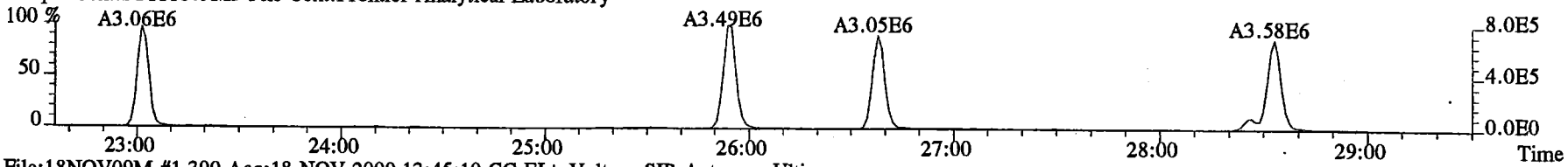
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



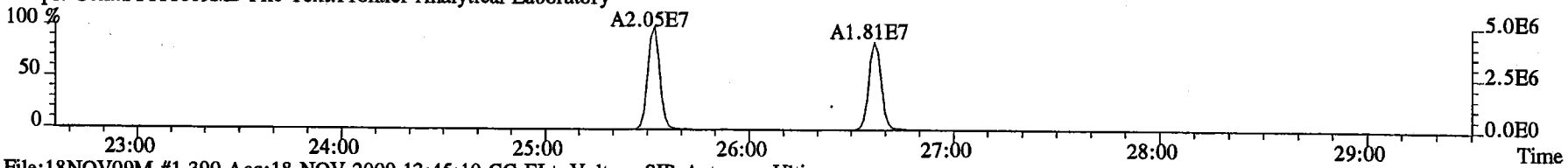
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



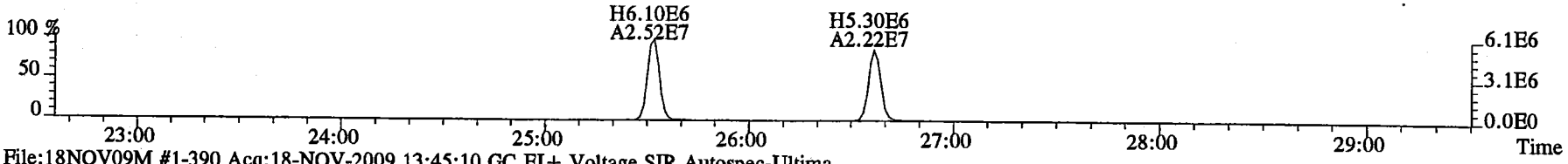
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



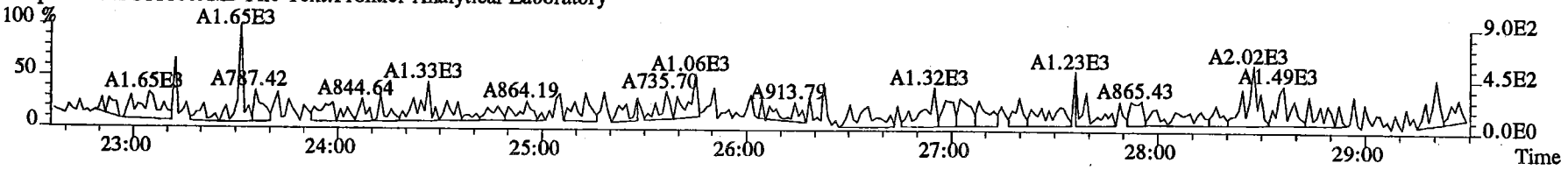
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



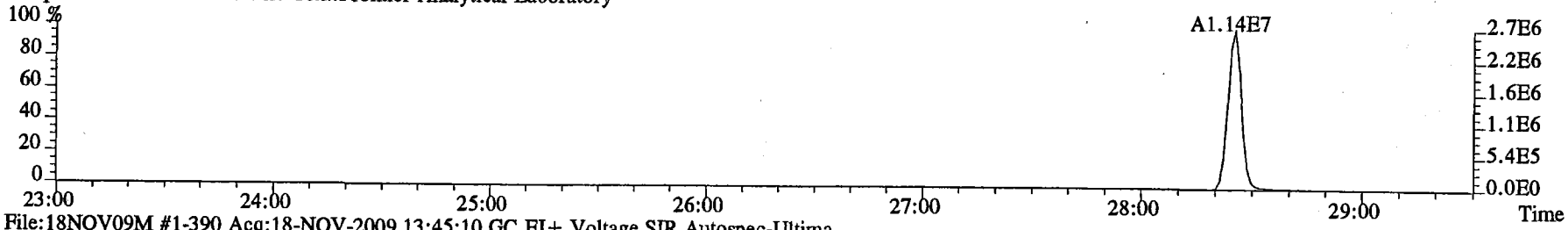
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



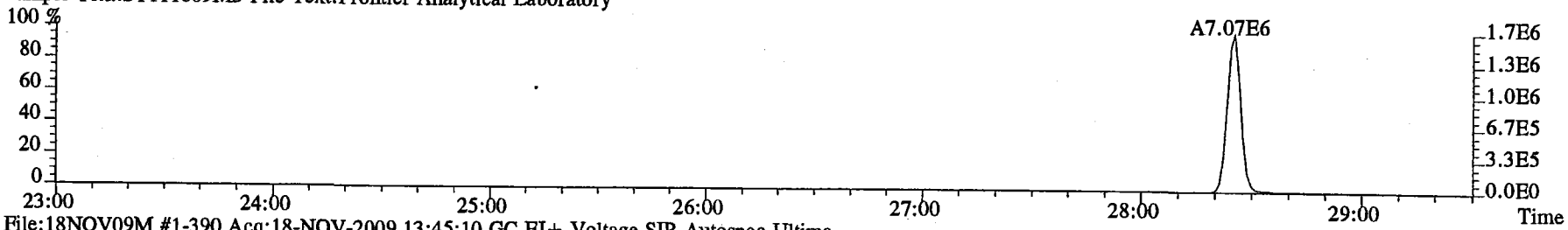
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



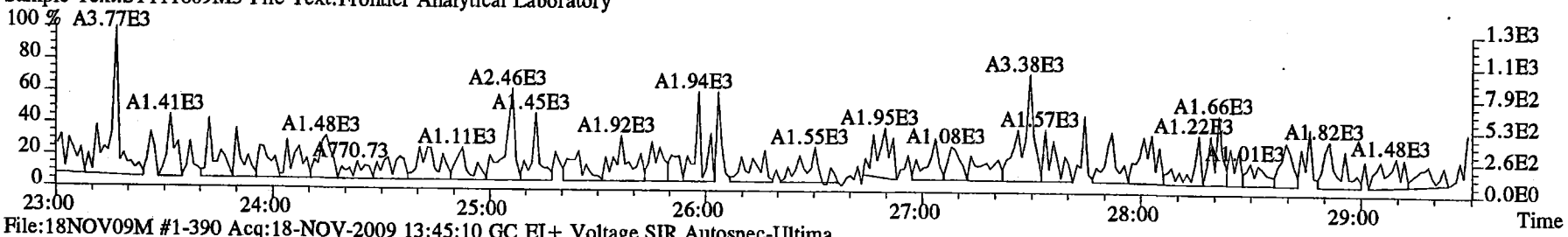
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



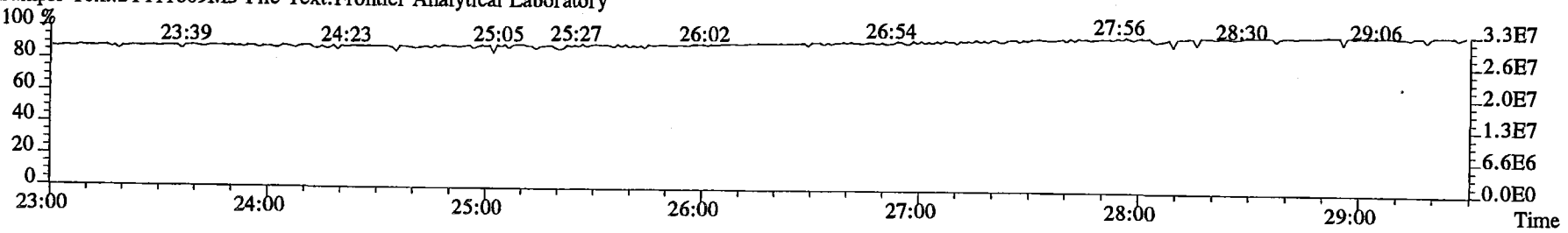
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



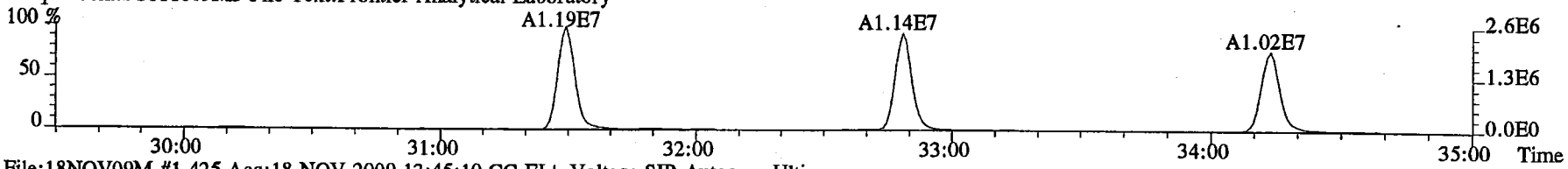
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



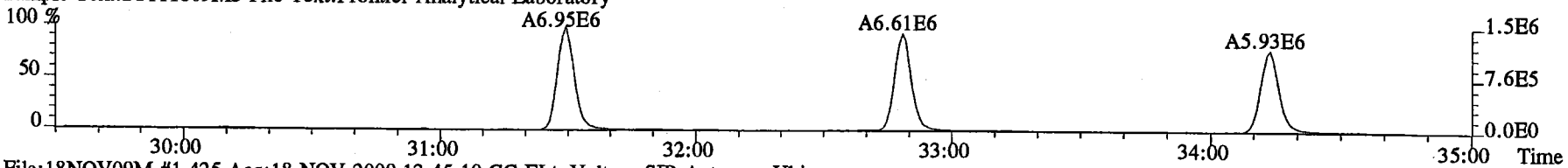
File:18NOV09M #1-390 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



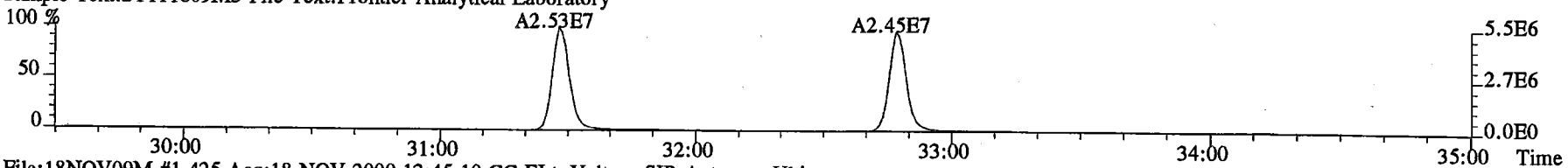
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



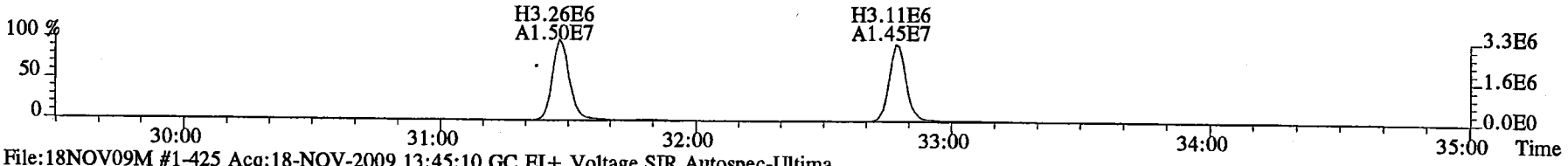
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



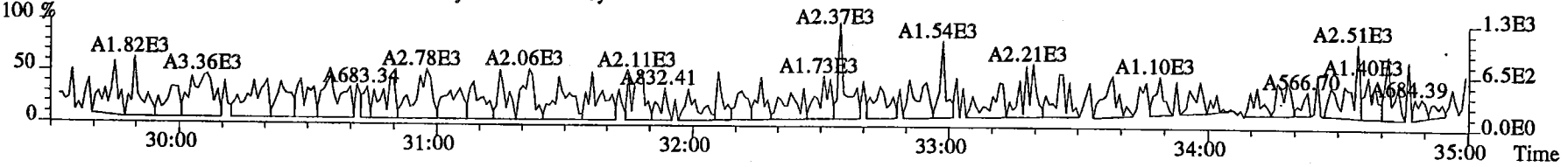
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



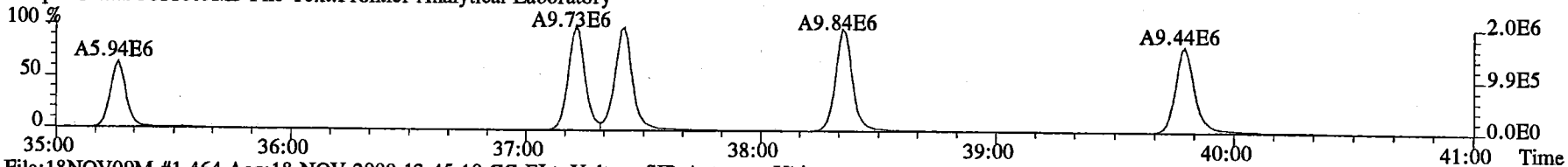
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



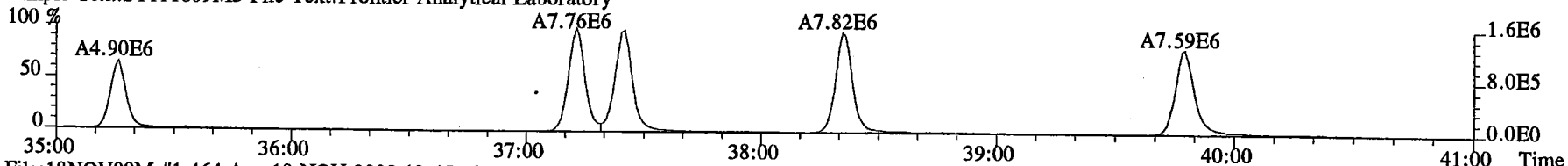
File:18NOV09M #1-425 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



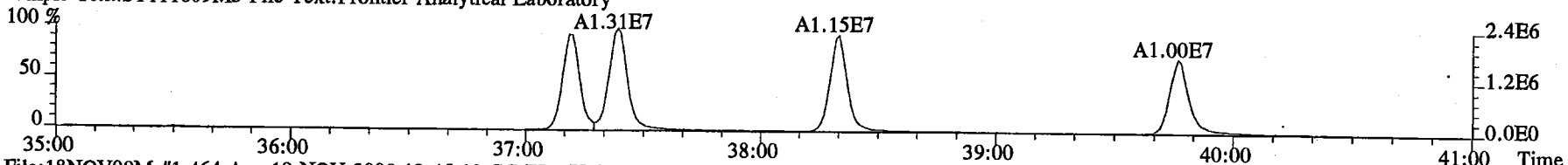
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



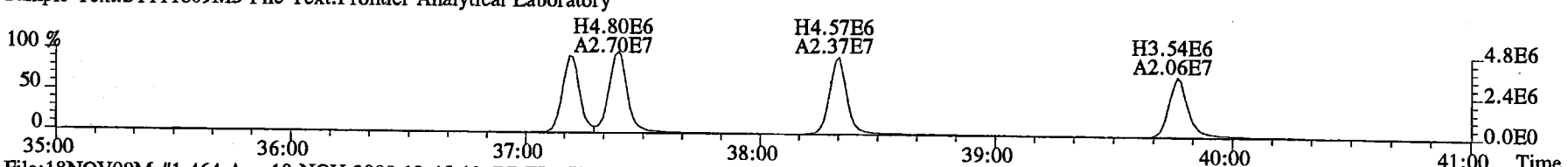
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



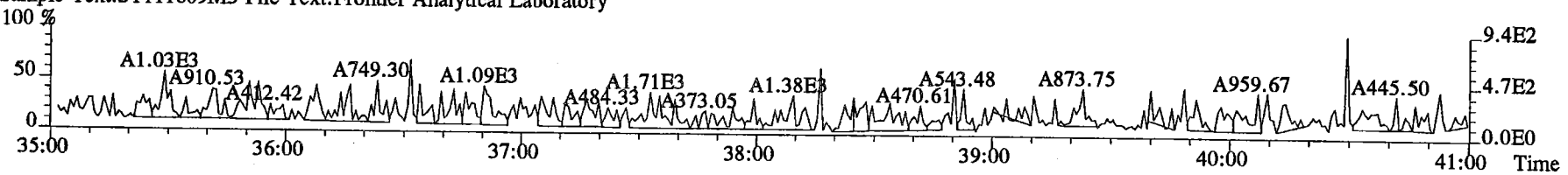
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



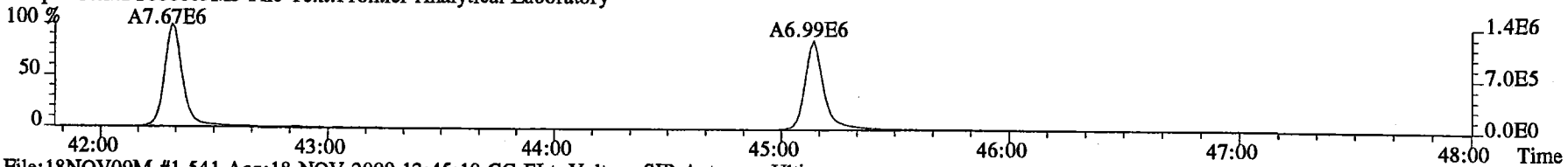
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



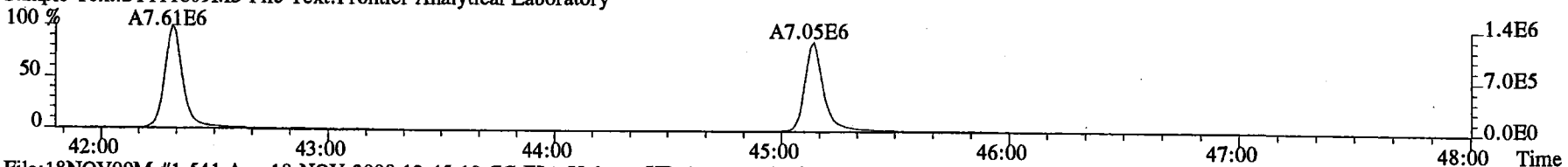
File:18NOV09M #1-464 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



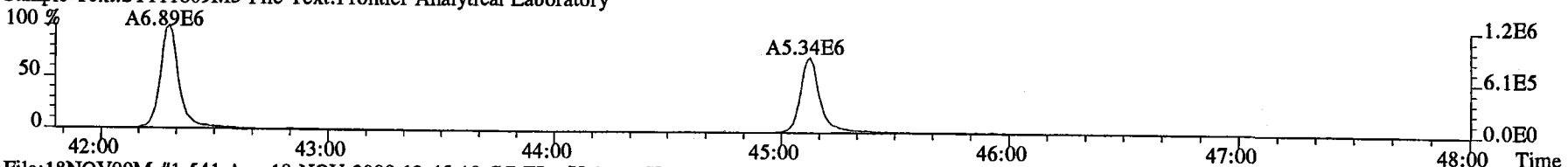
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



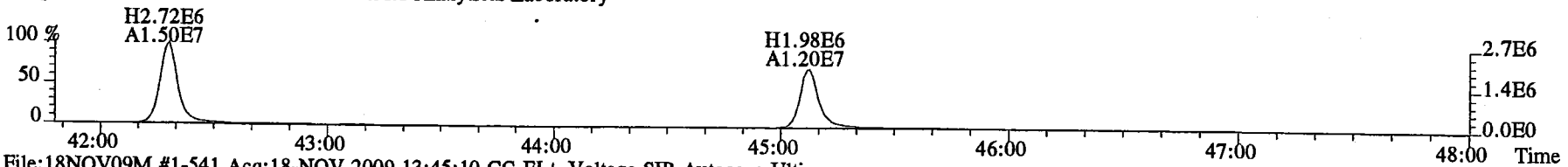
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



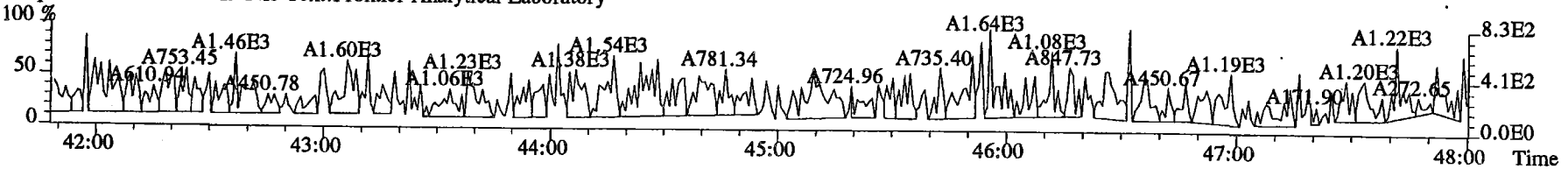
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



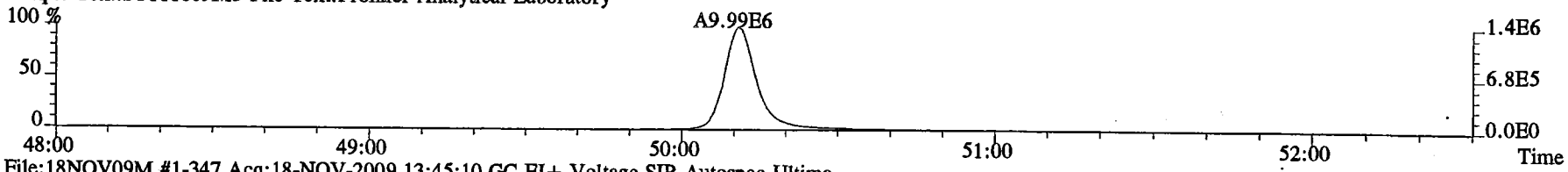
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



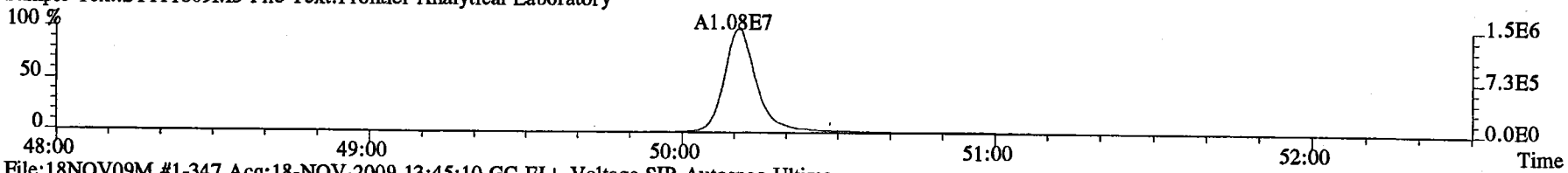
File:18NOV09M #1-541 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



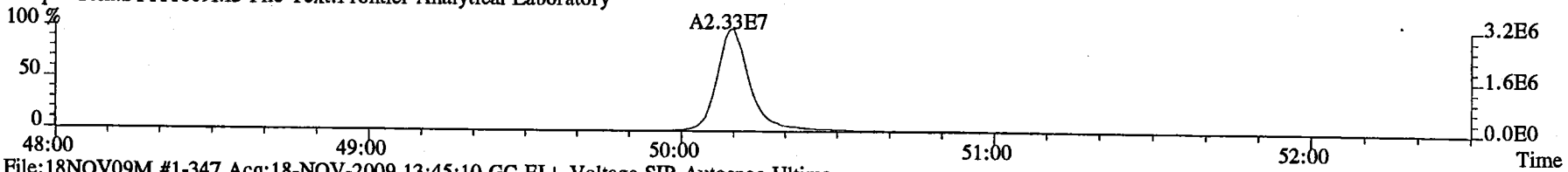
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



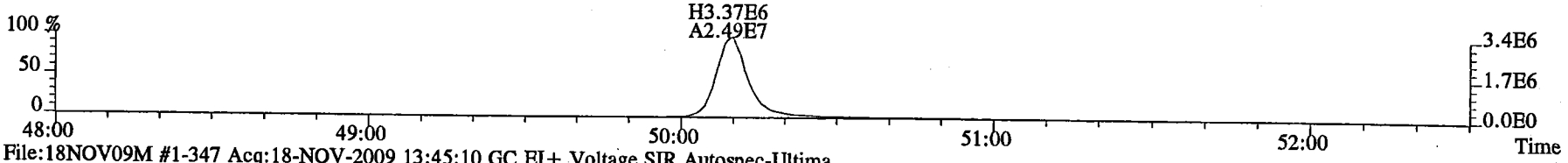
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



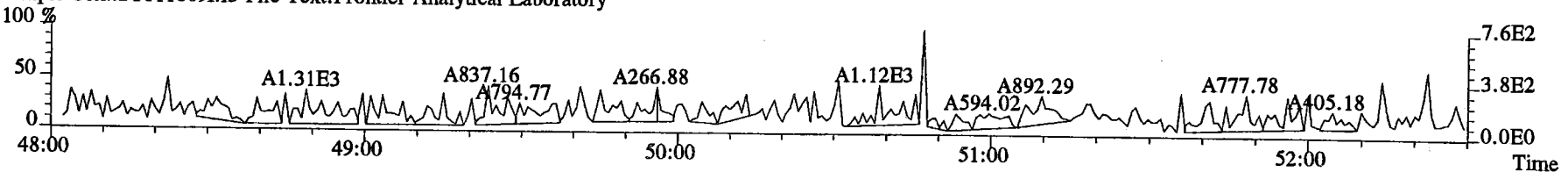
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



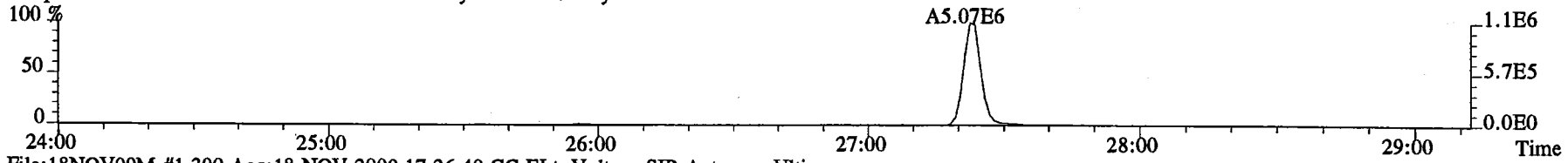
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



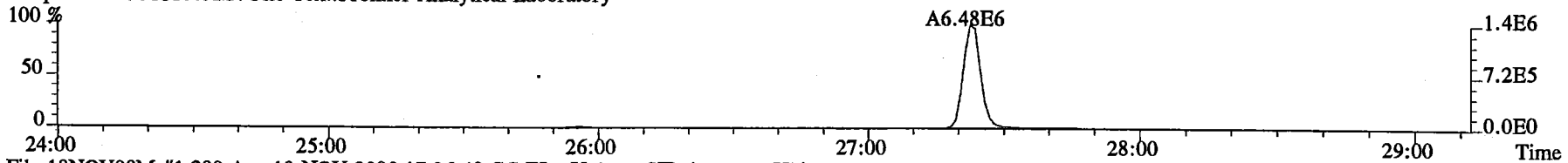
File:18NOV09M #1-347 Acq:18-NOV-2009 13:45:10 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M3 File Text:Frontier Analytical Laboratory



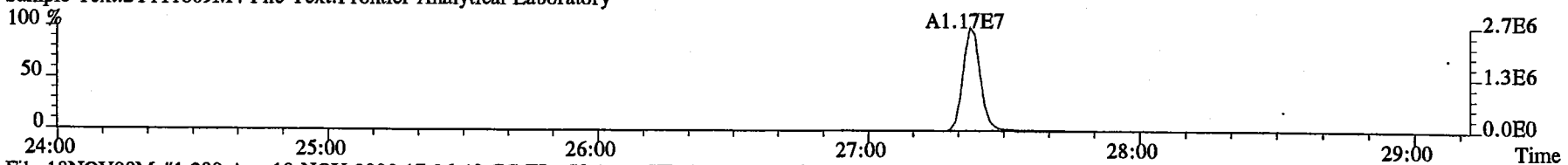
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



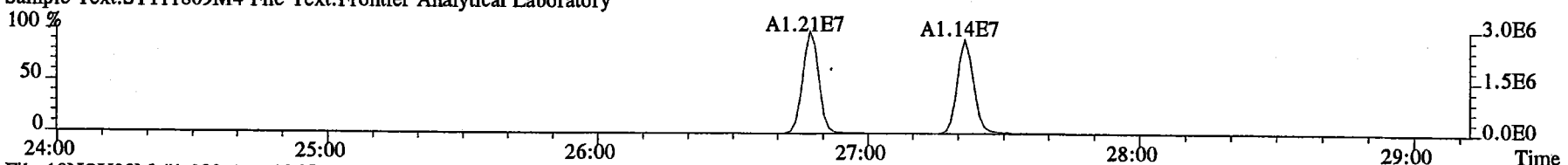
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



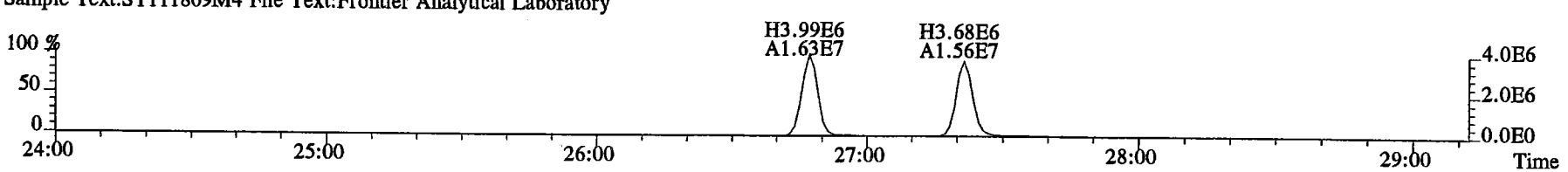
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



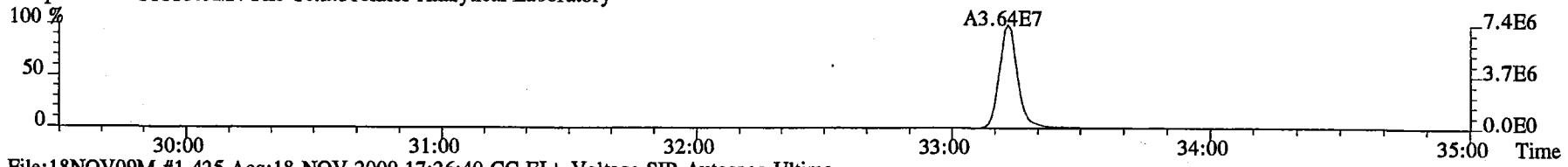
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



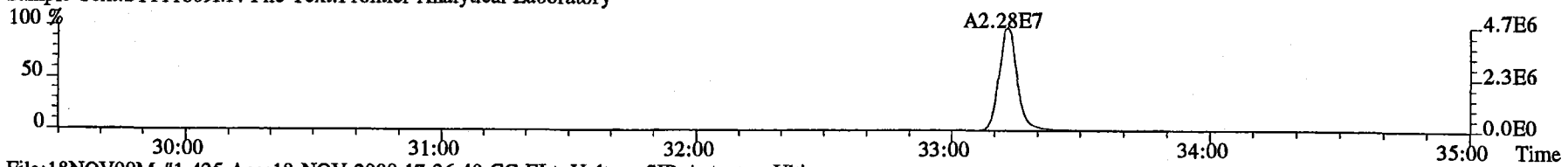
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



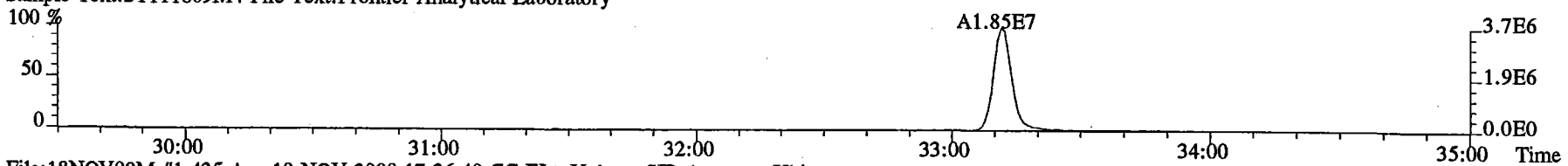
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



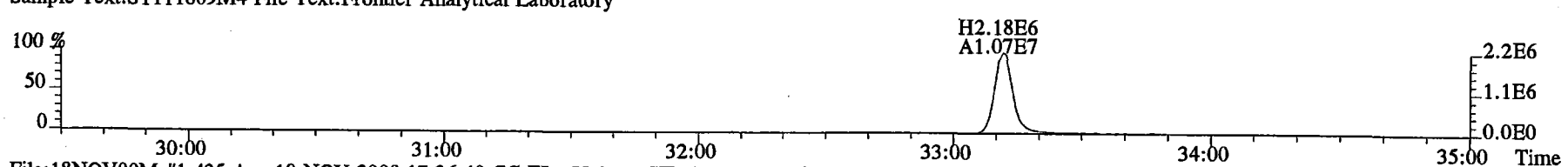
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



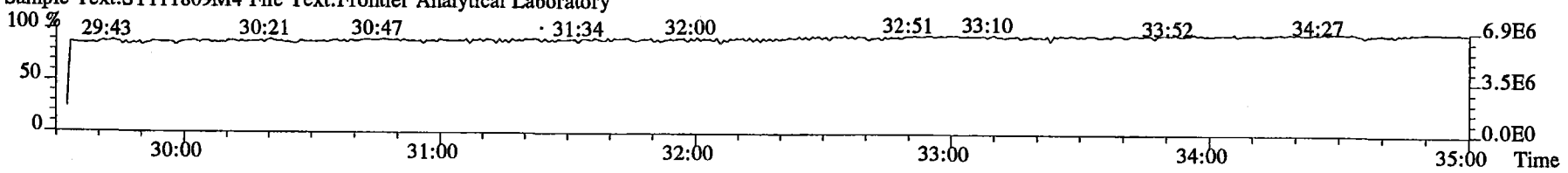
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



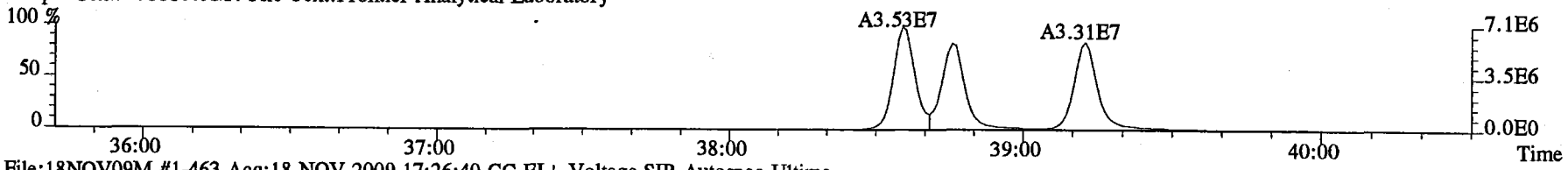
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



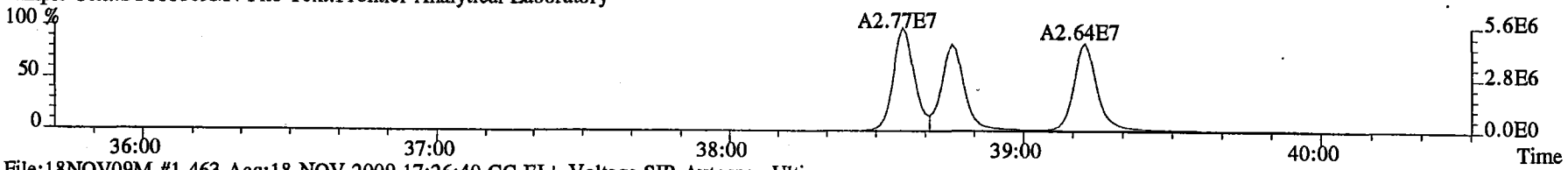
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



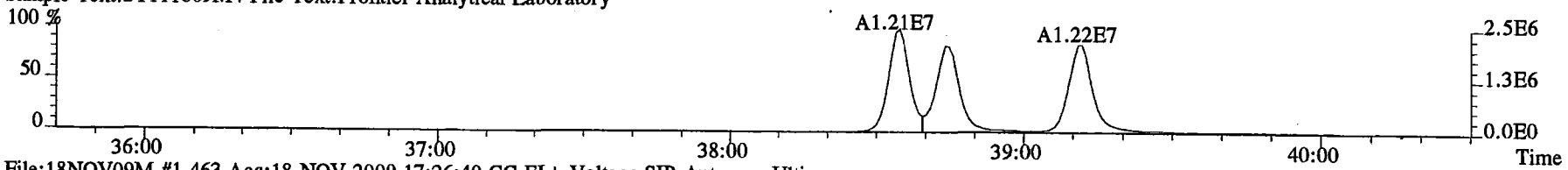
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



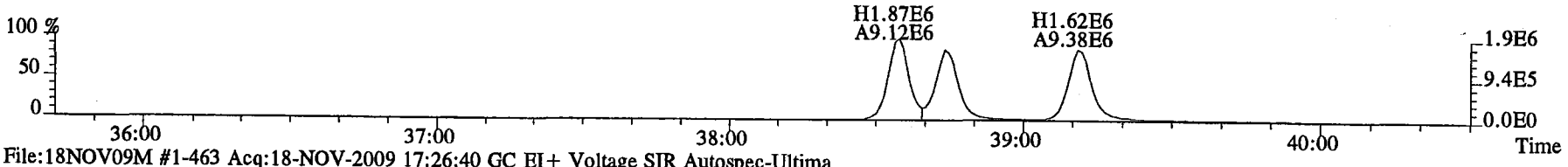
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



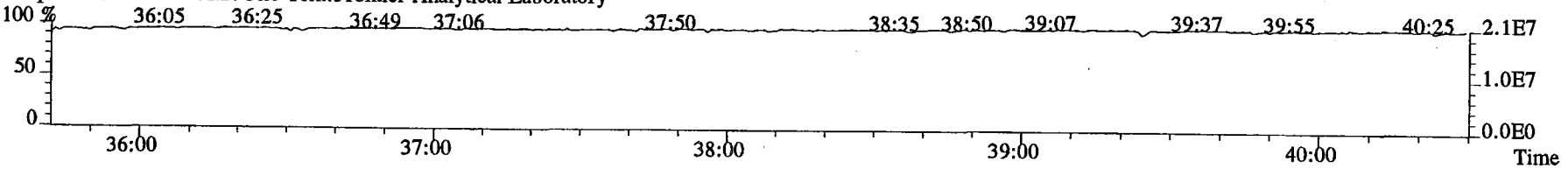
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



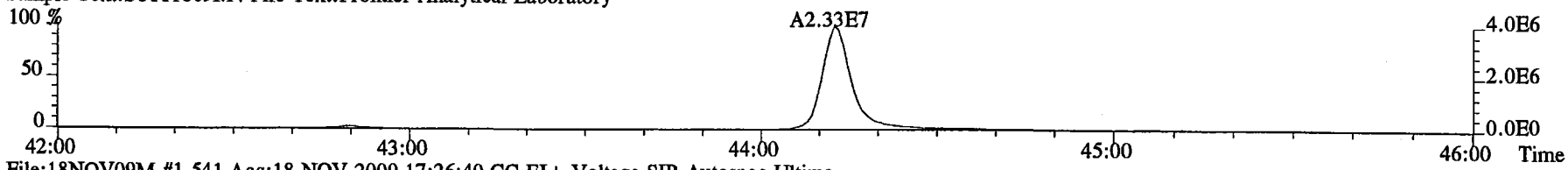
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



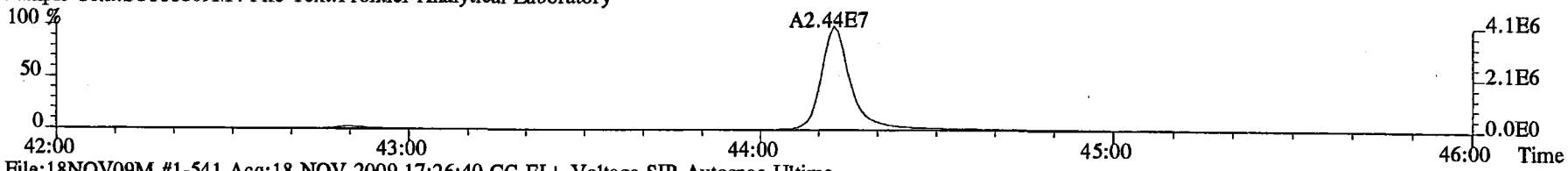
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



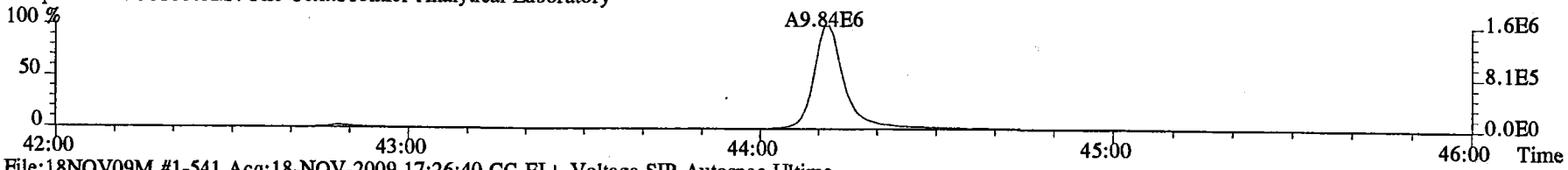
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



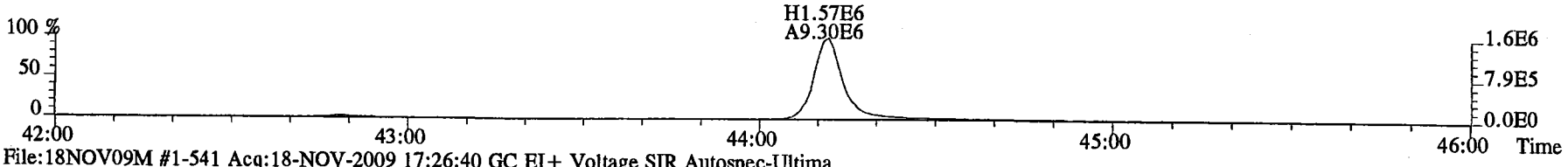
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



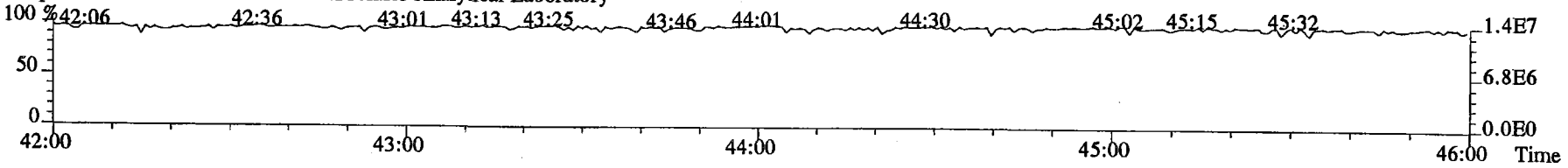
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



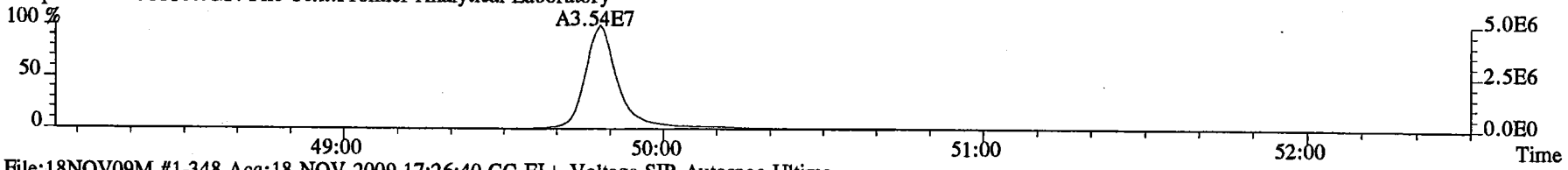
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



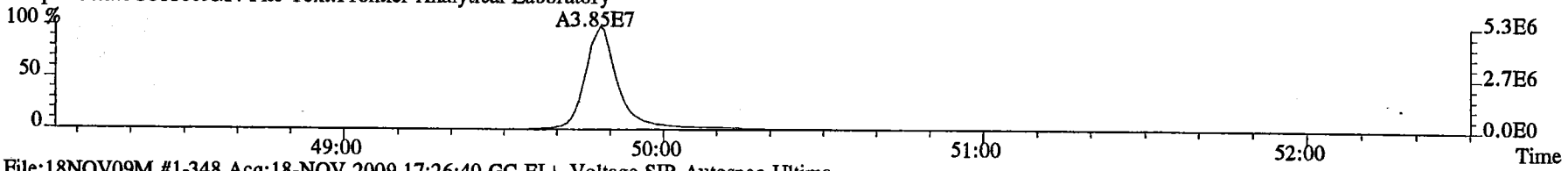
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



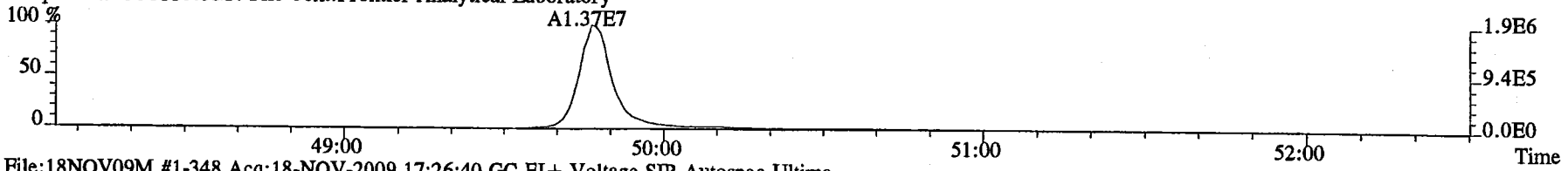
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



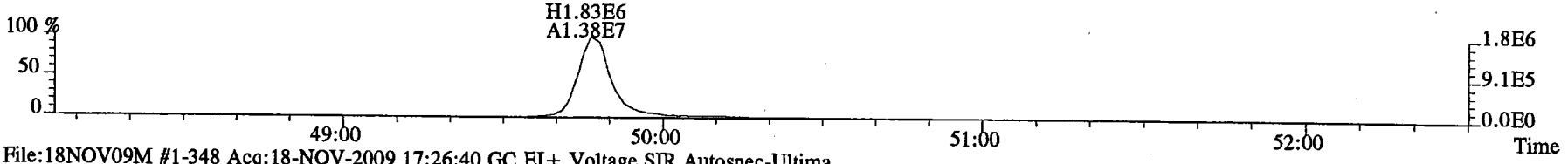
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



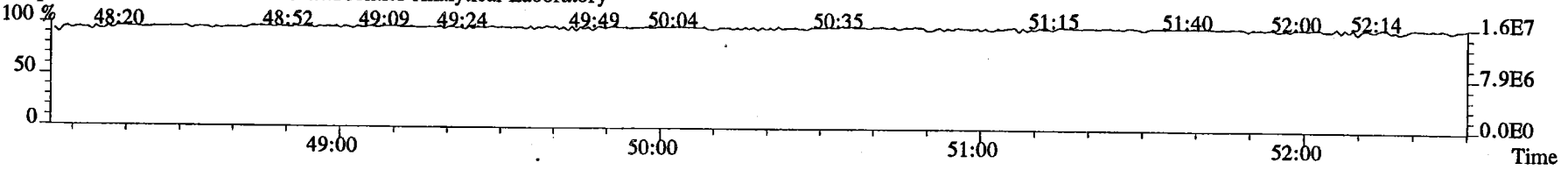
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



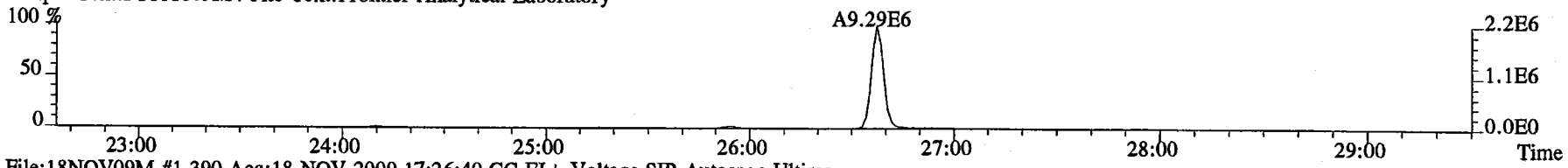
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



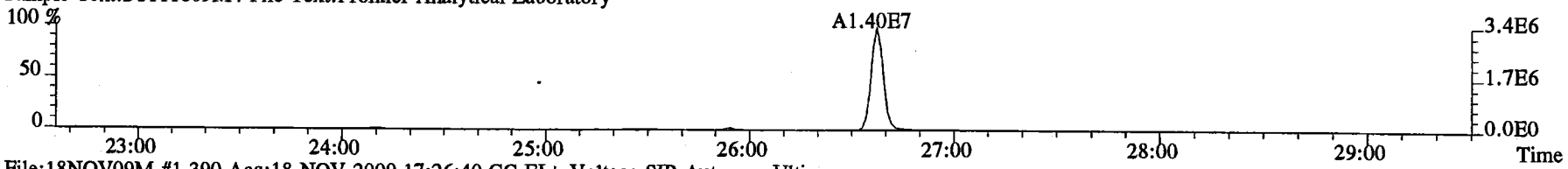
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



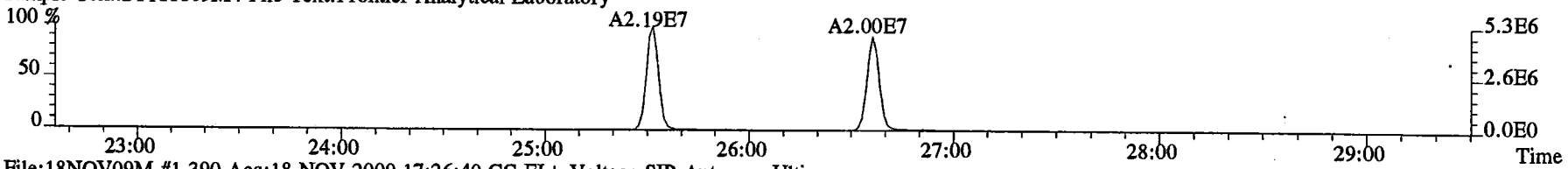
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



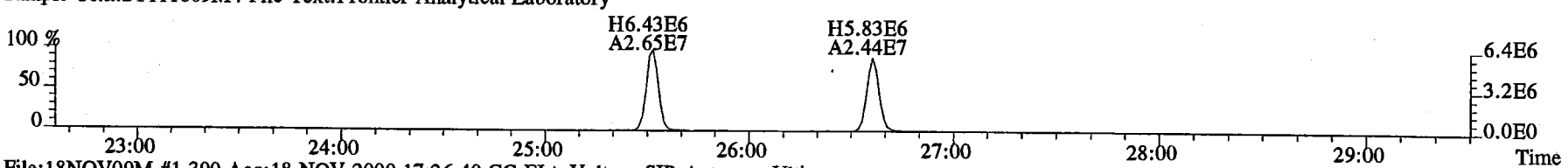
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



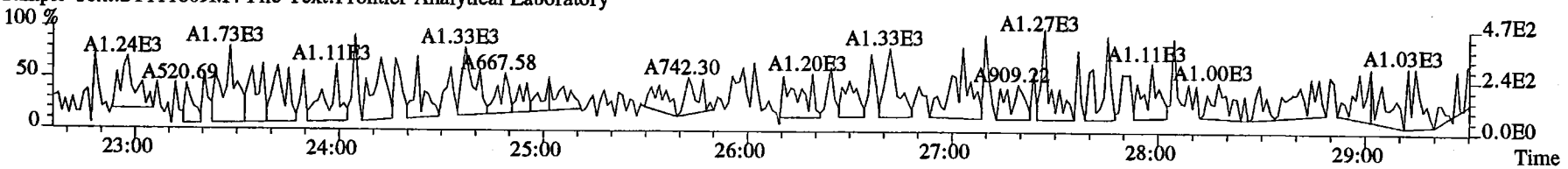
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



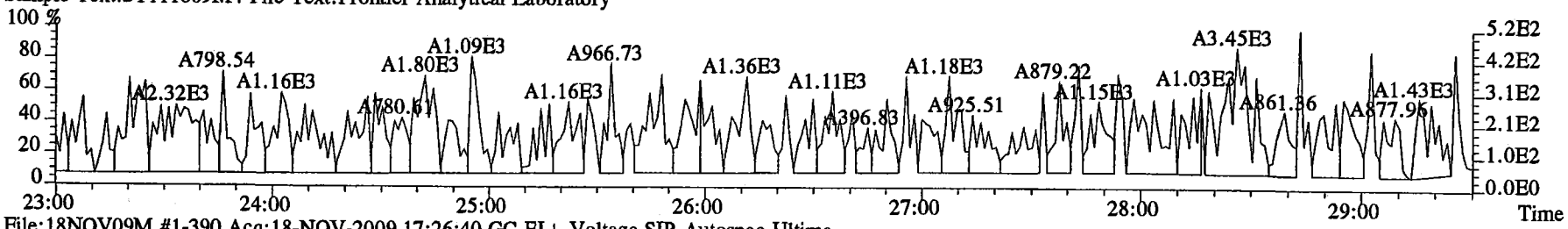
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



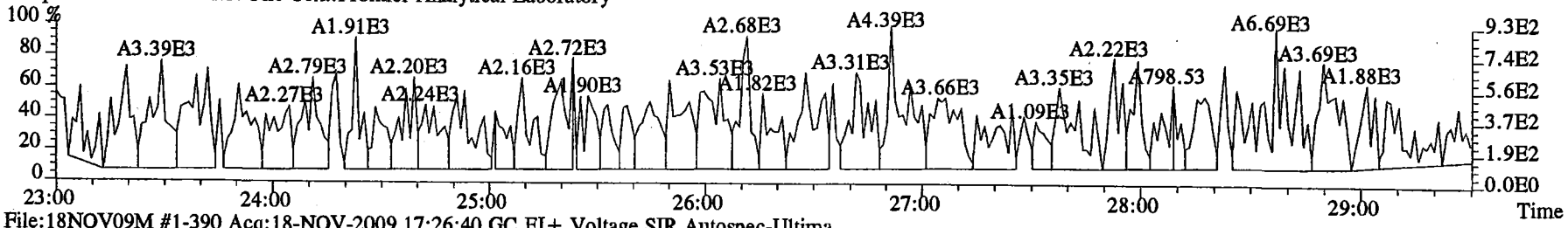
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



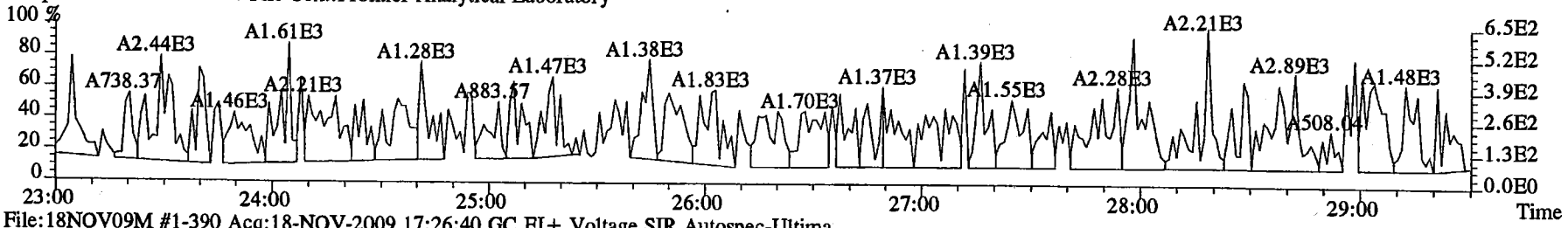
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



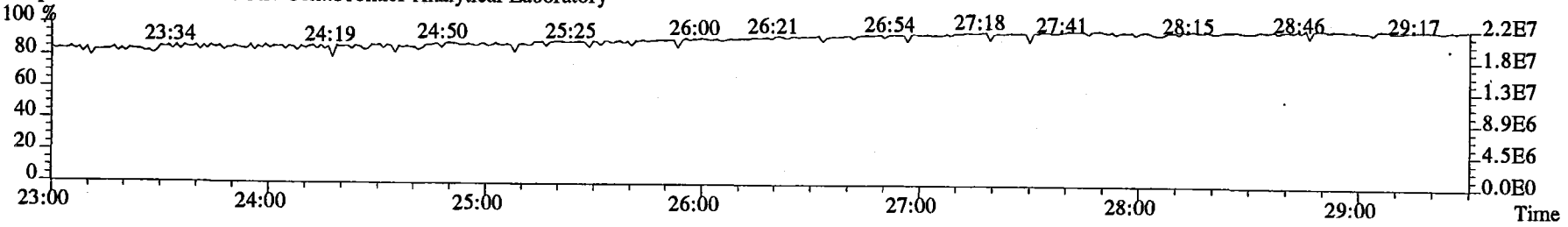
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



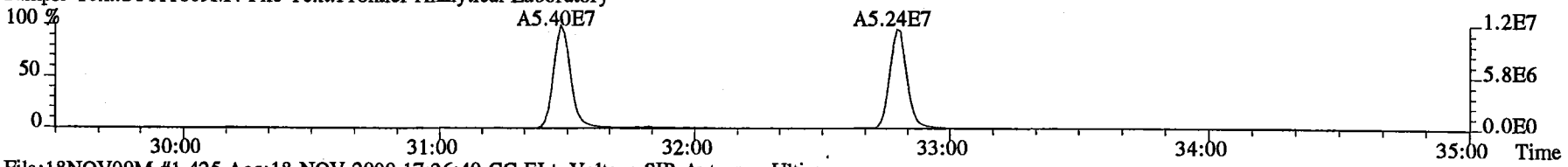
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



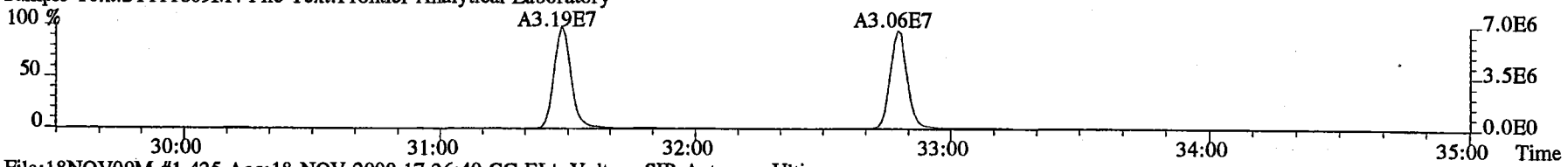
File:18NOV09M #1-390 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



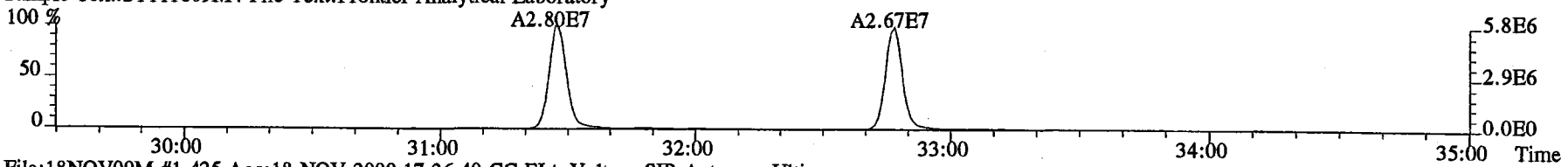
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



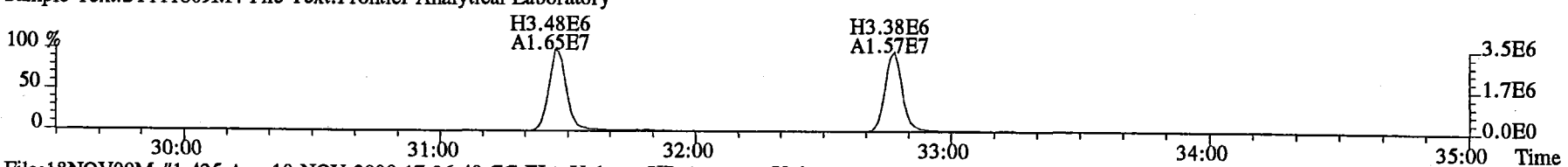
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



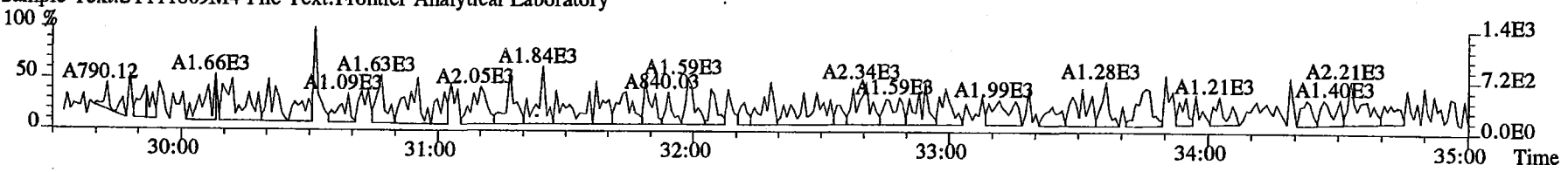
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



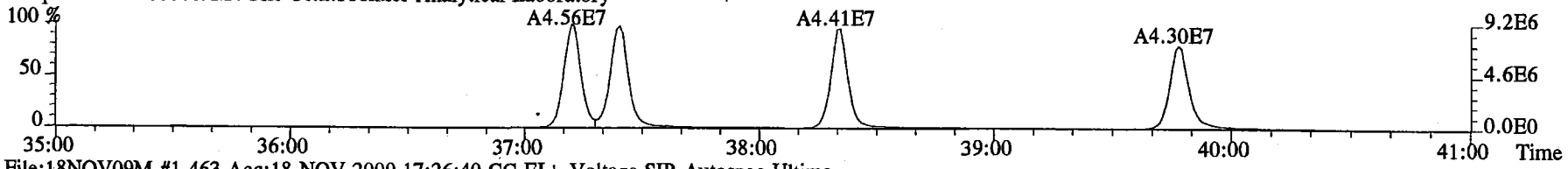
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



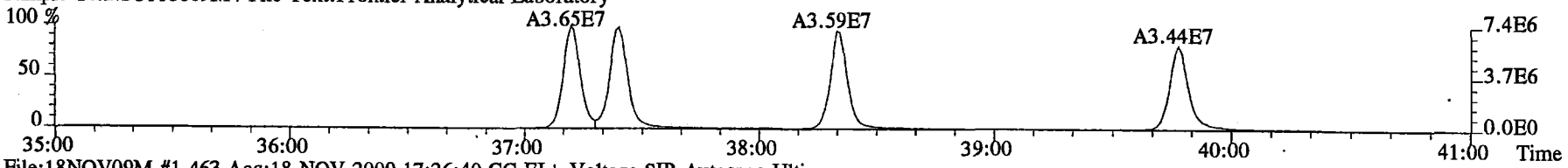
File:18NOV09M #1-425 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



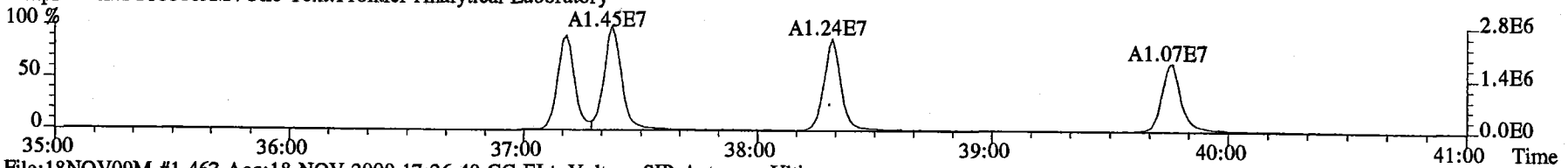
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



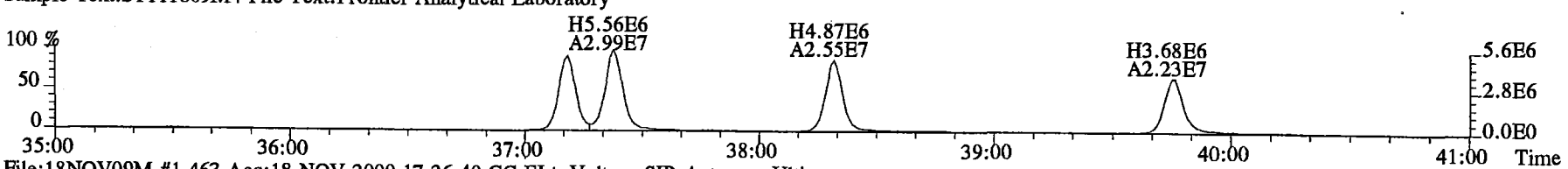
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



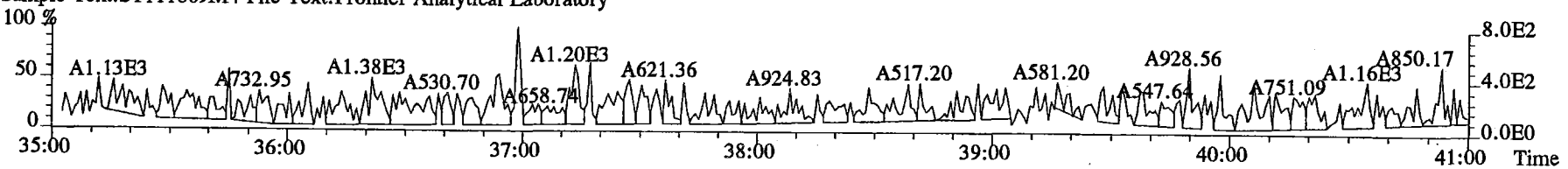
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



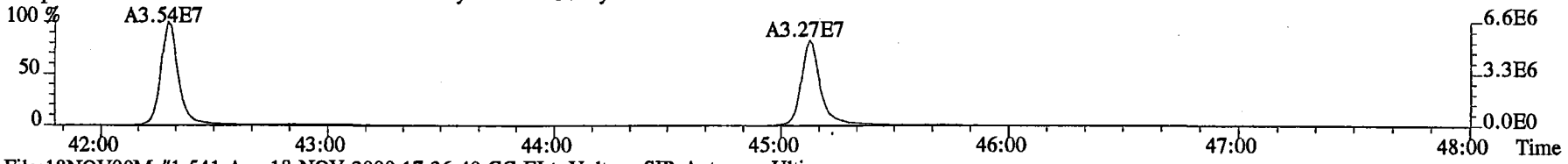
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



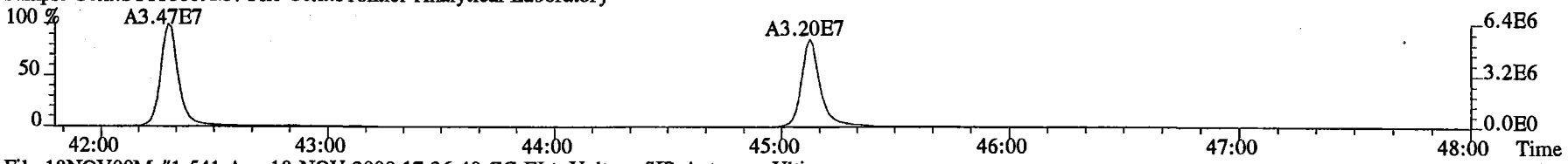
File:18NOV09M #1-463 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



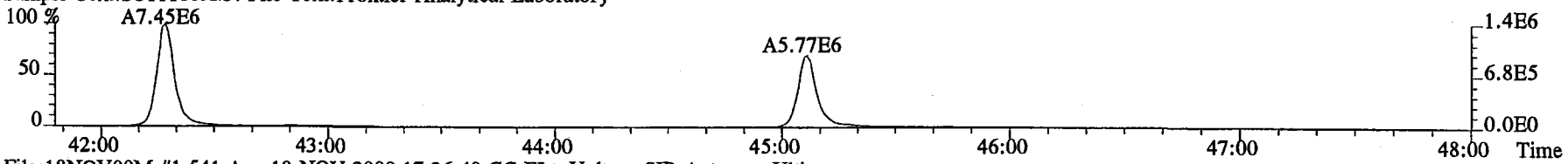
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



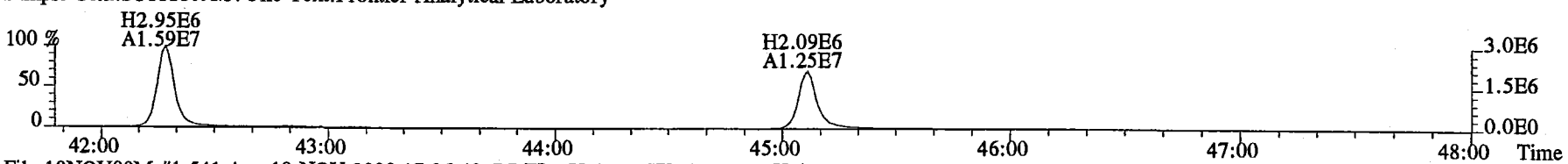
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



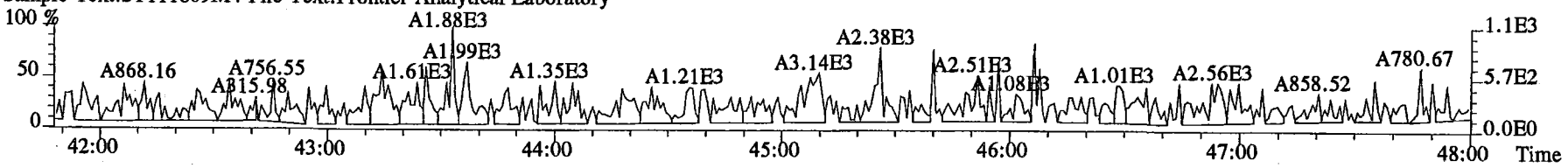
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



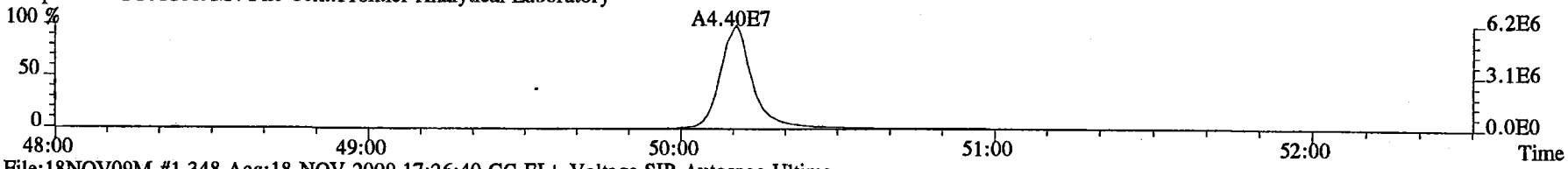
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



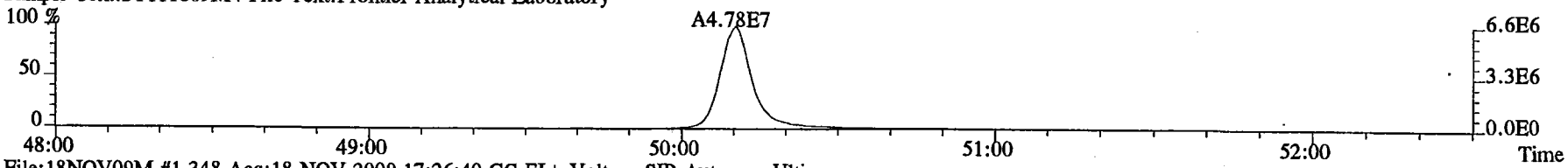
File:18NOV09M #1-541 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



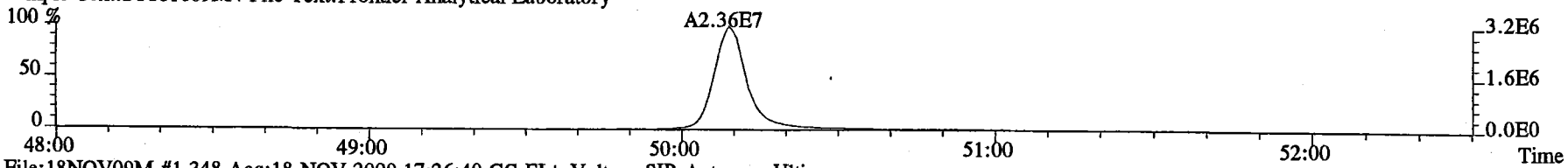
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



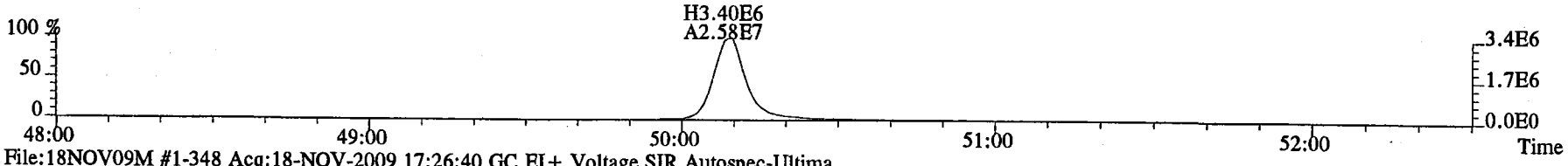
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



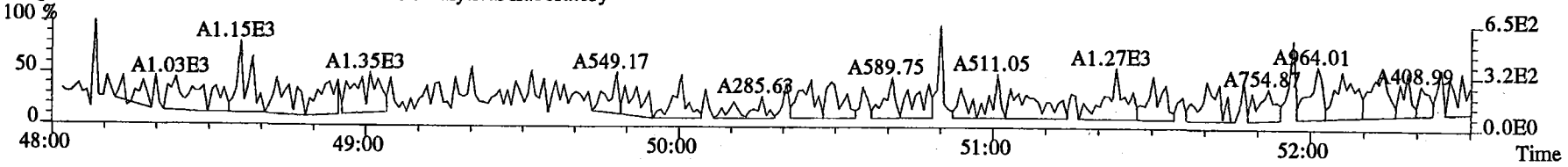
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



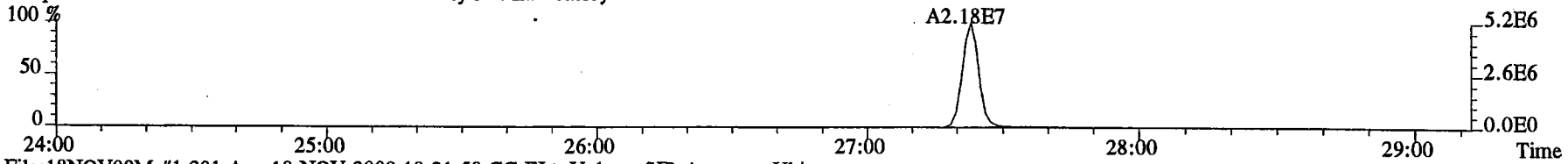
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



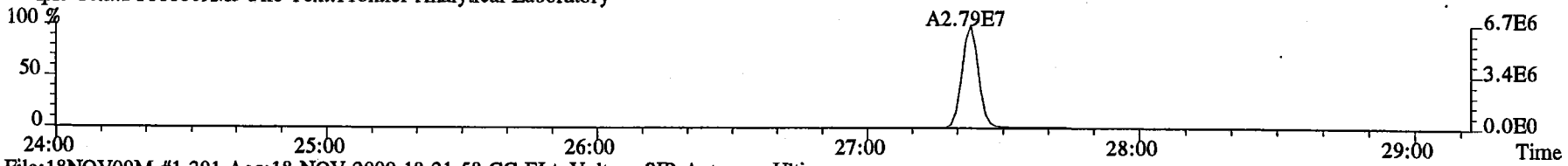
File:18NOV09M #1-348 Acq:18-NOV-2009 17:26:40 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M4 File Text:Frontier Analytical Laboratory



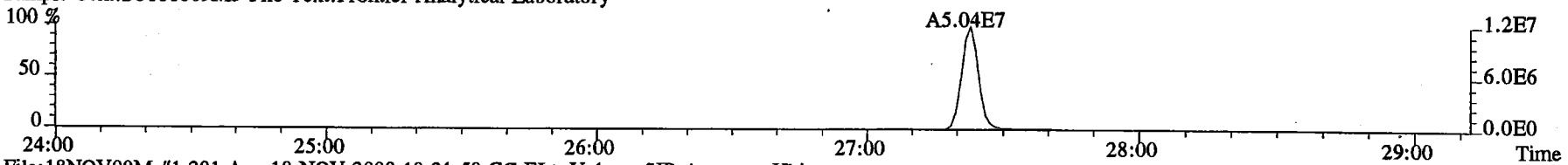
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



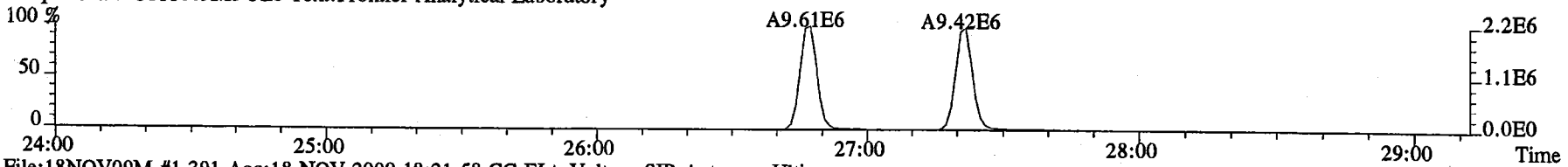
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



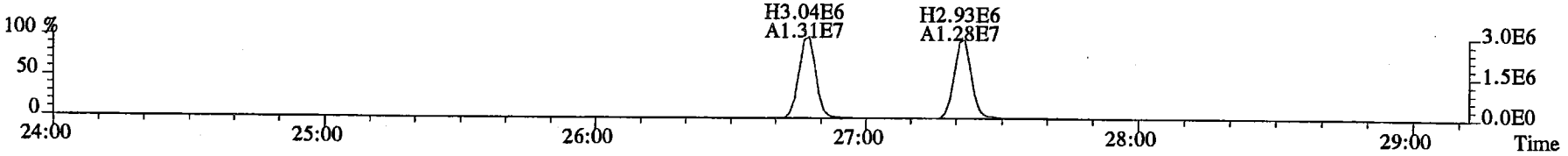
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



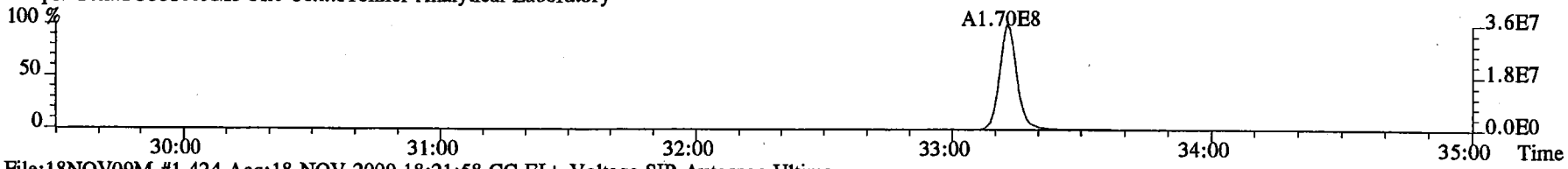
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



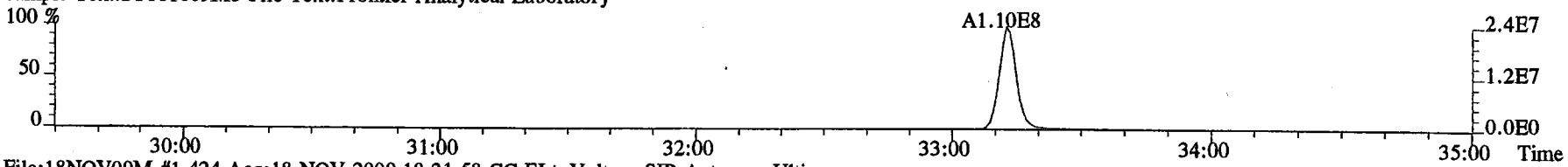
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



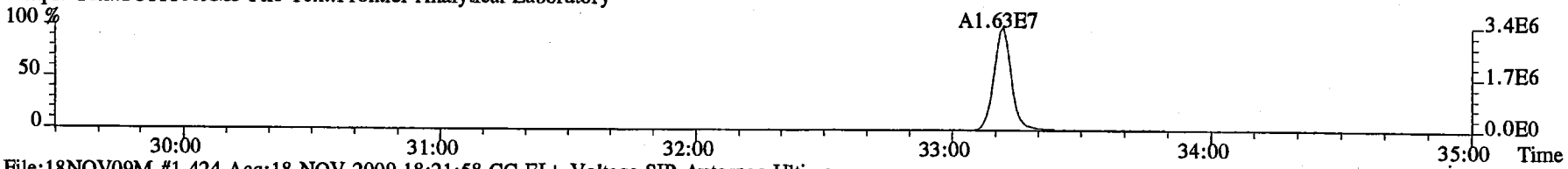
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



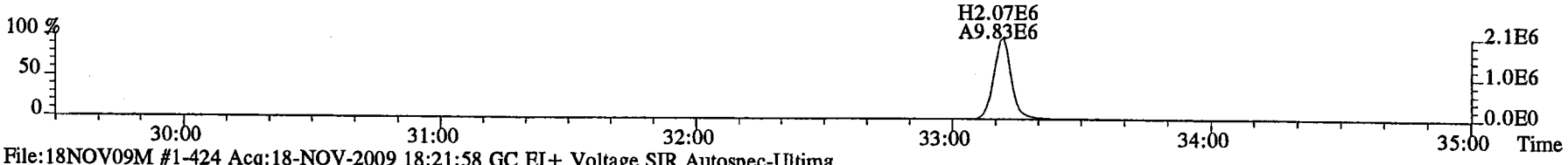
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



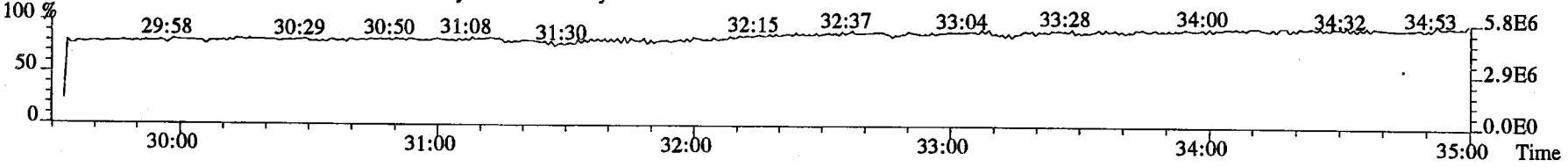
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



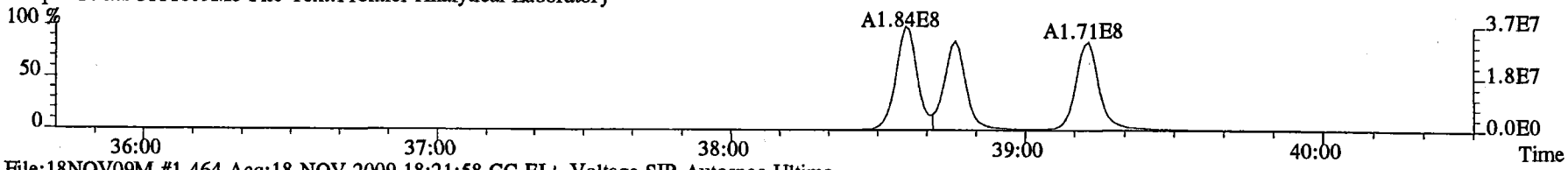
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



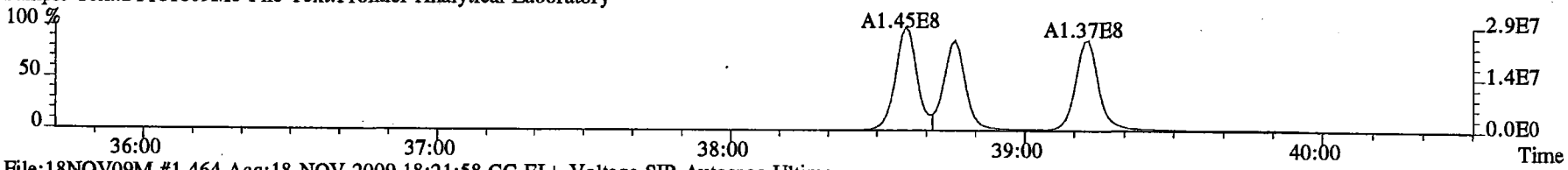
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



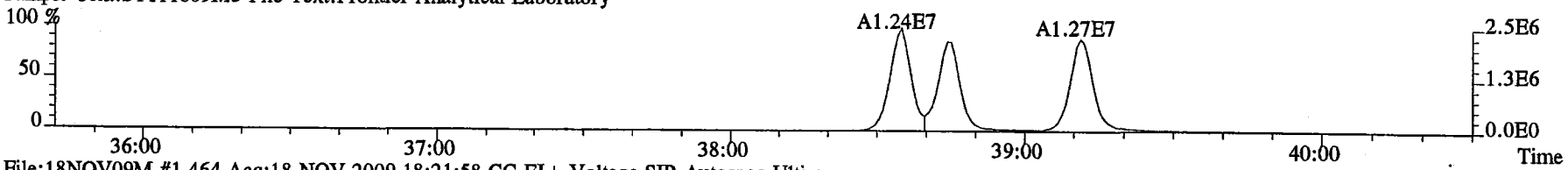
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



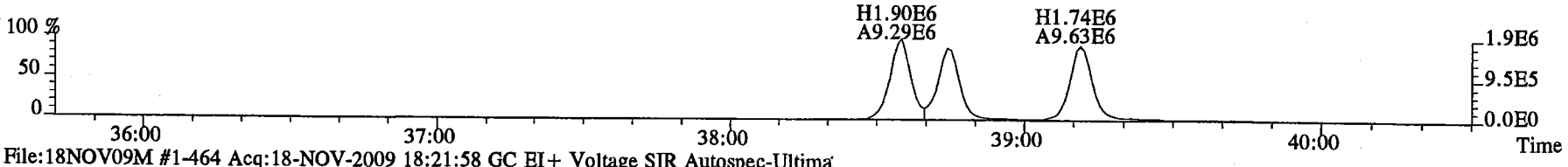
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



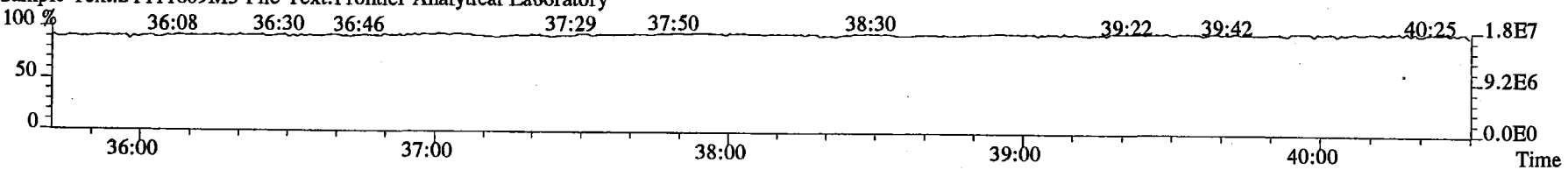
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



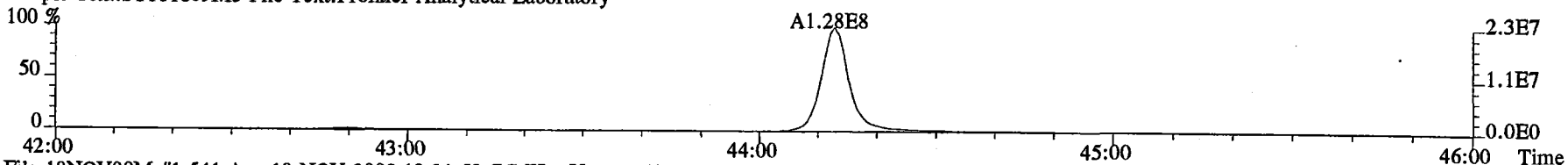
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



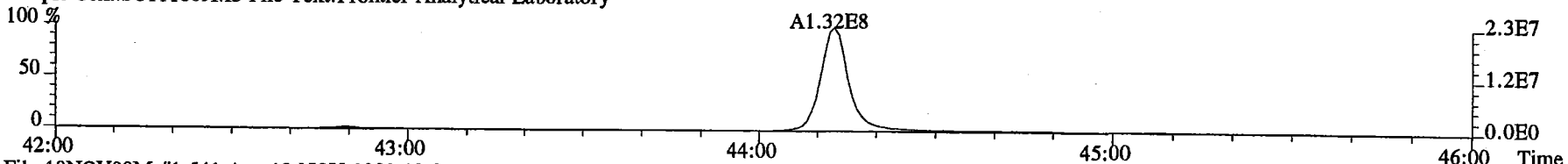
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



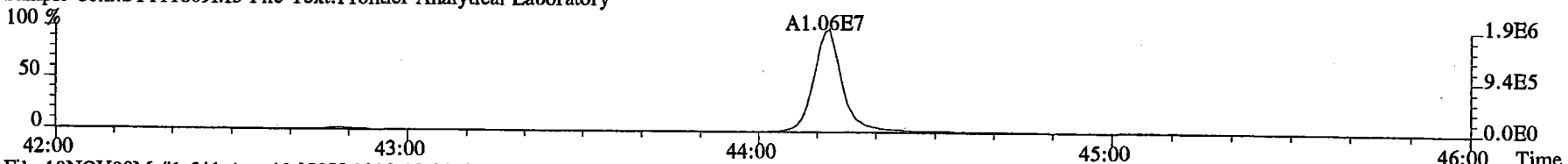
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



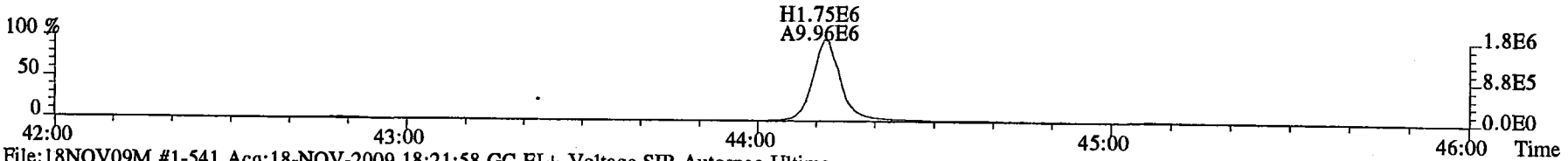
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



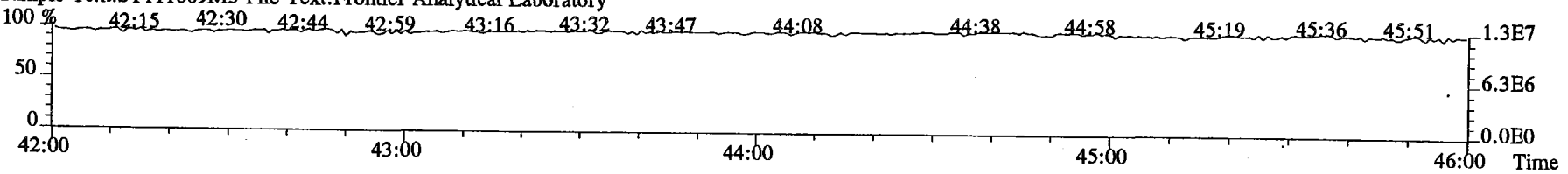
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



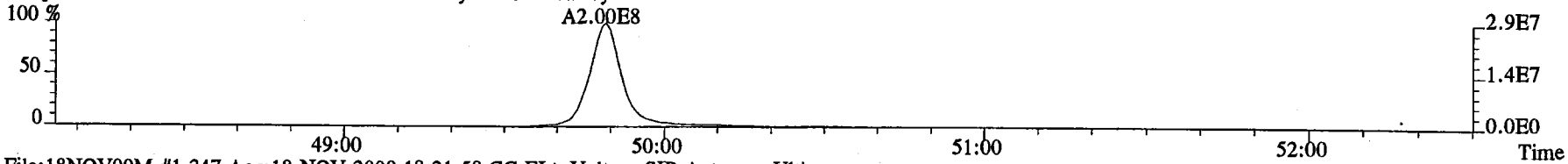
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



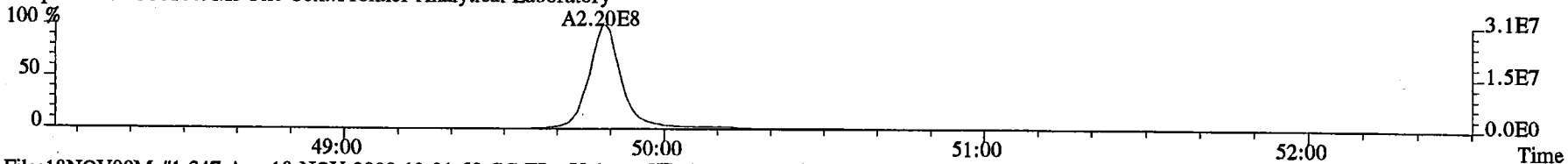
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



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

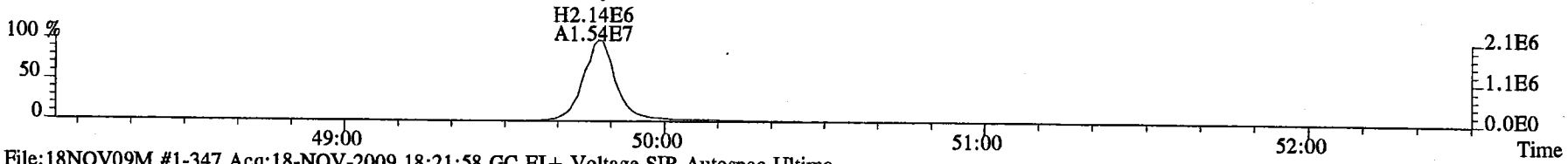


File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

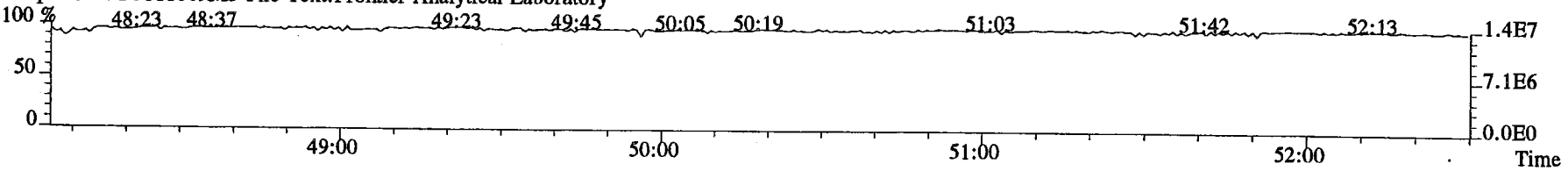


File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

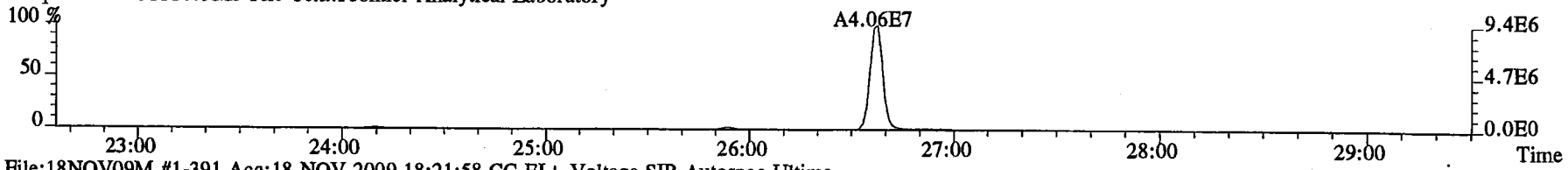
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



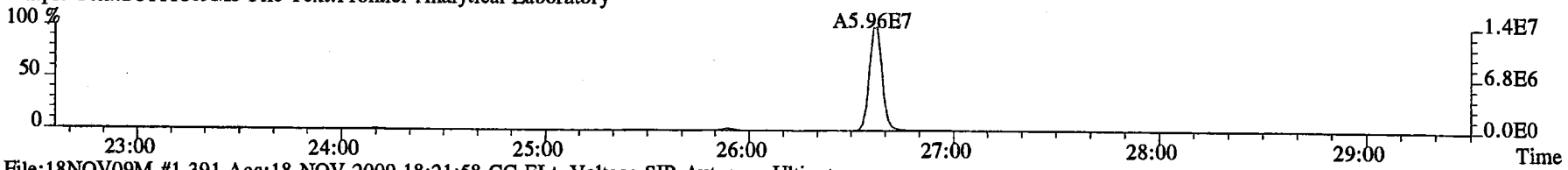
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



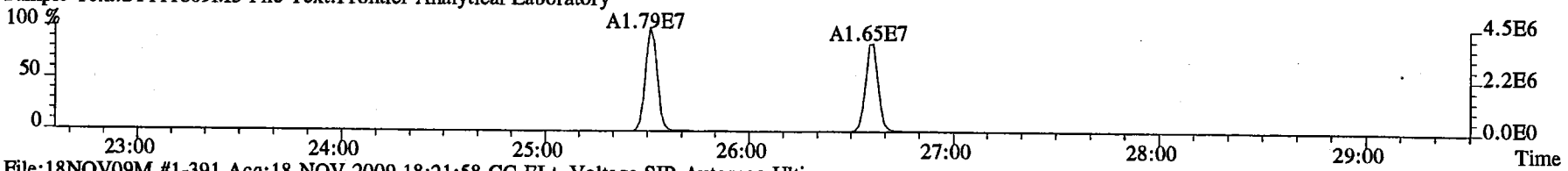
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



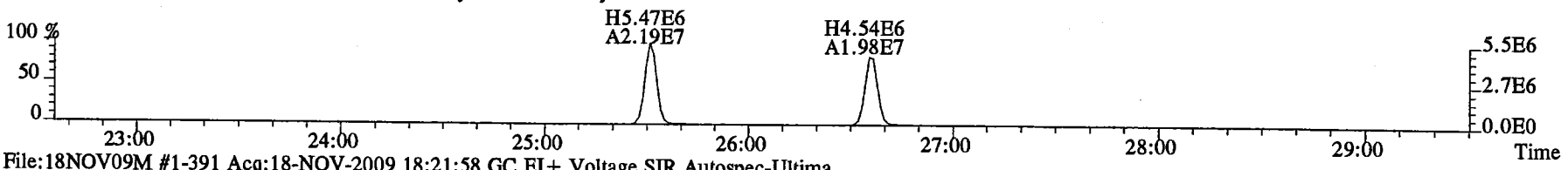
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



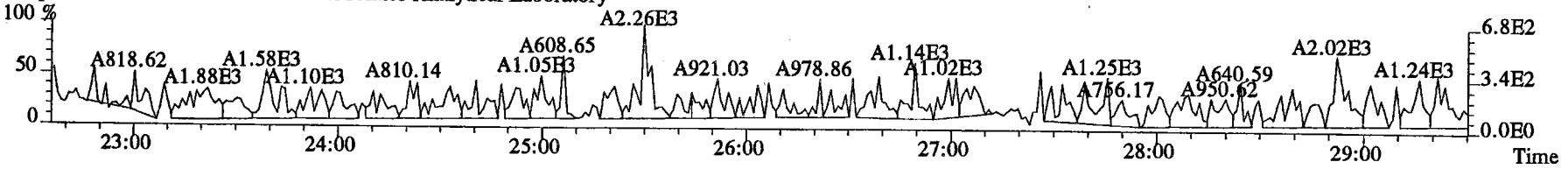
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



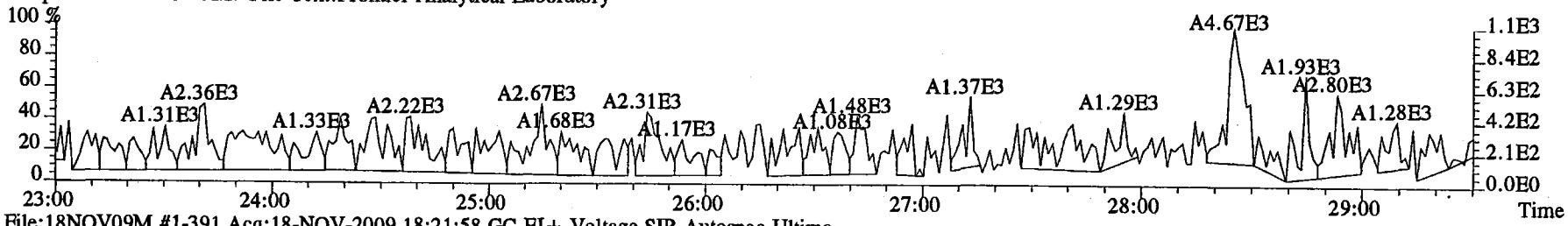
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



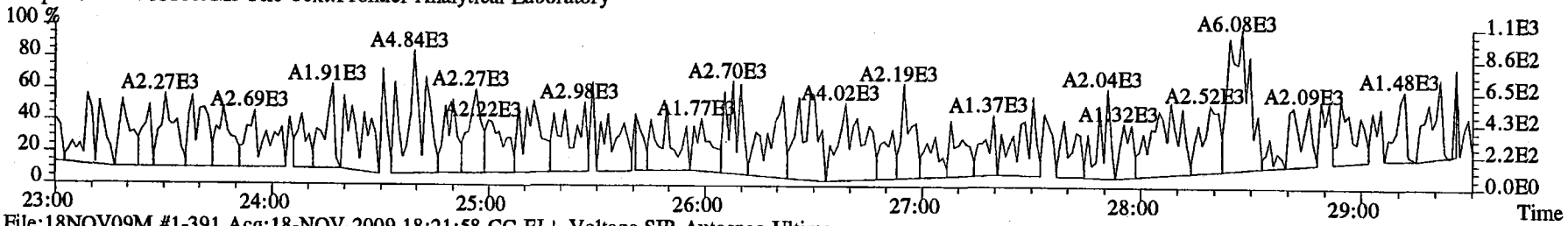
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



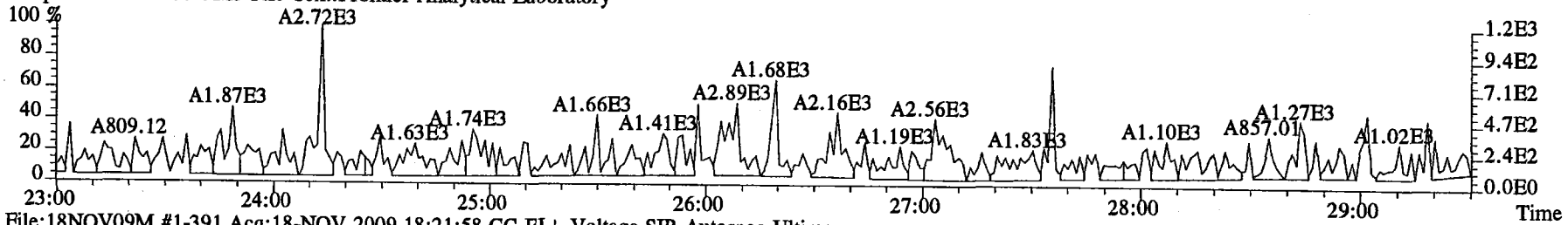
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



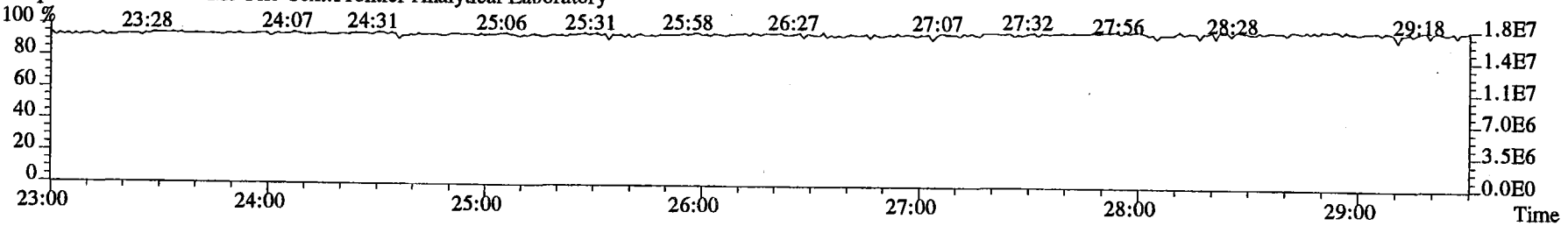
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



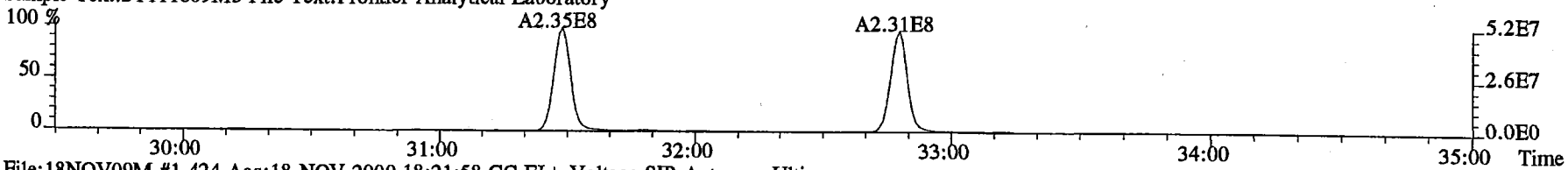
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



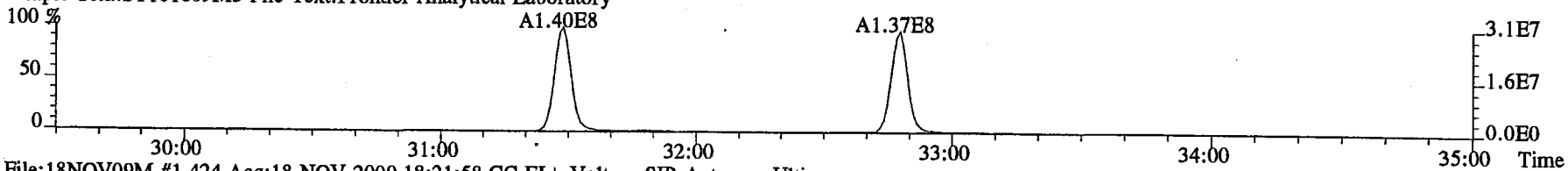
File:18NOV09M #1-391 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



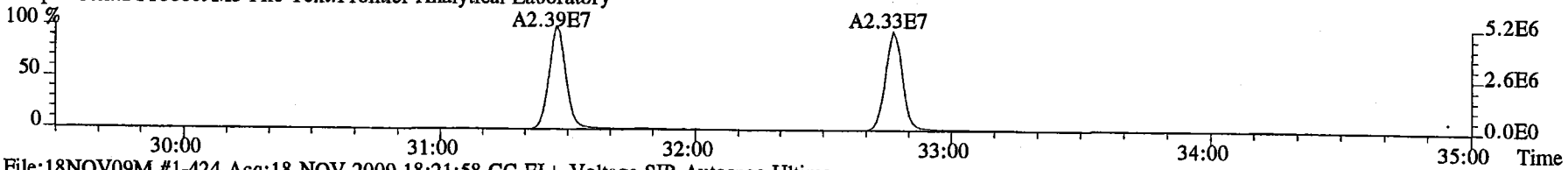
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



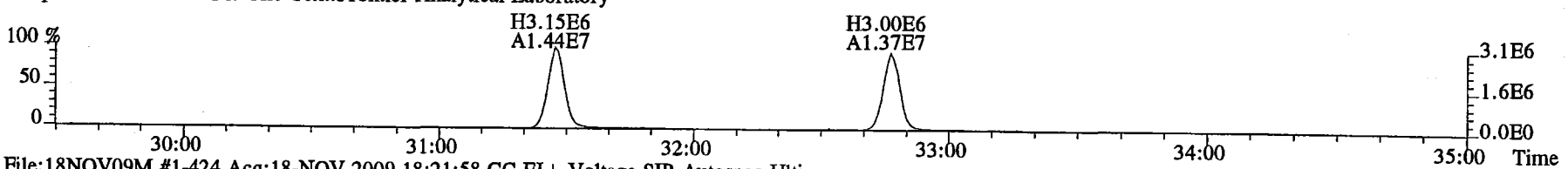
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



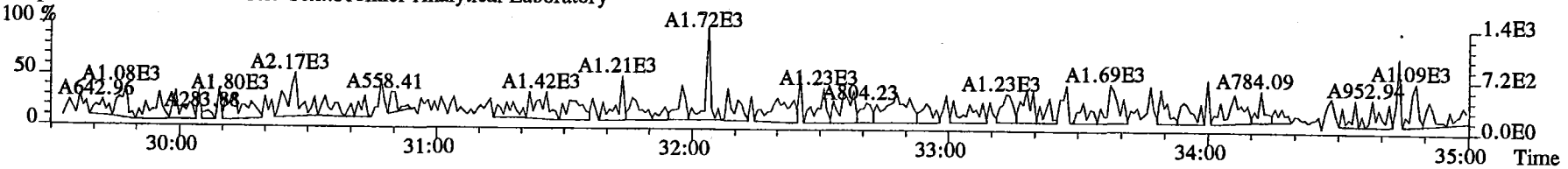
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



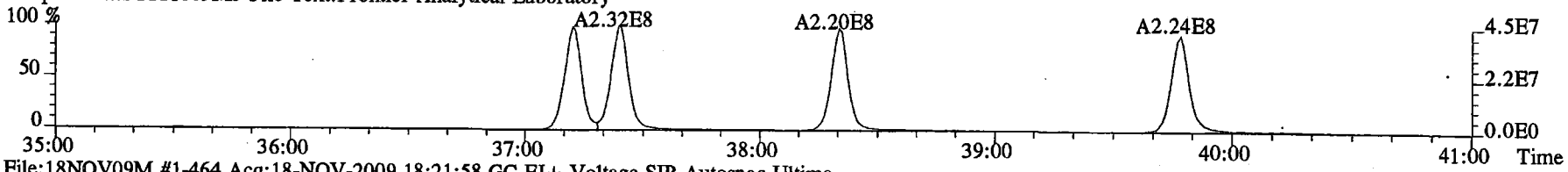
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



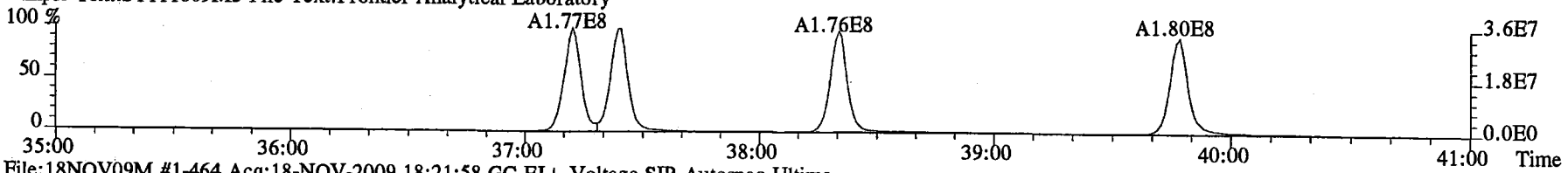
File:18NOV09M #1-424 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



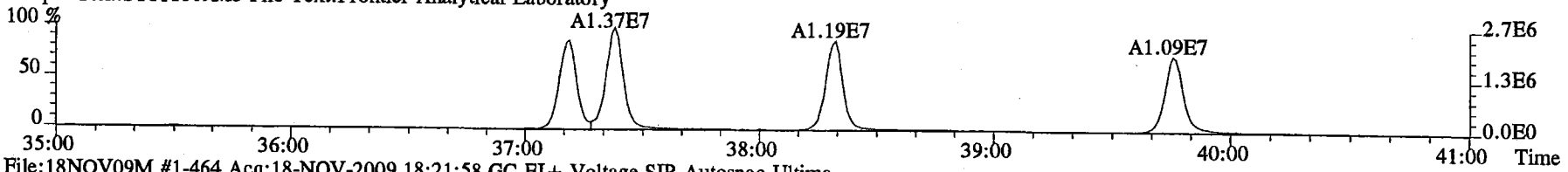
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



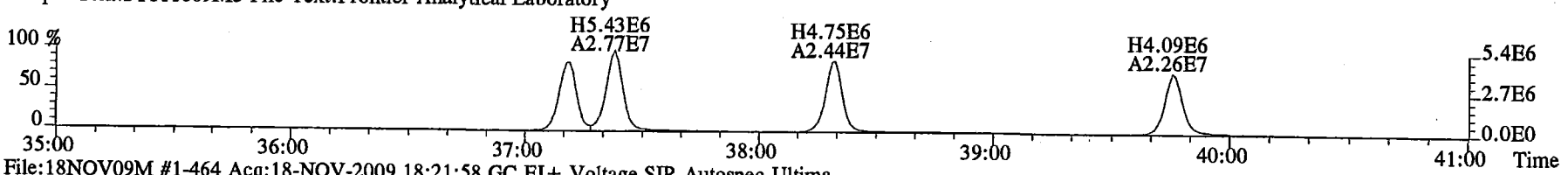
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



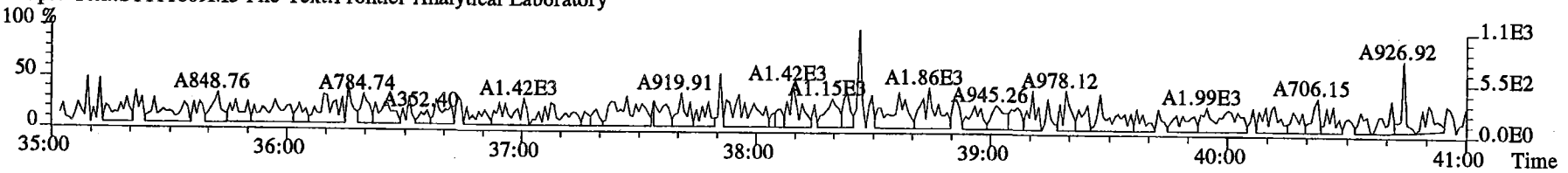
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



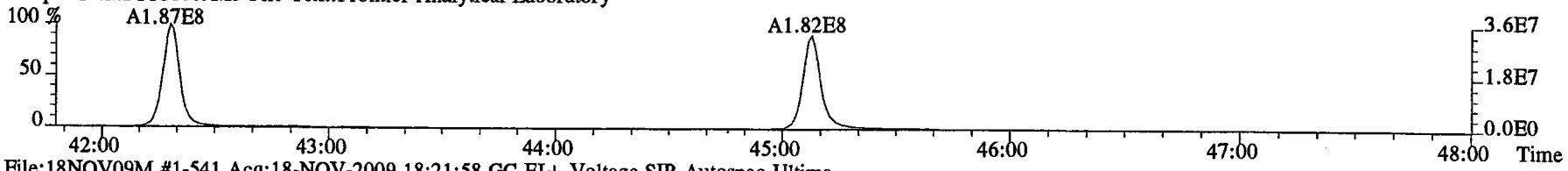
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



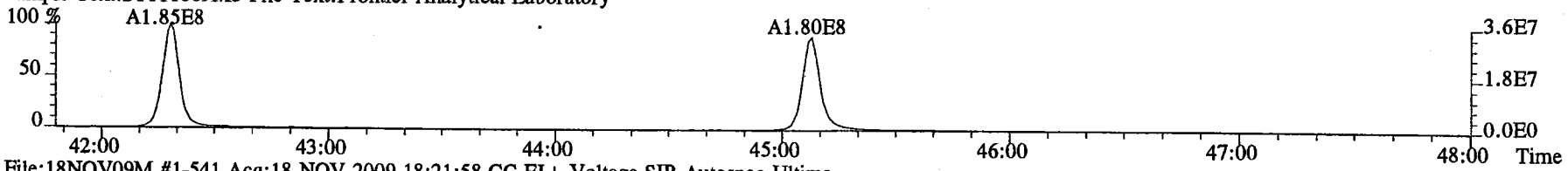
File:18NOV09M #1-464 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



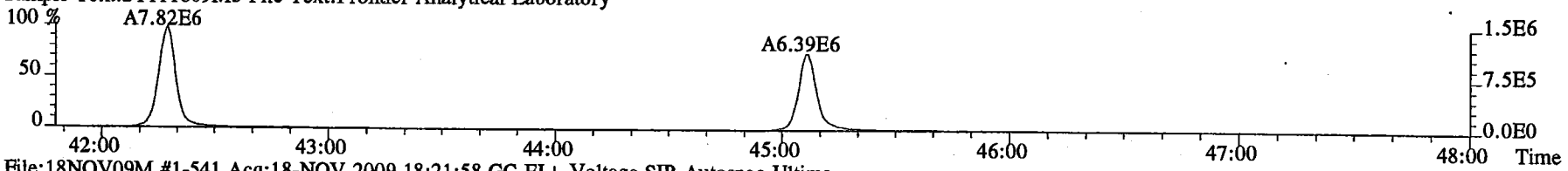
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



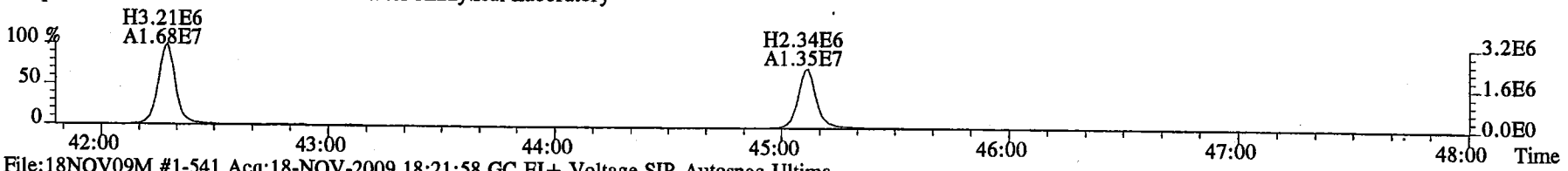
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



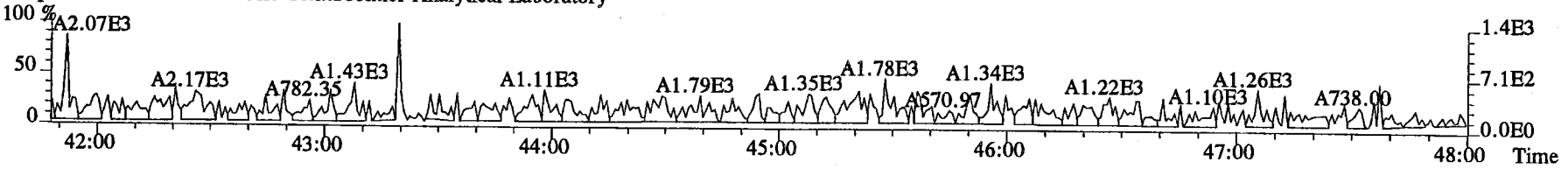
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



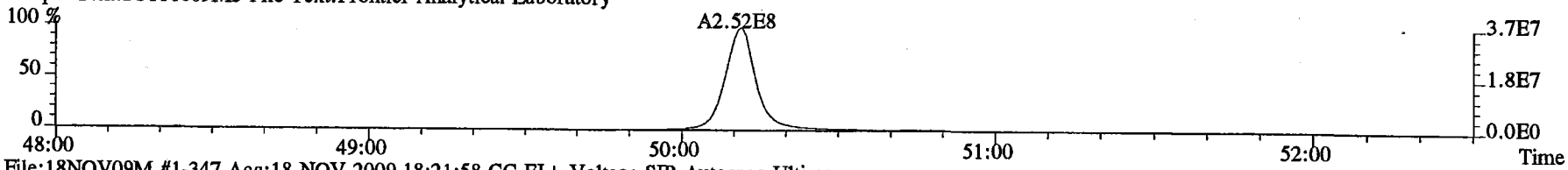
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



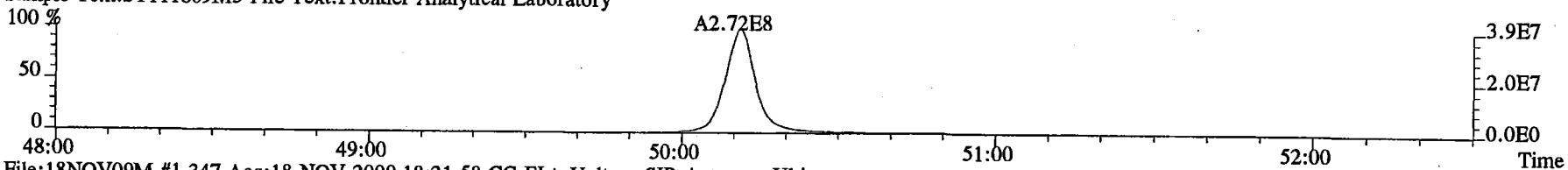
File:18NOV09M #1-541 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



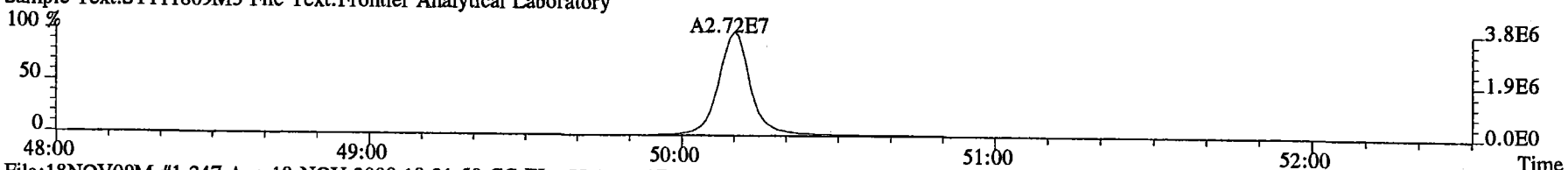
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



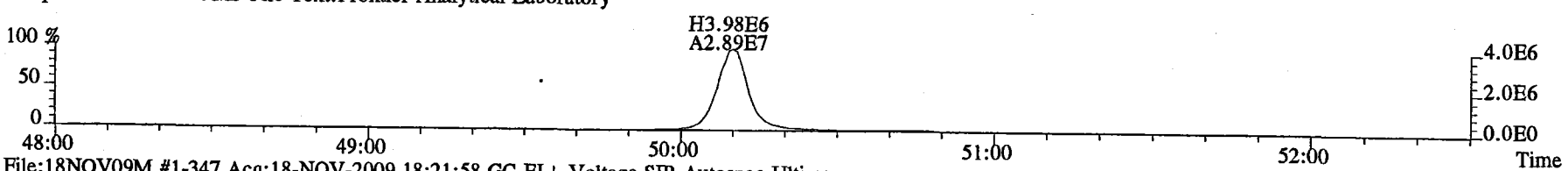
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



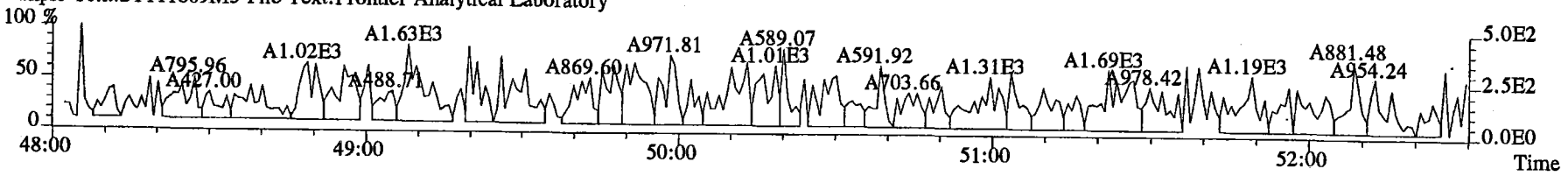
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory



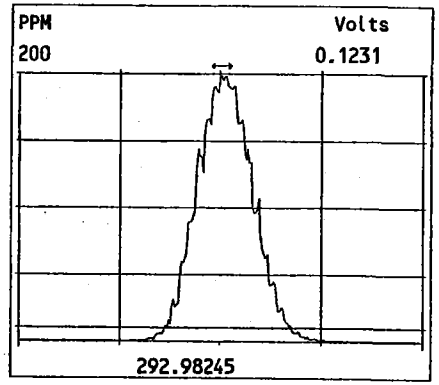
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

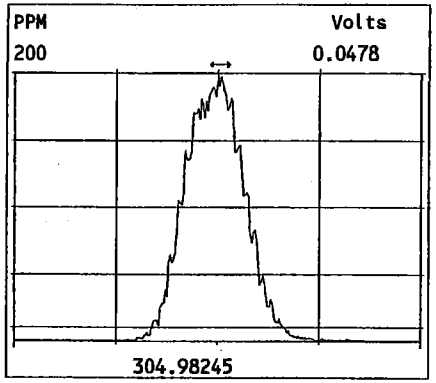


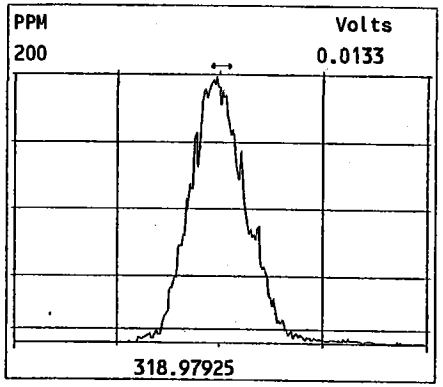
File:18NOV09M #1-347 Acq:18-NOV-2009 18:21:58 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST111809M5 File Text:Frontier Analytical Laboratory

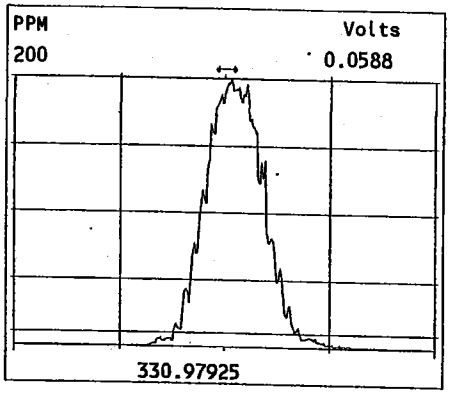


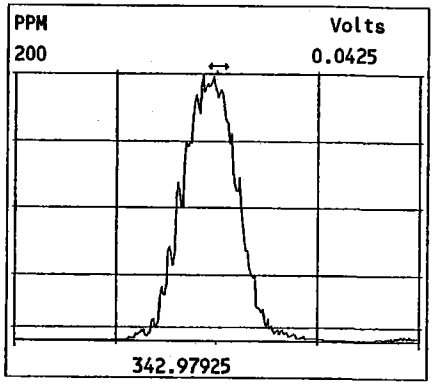
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

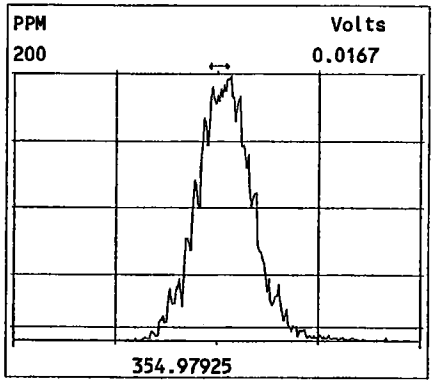


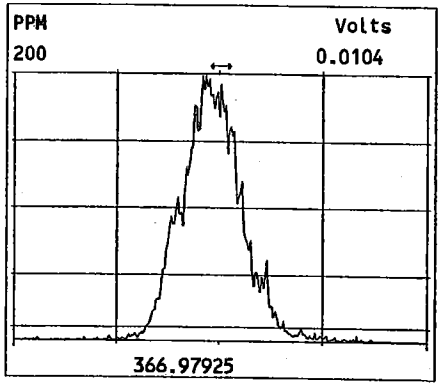


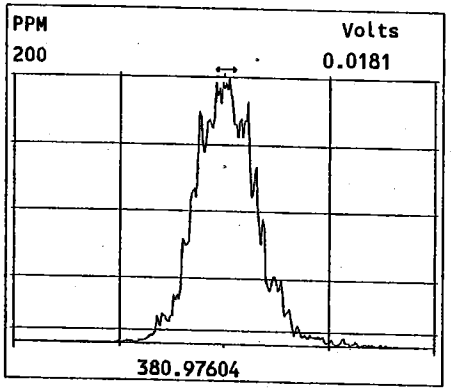


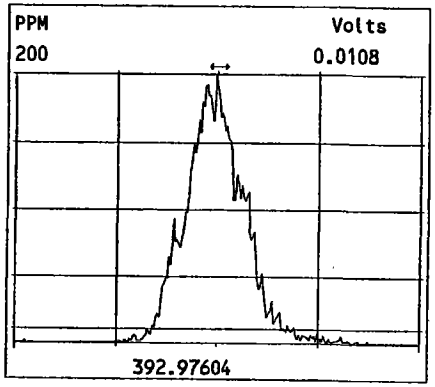


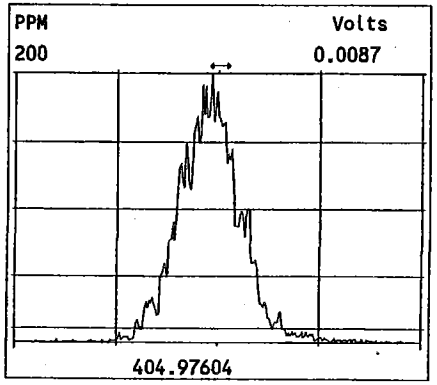


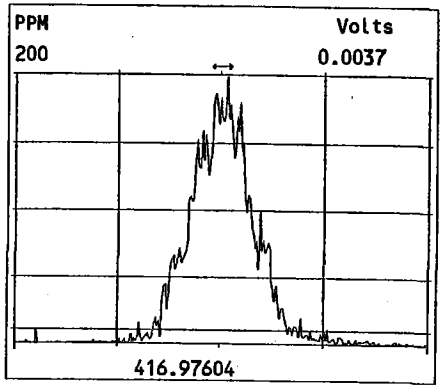




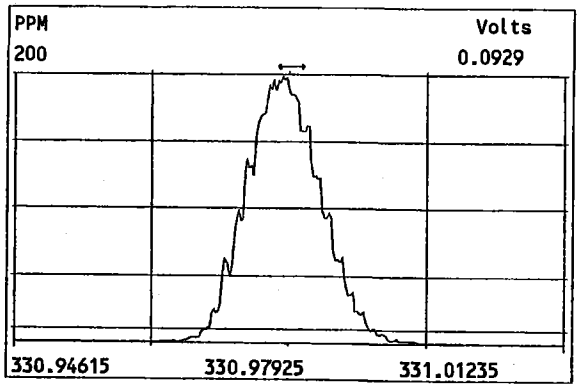


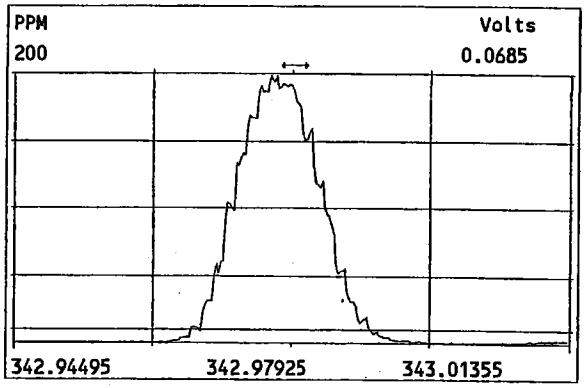


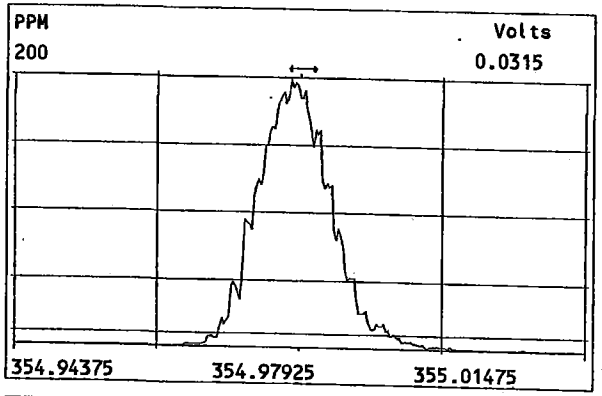


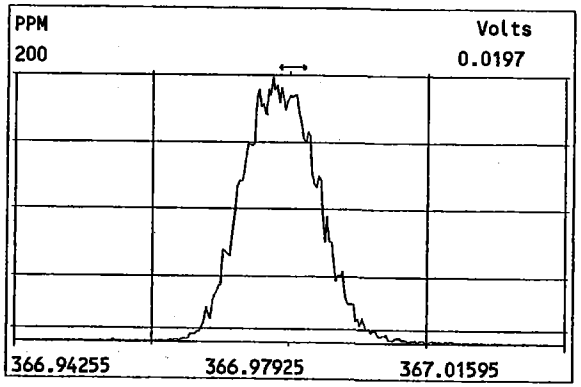


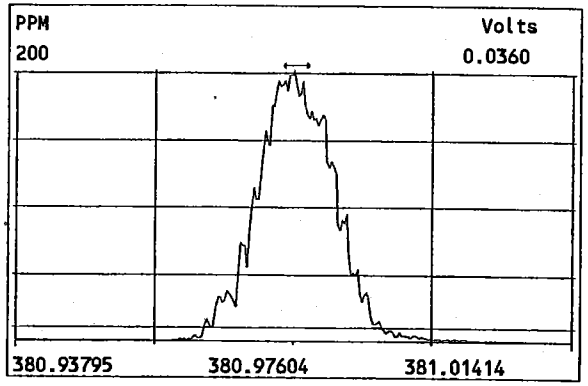
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

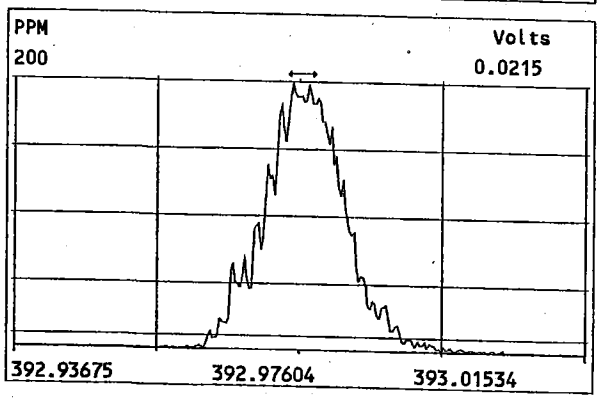


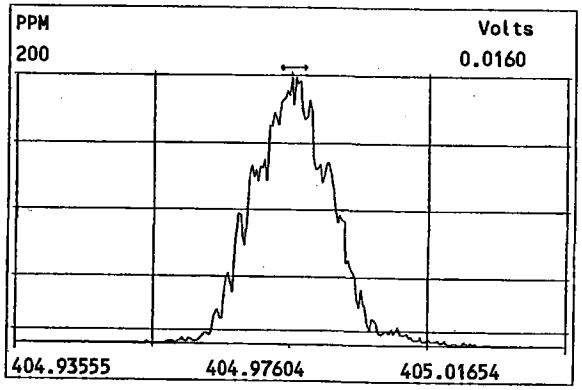


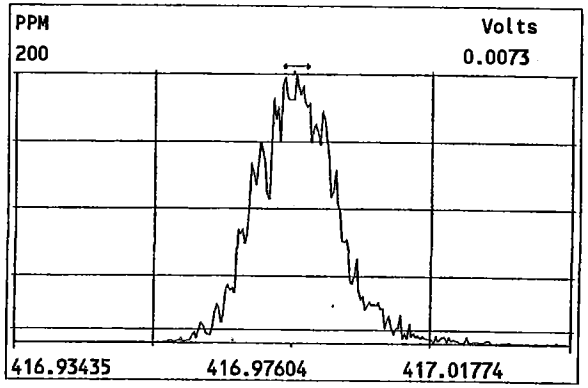




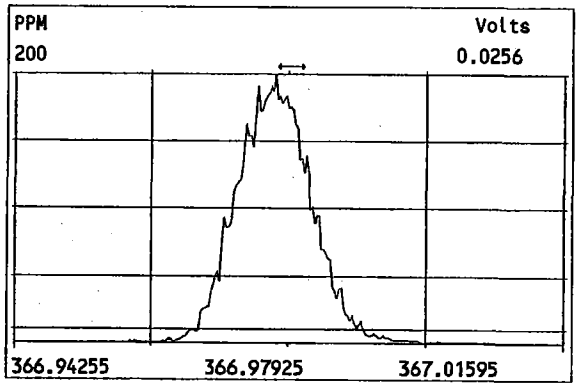


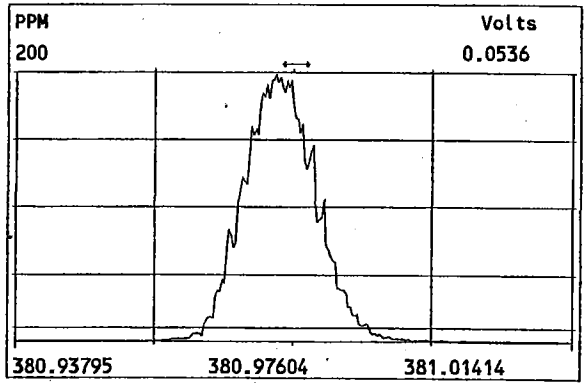


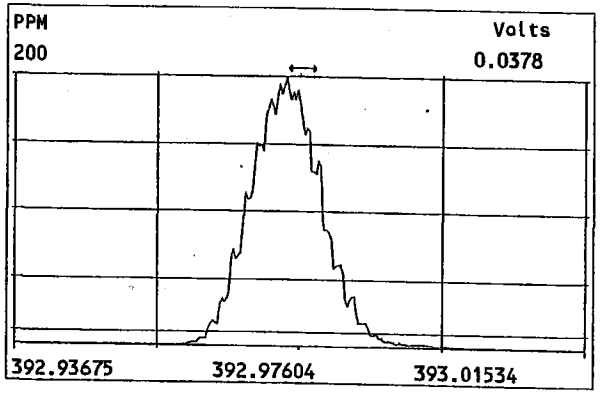


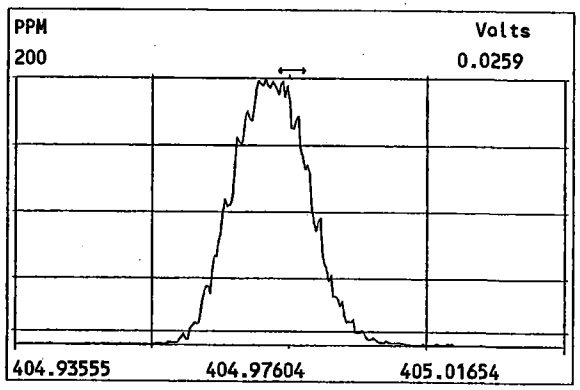


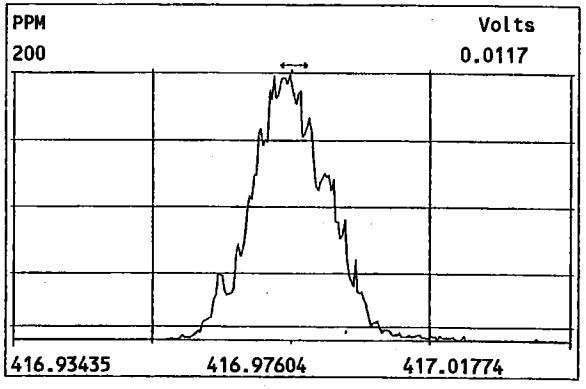
Peak Locate Examination:19-NOV-2009:14:42 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

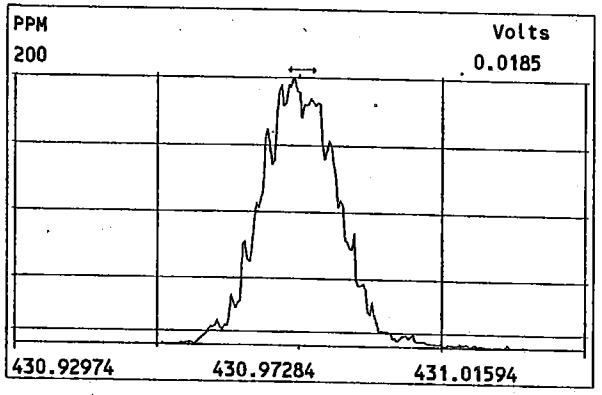


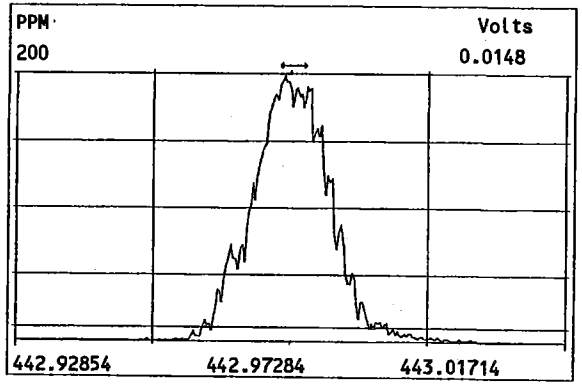


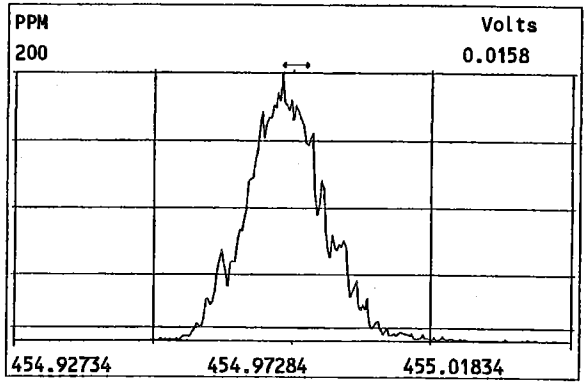




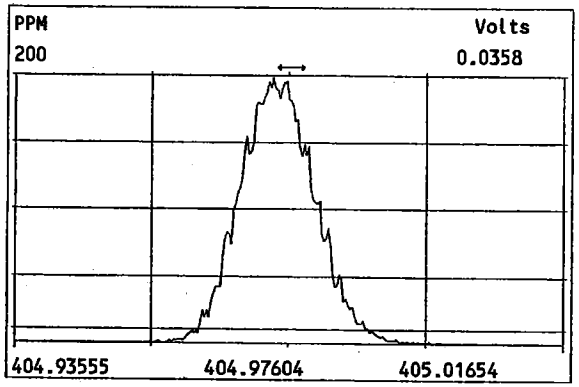


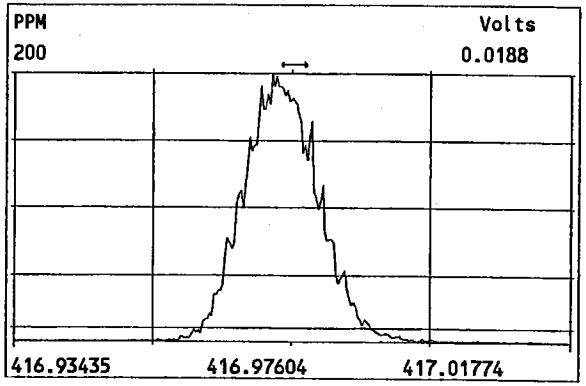


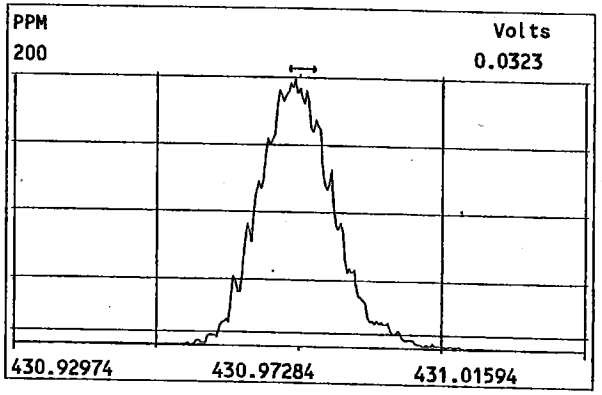


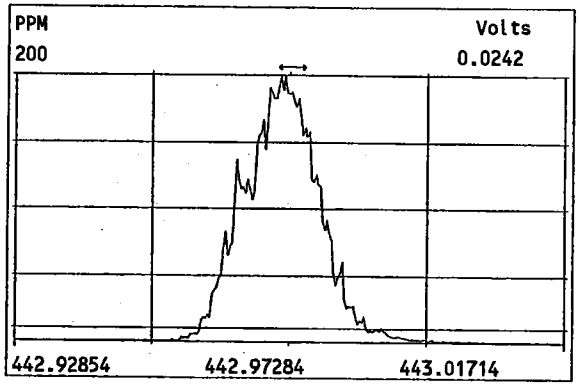


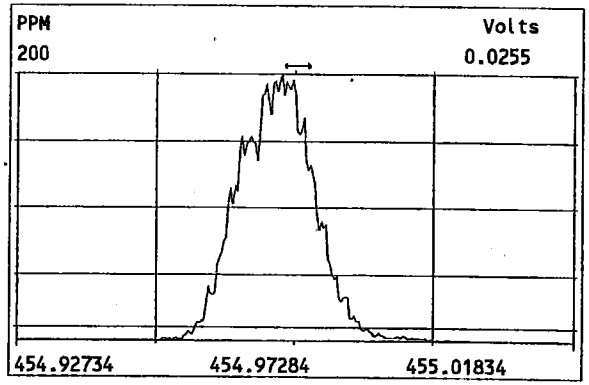
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

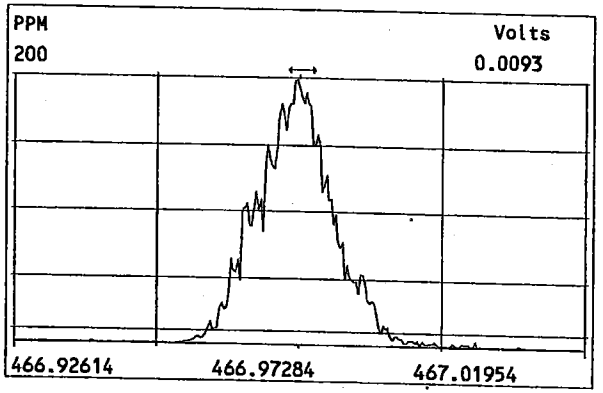


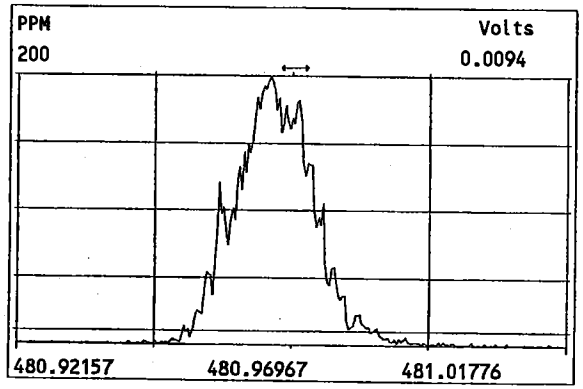






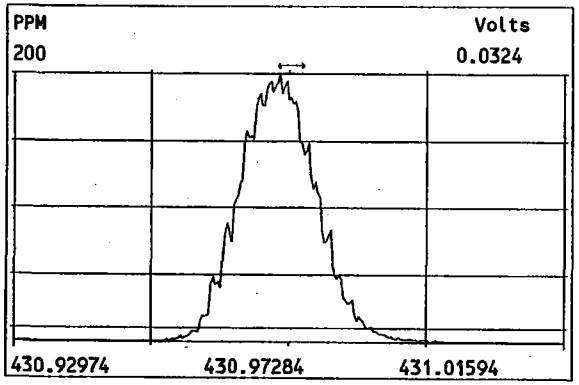


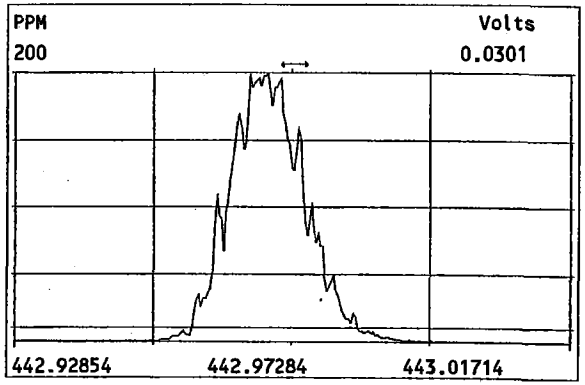


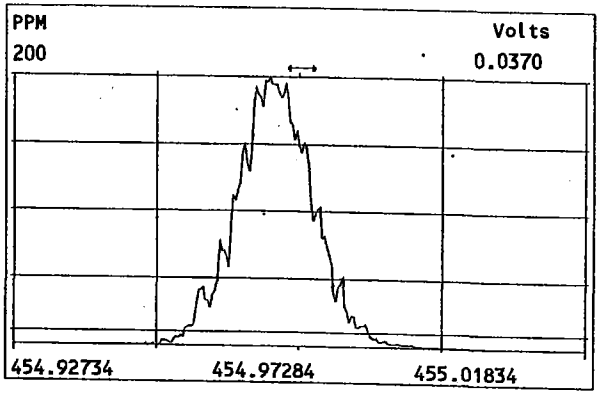


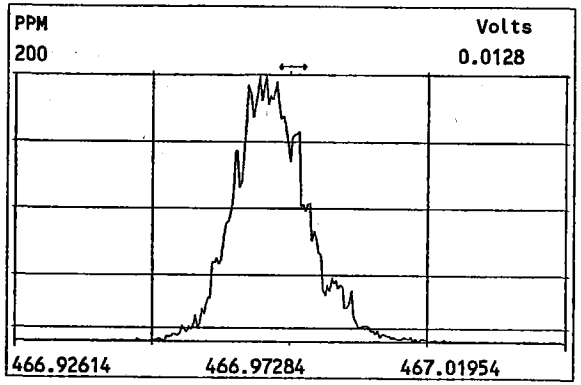
Peak Locate Examination:19-NOV-2009:14:43 File:18NOV09M_RES_CHECK

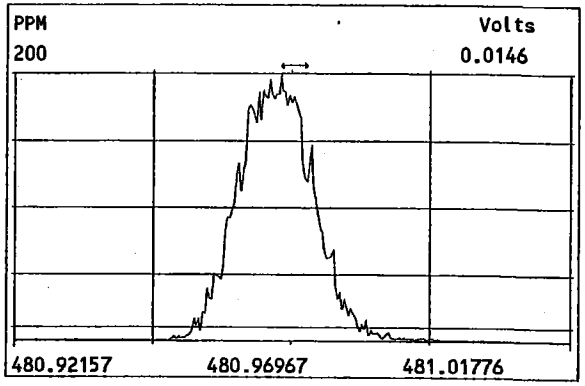
Experiment:PCDD Function:5 Reference:PFK

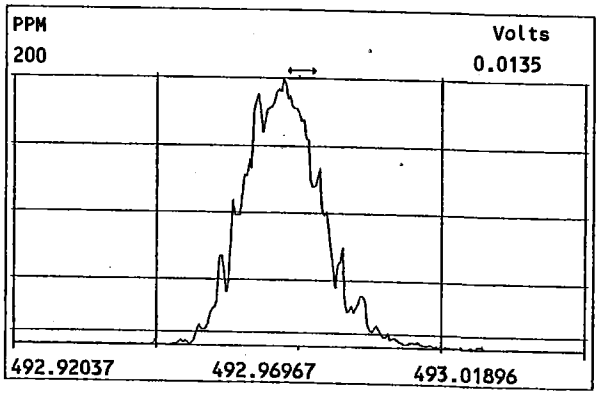


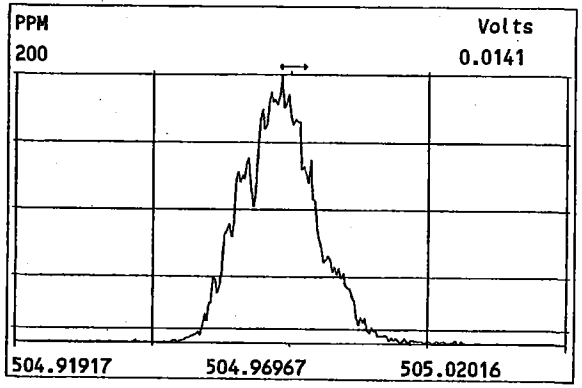


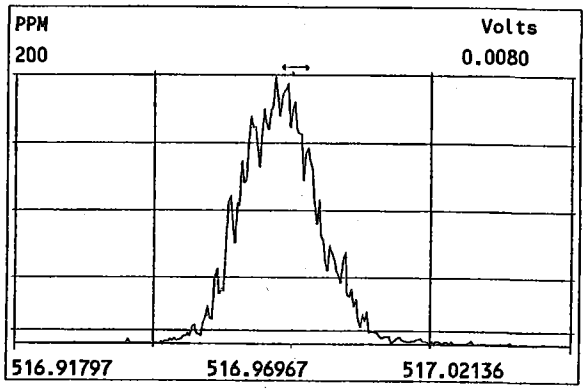












USEPA - ITD

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: 14JAN10M Sam:1 Analysis Date: 14-JAN-10 13:13:11

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	0.82	0.65-0.89	y	9.91	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	47.7	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	47.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.2	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.96	0.88-1.20	y	49.8	43.0 - 58.0
OCDD	M+2/M+4	0.93	0.76-1.02	y	100	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.70	0.65-0.89	y	9.85	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.68	1.32-1.78	y	53.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.69	1.32-1.78	y	53.3	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.2	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	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	49.6	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.7	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	y	51.5	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	51.2	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	103	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: 1/15/10

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: 14JAN10M Sam:1 Analysis Date: 14-JAN-10 13:13:11

	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	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.78	1.32-1.78	y	88.3	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	104	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88-1.20	y	93.3	72.0 - 138
13C-OCDD	M+2/M+4	1.00	0.76-1.02	y	175	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.86	0.65-0.89	y	101	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.72	1.32-1.78	y	86.2	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.74	1.32-1.78	y	81.6	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	105	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	102	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	101	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.48	0.43-0.59	y	92.9	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	y	92.0	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37-0.51	y	85.3	77.0 - 129
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	159	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: 1/15/10

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 11/18/09

RT Window Data Filename: 14JAN10M Sam:1 Analysis Date: 14-JAN-10 Time: 13:13:11

DB-5 IS Data Filename: 14JAN10M Sam:1 Analysis Date: 14-JAN-10 Time: 13:13:11

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)	24:19	1,3,6,8-TCDF (F)	22:58
1,2,8,9-TCDD (L)	28:15	1,2,8,9-TCDF (L)	28:28
1,2,4,7,9-PeCDD (F)	30:10	1,3,4,6,8-PeCDF (F)	28:20
1,2,3,8,9-PeCDD (L)	33:43	1,2,3,8,9-PeCDF (L)	34:07
1,2,4,6,7,9-HxCDD (F)	36:02	1,2,3,4,6,8-HxCDF (F)	35:10
1,2,3,7,8,9-HxCDD (L)	39:07	1,2,3,7,8,9-HxCDF (L)	39:41
1,2,3,4,6,7,9-HpCDD (F)	42:44	1,2,3,4,6,7,8-HpCDF (F)	42:12
1,2,3,4,6,7,8-HpCDD (L)	44:07	1,2,3,4,7,8,9-HpCDF (L)	45:01

(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: 1/15/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

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

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-JAN-10 13:13:11 CS3 or VER Data Filename: 14JAN10M Sam:1

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

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

Analyst: _____ Date: 1/15/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

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

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-JAN-10 13:13:11 CS3 or VER Data Filename: 14JAN10M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	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		0.989	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: 1/15/10

FAL ID: STO11410M1 Filename: 14JAN10M Sam:1 Acquired: 14-JAN-10 13:13:11 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (090918J) ConCal: STO11410M1 EndCal: STO11410M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 100
WHO 1998 Tox: 124 WHO 2005 Tox: 112

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	2.91e+06	0.82 y	27:19	1.02	9.91		2.50	-	-	*
1,2,3,7,8-PeCDD	1.25e+07	1.61 y	33:08	0.96	47.7		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.27e+07	1.27 y	38:30	1.37	48.7		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.11e+07	1.30 y	38:40	1.34	47.3		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.20e+07	1.27 y	39:07	1.37	48.2		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	9.08e+06	0.96 y	44:07	1.17	49.8		2.50	-	-	*
OCDD	1.32e+07	0.93 y	49:40	1.21	100		2.50	-	-	*
2,3,7,8-TCDF	6.22e+06	0.70 y	26:34	1.29	9.85		2.50	-	-	*
1,2,3,7,8-PeCDF	1.99e+07	1.68 y	31:23	0.89	53.5		2.50	-	-	*
2,3,4,7,8-PeCDF	1.85e+07	1.69 y	32:43	0.91	53.3		2.50	-	-	*
1,2,3,4,7,8-HxCDF	1.68e+07	1.24 y	37:07	1.00	50.2		2.50	-	-	*
1,2,3,6,7,8-HxCDF	1.74e+07	1.24 y	37:18	0.92	50.1		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.59e+07	1.24 y	38:15	0.99	49.6		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.41e+07	1.25 y	39:41	1.09	49.7		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.32e+07	1.03 y	42:12	1.36	51.5		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.10e+07	1.04 y	45:01	1.61	51.2		2.50	-	-	*
OCDF	1.50e+07	0.91 y	50:01	0.84	103		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	2.89e+07	0.71 y	27:18	0.94	101					101
13C-1,2,3,7,8-PeCDD	2.73e+07	1.78 y	33:06	1.02	88.3					88.3
13C-1,2,3,4,7,8-HxCDD	1.90e+07	1.29 y	38:29	0.98	104					104
13C-1,2,3,6,7,8-HxCDD	1.75e+07	1.30 y	38:39	0.94	101					101
13C-1,2,3,4,6,7,8-HpCDD	1.56e+07	1.08 y	44:05	0.90	93.3					93.3
13C-OCDD	2.16e+07	1.00 y	49:38	0.67	175					87.3
13C-2,3,7,8-TCDF	4.91e+07	0.86 y	26:32	0.88	101					101
13C-1,2,3,7,8-PeCDF	4.18e+07	1.72 y	31:23	0.88	86.2					86.2
13C-2,3,4,7,8-PeCDF	3.83e+07	1.74 y	32:42	0.85	81.6					81.6
13C-1,2,3,4,7,8-HxCDF	3.35e+07	0.49 y	37:05	1.72	105					105
13C-1,2,3,6,7,8-HxCDF	3.80e+07	0.49 y	37:17	2.00	102					102
13C-2,3,4,6,7,8-HxCDF	3.25e+07	0.50 y	38:13	1.74	101					101
13C-1,2,3,7,8,9-HxCDF	2.60e+07	0.48 y	39:39	1.51	92.9					92.9
13C-1,2,3,4,6,7,8-HpCDF	1.88e+07	0.46 y	42:10	1.10	92.0					92.0
13C-1,2,3,4,7,8,9-HpCDF	1.34e+07	0.46 y	44:60	0.85	85.3					85.3
13C-OCDF	3.47e+07	0.96 y	49:60	1.17	159					79.4
37Cl-2,3,7,8-TCDD	3.00e+06		27:19	0.97	10.1					101
13C-1,2,3,4-TCDD	3.03e+07	0.73 y	26:43	-	116					
13C-1,2,3,4-TCDF	5.53e+07	0.86 y	25:28	-	120					
13C-1,2,3,7,8,9-HxCDD	1.86e+07	1.30 y	39:05	-	90.7					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.62e+07		24:19	1.02	55.1	2.50	-	-	*		17
Total Penta-Dioxins	2.73e+07		30:10	0.96	104	2.50	-	-	*		7
Total Hexa-Dioxins	4.12e+07		36:02	1.36	166	2.50	-	-	*		23
Total Hepta-Dioxins	1.94e+07		42:44	1.17	106	2.50	-	-	*		13
Total Tetra-Furans	2.63e+07		22:58	1.29	41.7	2.50	-	-	*		19
1st Fn. Tot Penta-Furans	2.12e+07		28:20	0.90	58.9	2.50	-	-	*	PeCDF	1
Total Penta-Furans	5.46e+07		30:08	0.90	152	2.50	-	-	*	211	13
Total Hexa-Furans	7.41e+07		35:10	0.99	230	2.50	-	-	*		9
Total Hepta-Furans	2.47e+07		42:12	1.47	105	2.50	-	-	*		15

Analyst: _____ Date: 1/15/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:14JAN10M Instrument: FAL3 GC: DB5 Experiment:PCDD

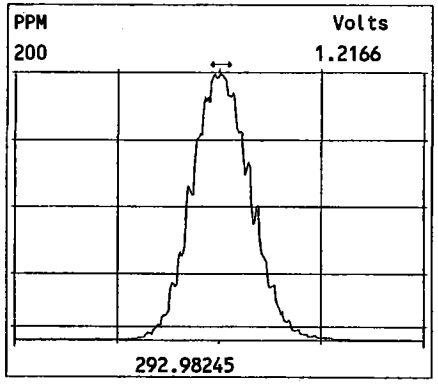
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
14JAN10M	1	ST011410M1	1613 CS3 (090918J)	14-JAN-10 13:13:11	ST011410M1	ST011410M2	TC
14JAN10M	2	1918-001-0001-OPR	OPR	14-JAN-10 14:08:25	ST011410M1	ST011410M2	TC
14JAN10M	3	1918-001-0001-MB	Method Blank	14-JAN-10 15:03:41	ST011410M1	ST011410M2	TC
14JAN10M	4	5911-001-0001-SA	MW-8.3-010810	14-JAN-10 15:58:55	ST011410M1	ST011410M2	TC
14JAN10M	5	5912-001-0001-SA	Well #1	14-JAN-10 16:54:17	ST011410M1	ST011410M2	TC
14JAN10M	6	5902-001-0001-SA	9121091-01	14-JAN-10 17:49:36	ST011410M1	ST011410M2	TC
14JAN10M	7	5902-002-0001-SA	9121091-02	14-JAN-10 18:44:55	ST011410M1	ST011410M2	TC
14JAN10M	8	5904-001-0001-SA	CB31A123109COMP	14-JAN-10 19:40:14	ST011410M1	ST011410M2	TC
14JAN10M	9	5904-002-0001-SA	CB4857123109COMP	14-JAN-10 20:35:29	ST011410M1	ST011410M2	TC
14JAN10M	10	5904-003-0001-SA	CB1123109COMP	14-JAN-10 21:30:44	ST011410M1	ST011410M2	TC
14JAN10M	11	SB011410M1	Solvent Blank	14-JAN-10 22:25:59	ST011410M1	ST011410M2	TC
14JAN10M	12	ST011410M2	1613 CS3 (090918J)	14-JAN-10 23:21:17	ST011410M1	ST011410M2	TC

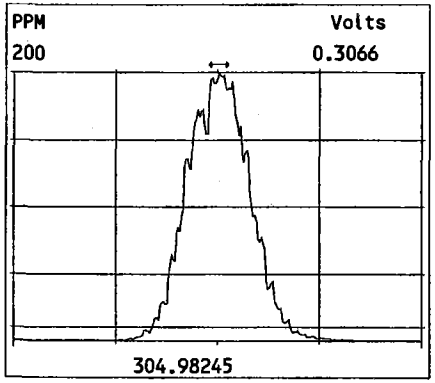
1/15/10

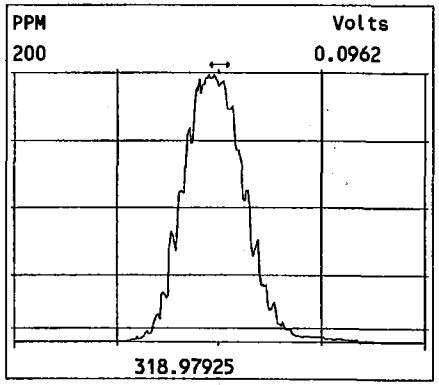
Data Backed Up:_____

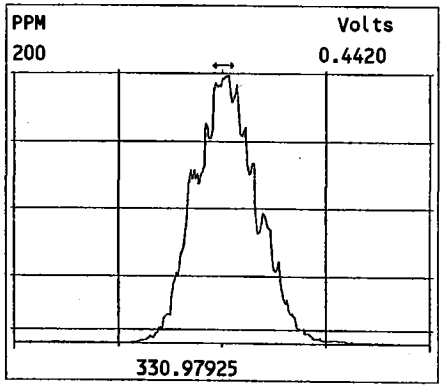
Date:_____

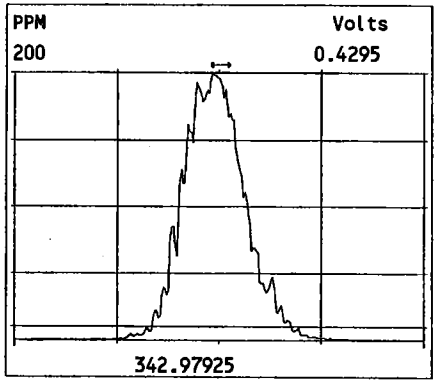
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M
Experiment:PCDD Function:1 Reference:PFK

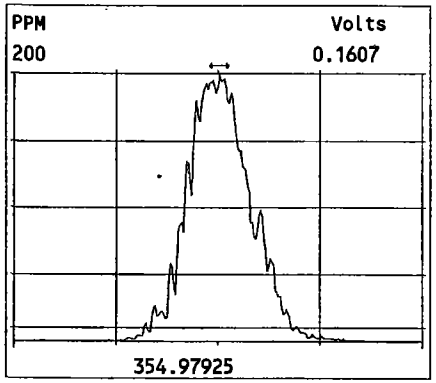


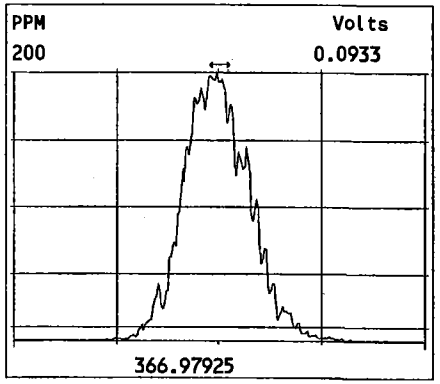


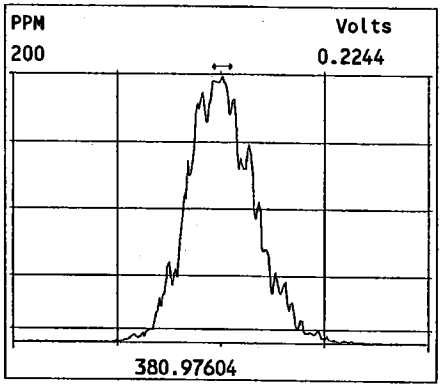


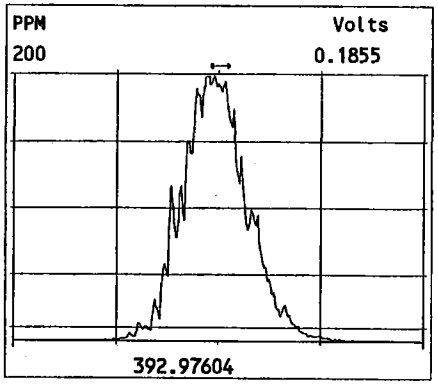


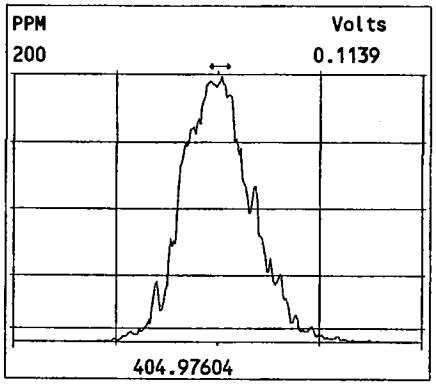


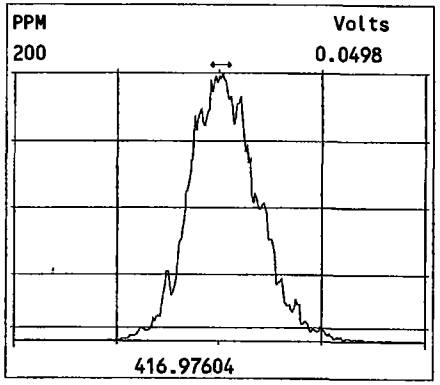




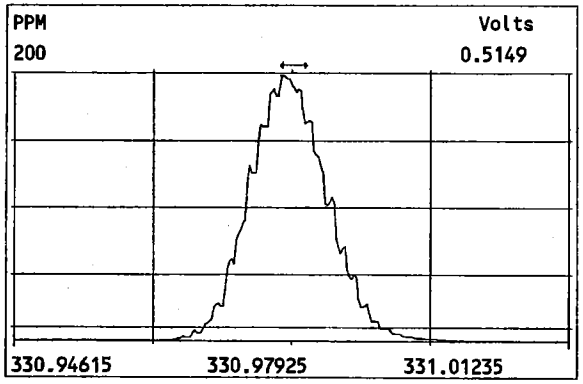


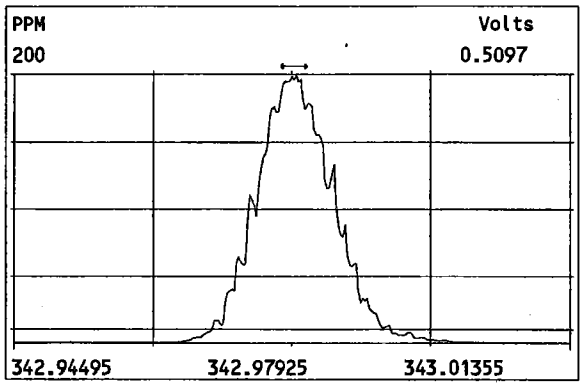


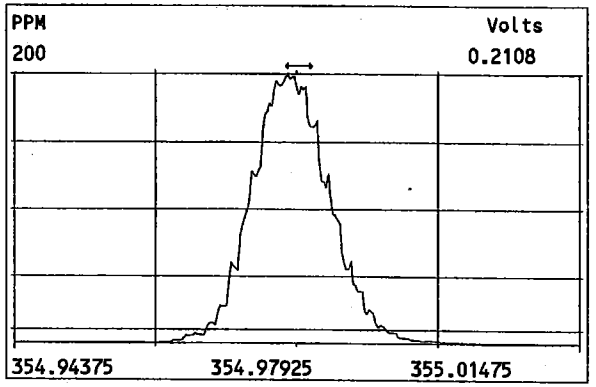


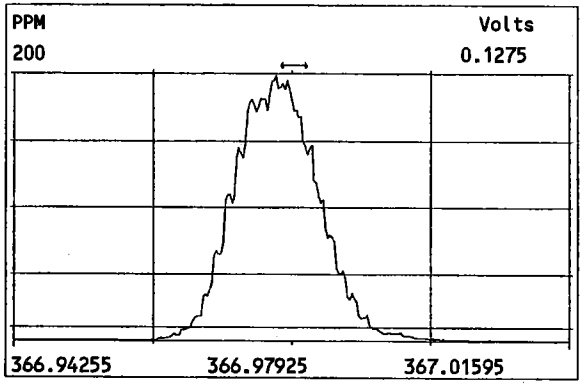


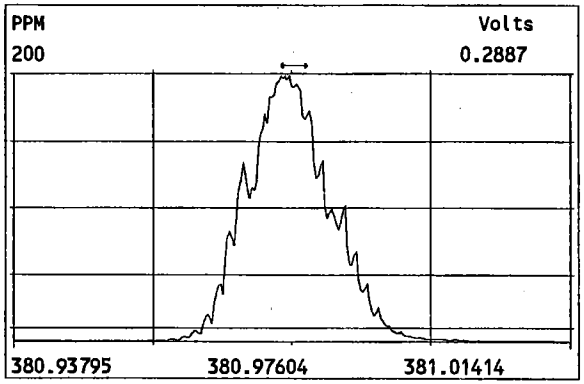
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M
Experiment:PCDD Function:2 Reference:PFK

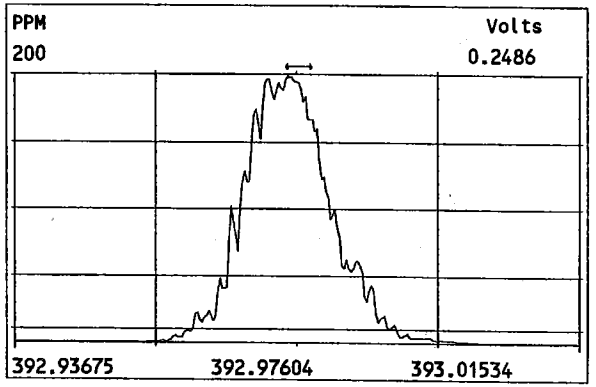


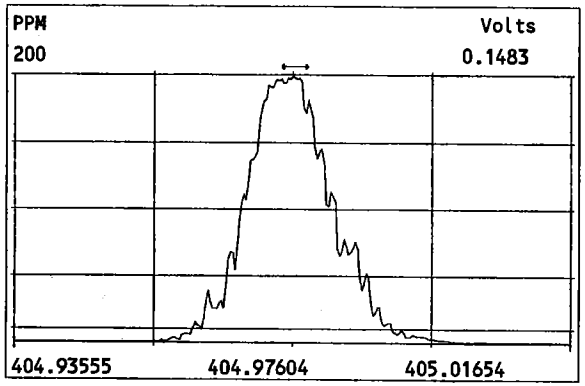


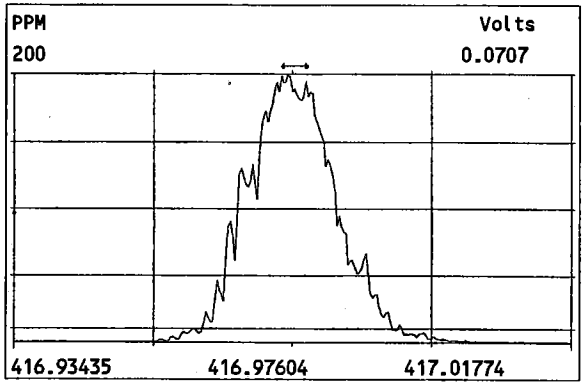




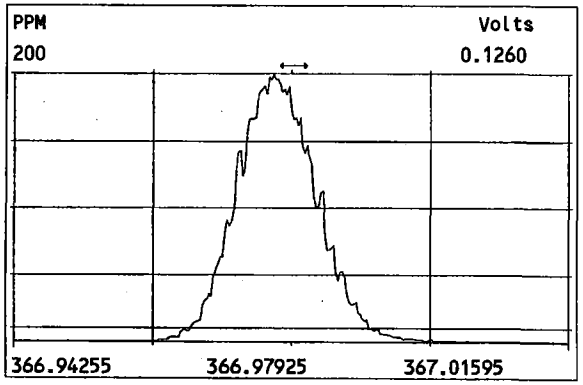


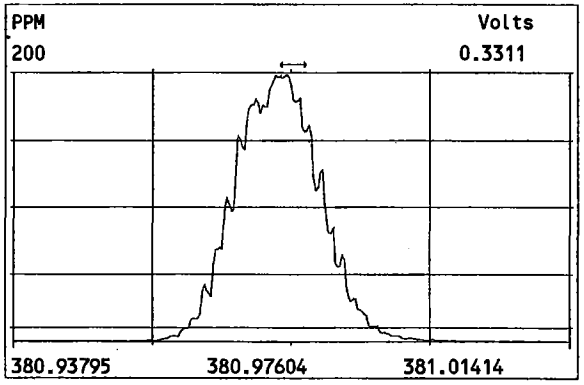


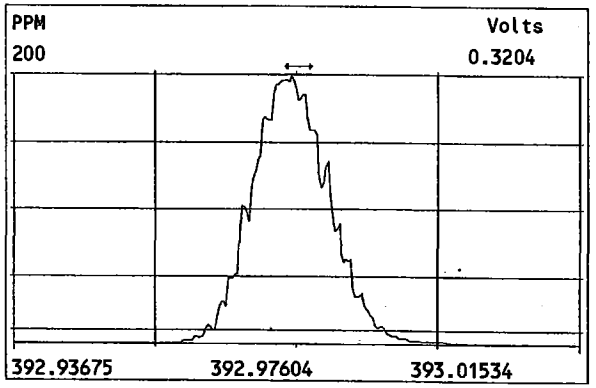


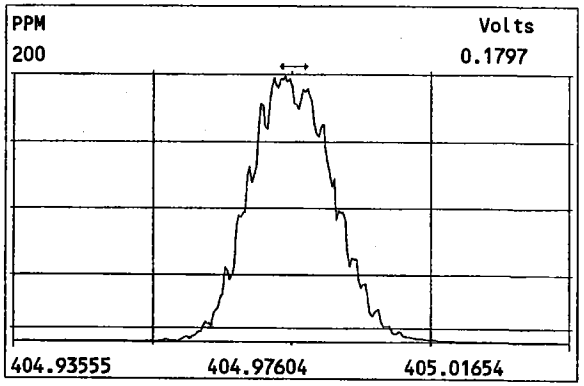


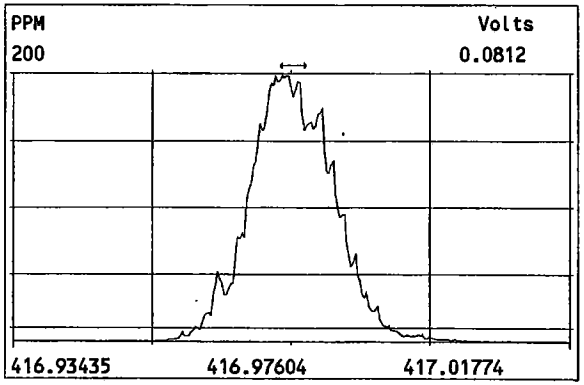
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M
Experiment:PCDD Function:3 Reference:PFK

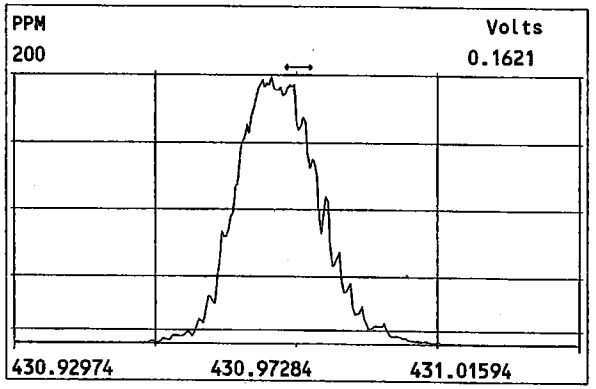


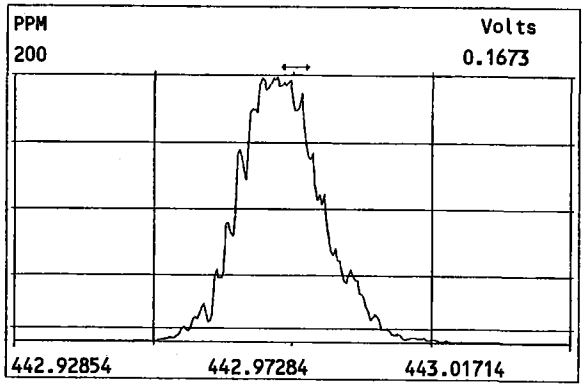


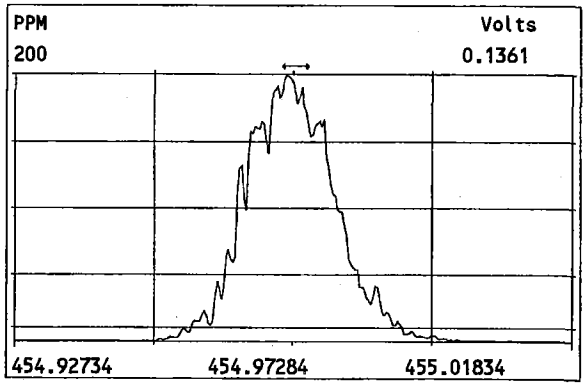




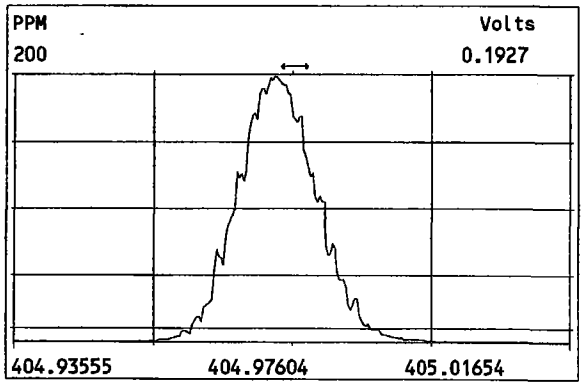


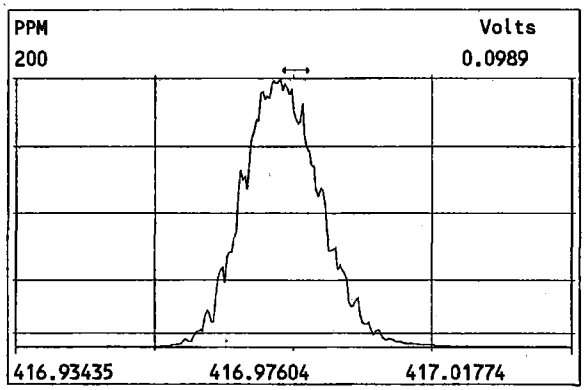


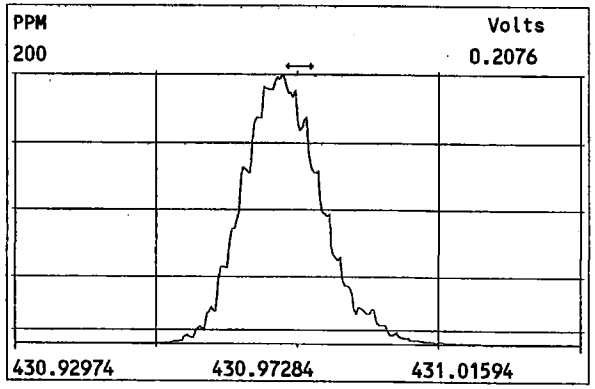


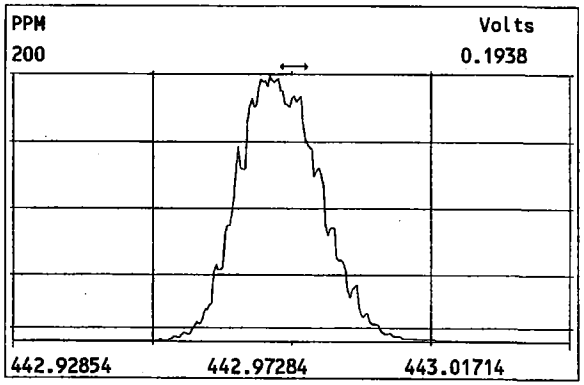


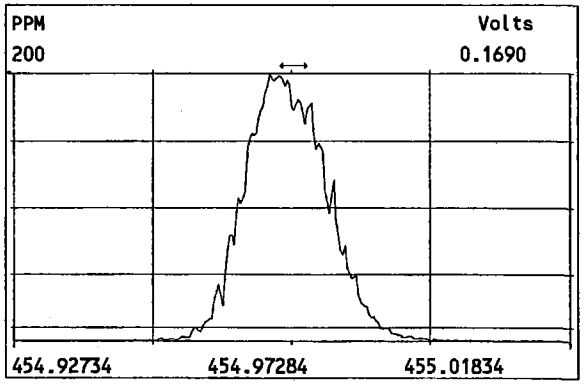
Peak Locate Examination:14-JAN-2010:13:12 File:14JAN10M
Experiment:PCDD Function:4 Reference:PFK

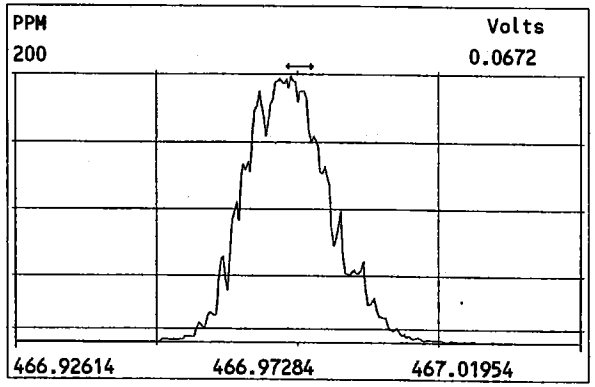


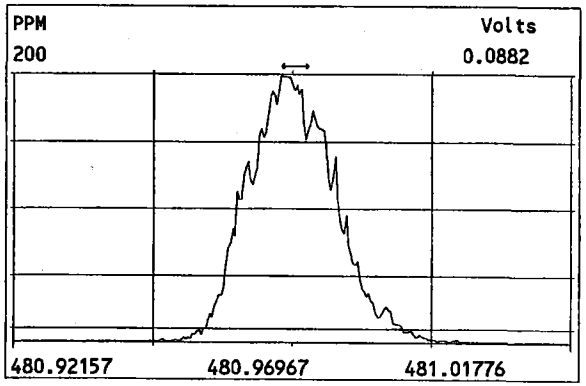




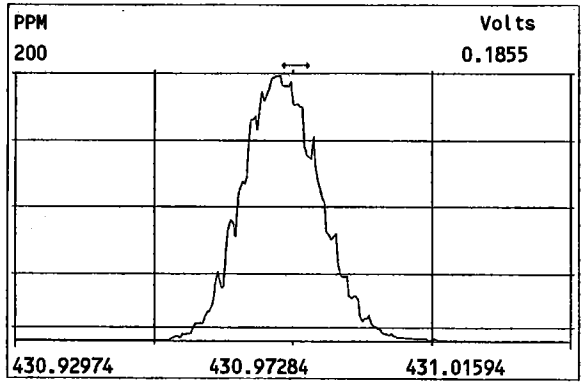


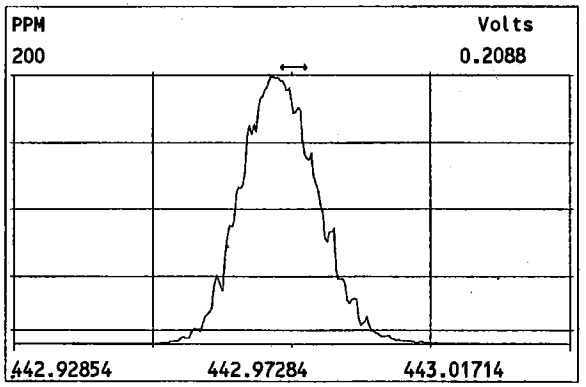


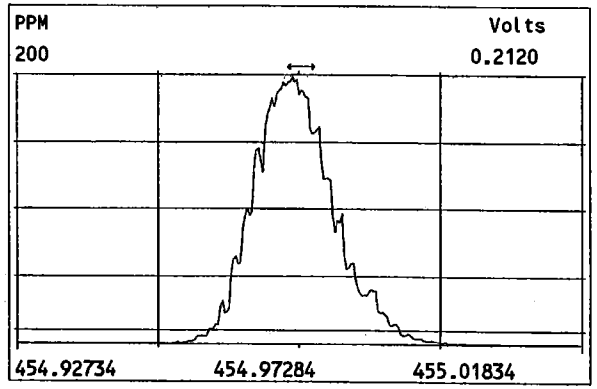


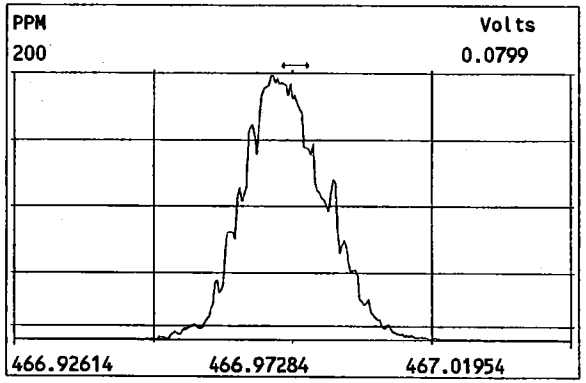


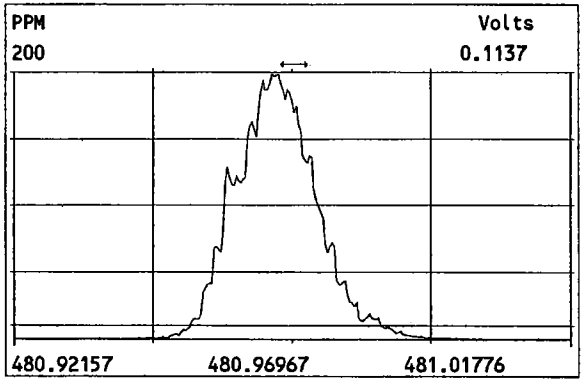
Peak Locate Examination:14-JAN-2010:13:12 File:14JAN10M
Experiment:PCDD Function:5 Reference:PFK

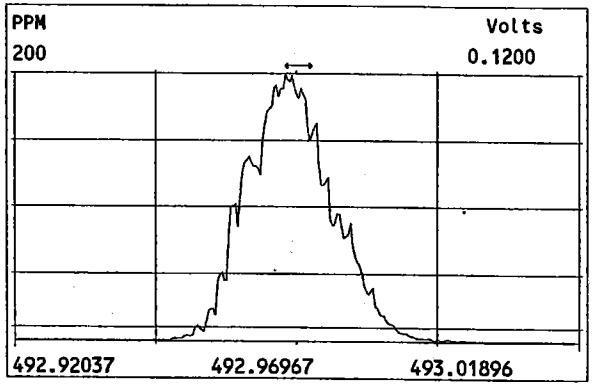


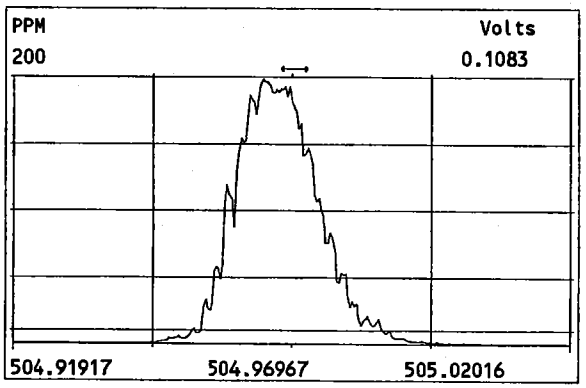


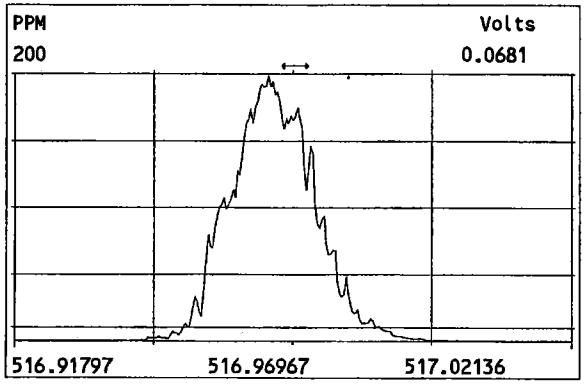




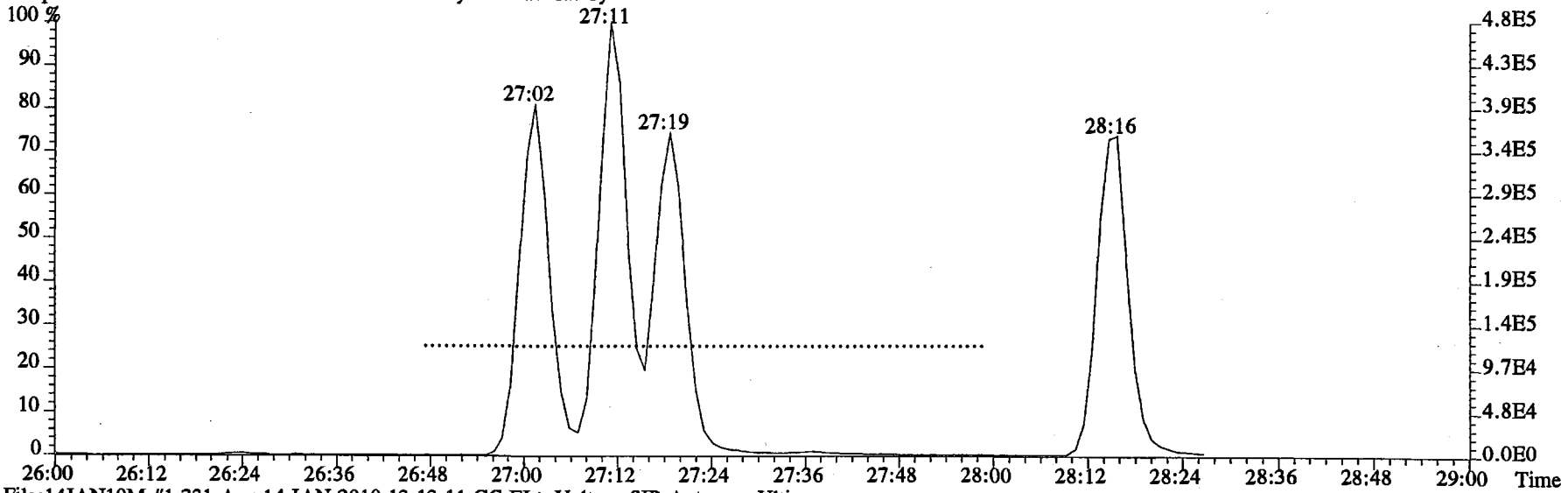




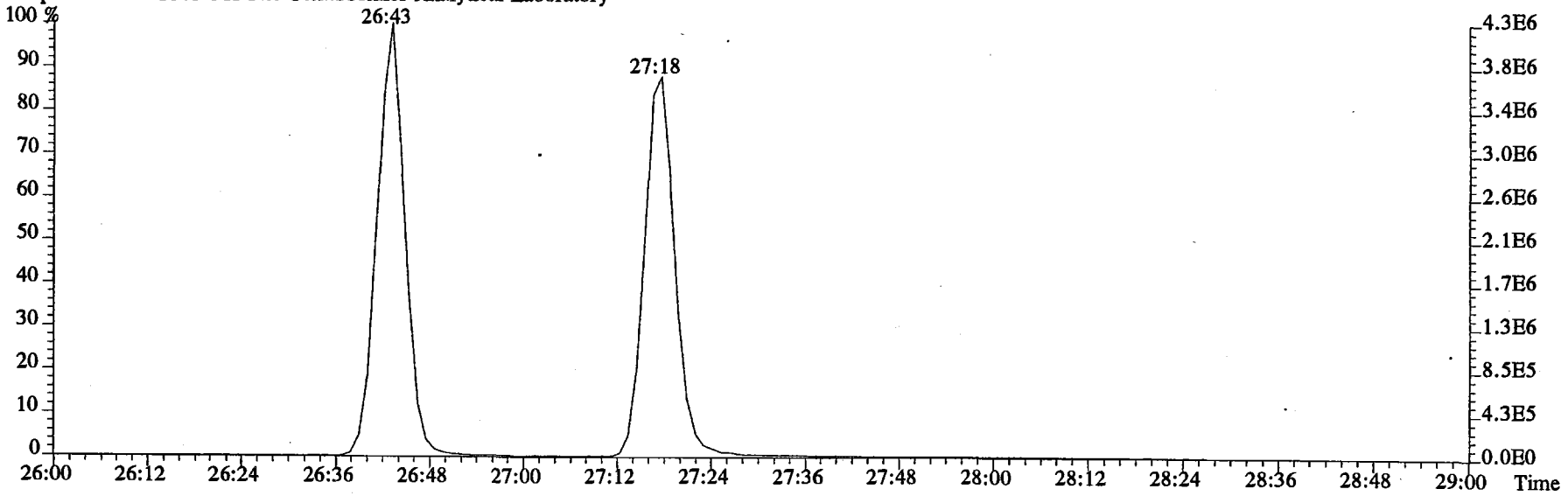




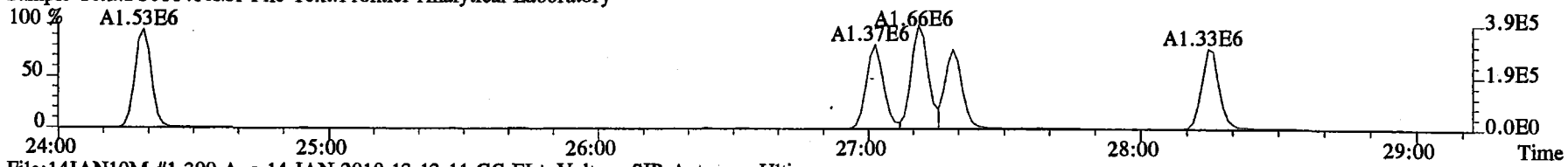
File:14JAN10M #1-331 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



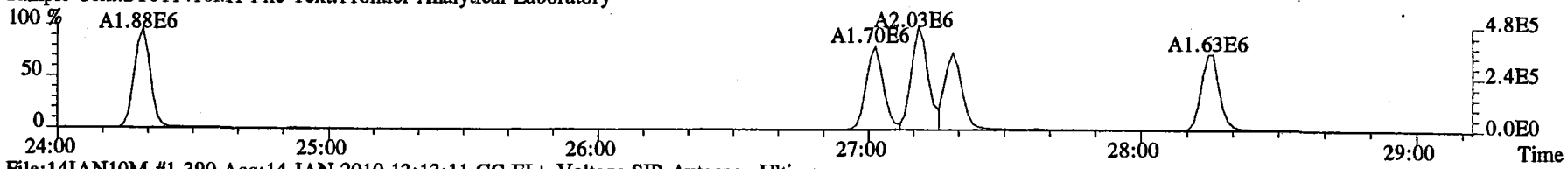
File:14JAN10M #1-331 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



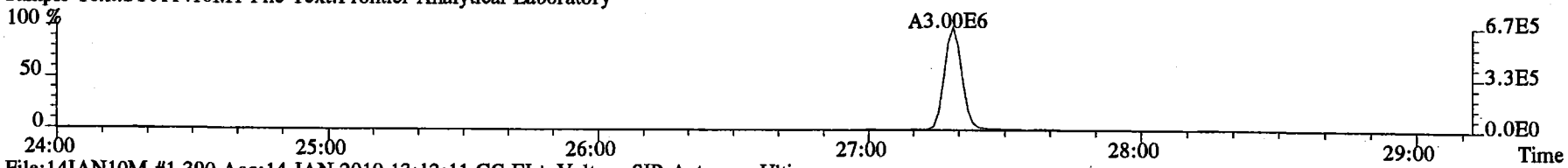
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



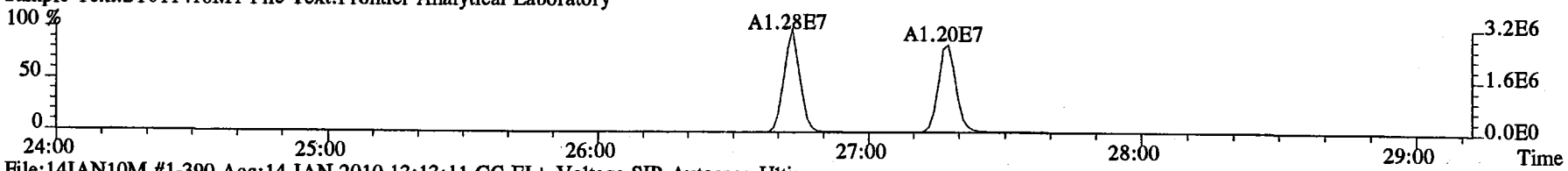
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



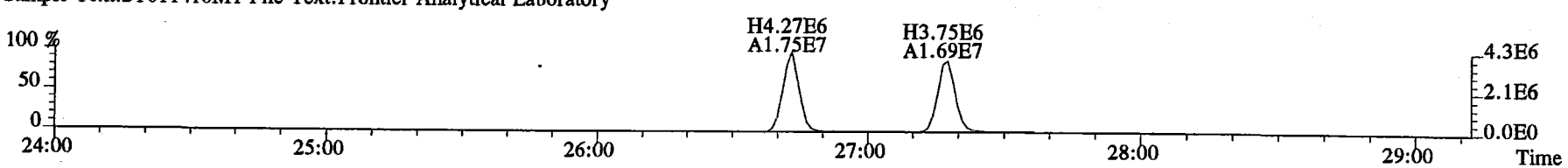
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



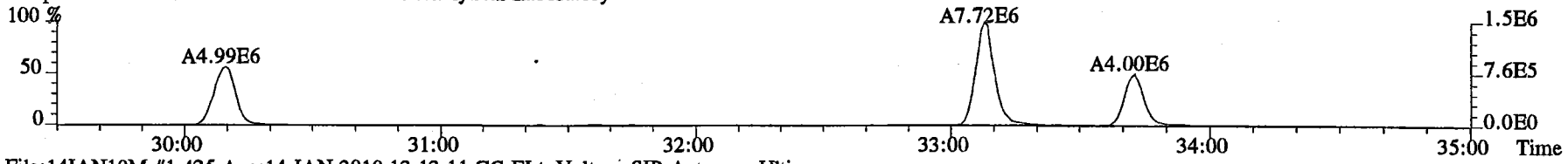
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



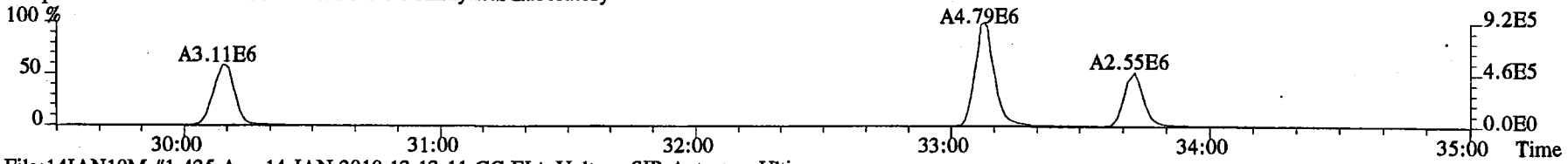
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



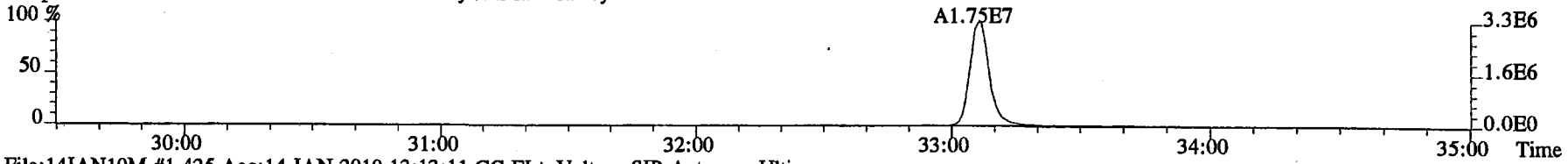
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



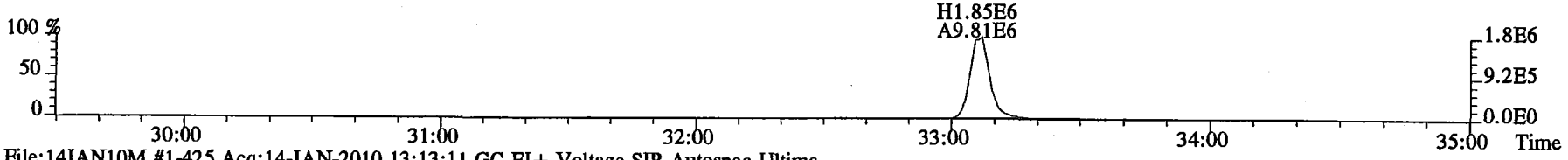
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



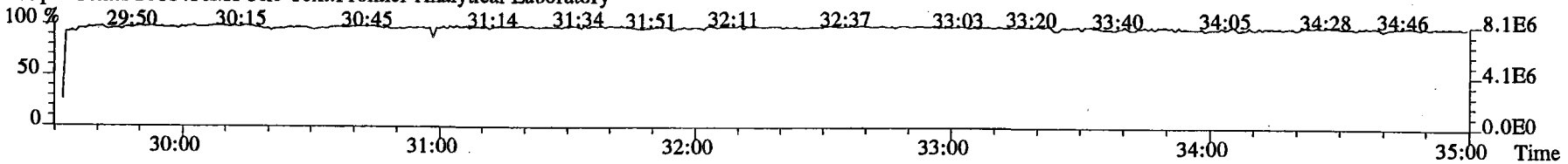
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



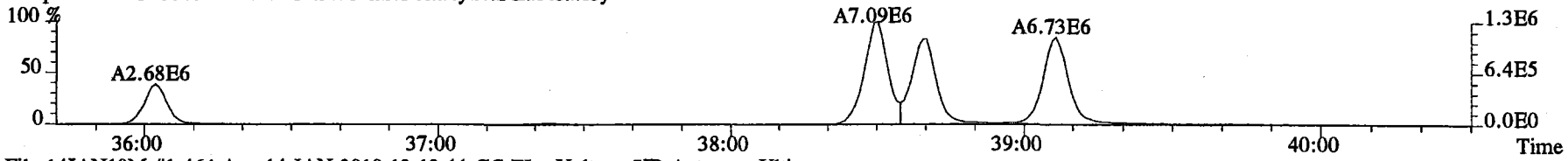
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



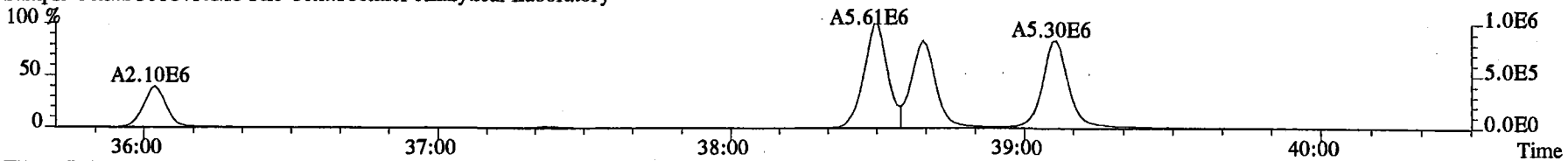
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



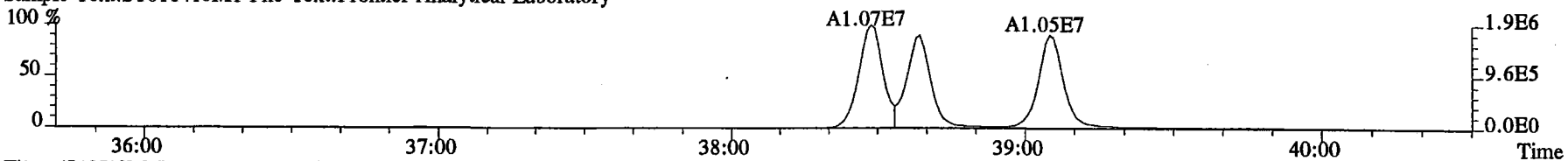
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



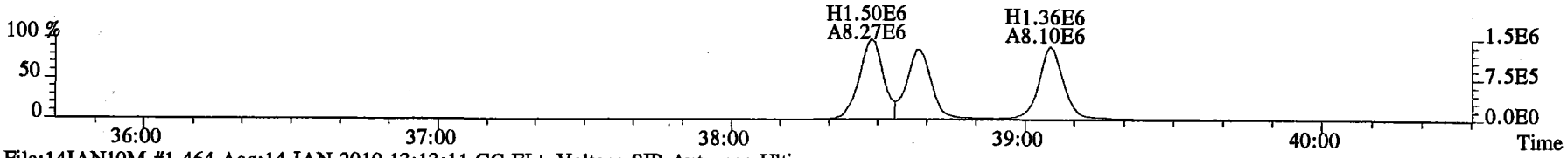
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



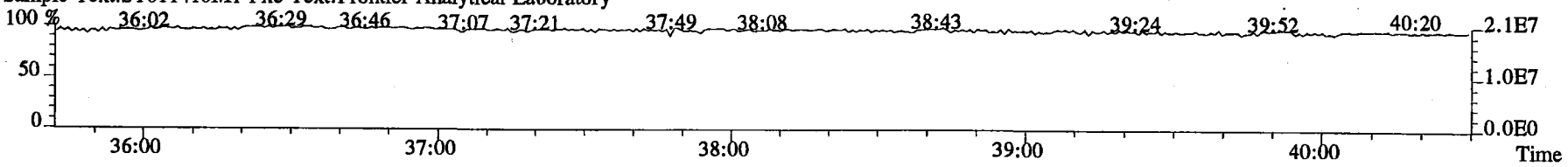
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



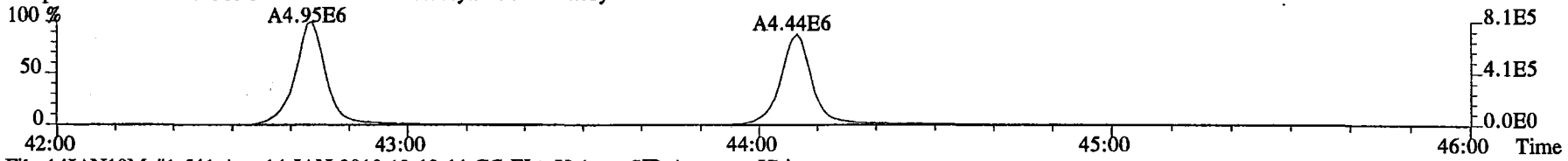
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100:0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



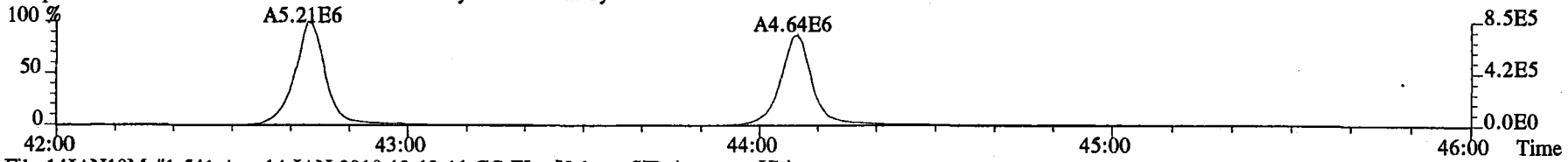
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



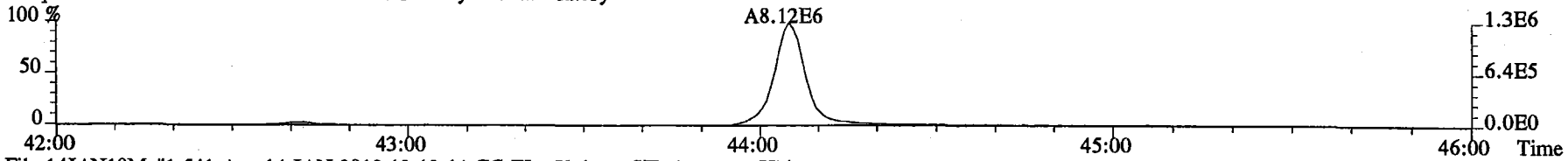
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



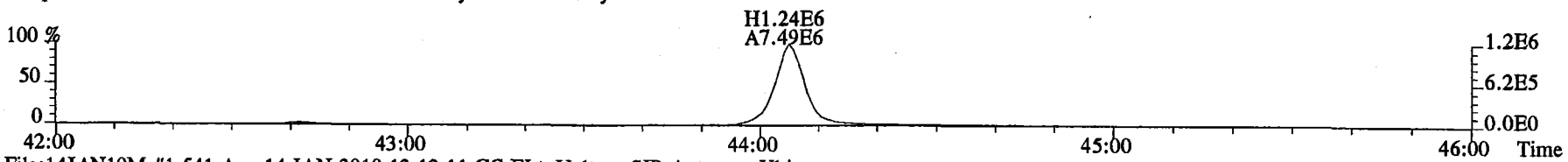
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



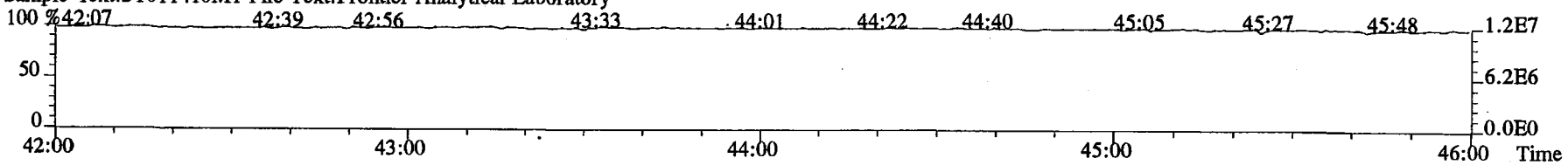
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



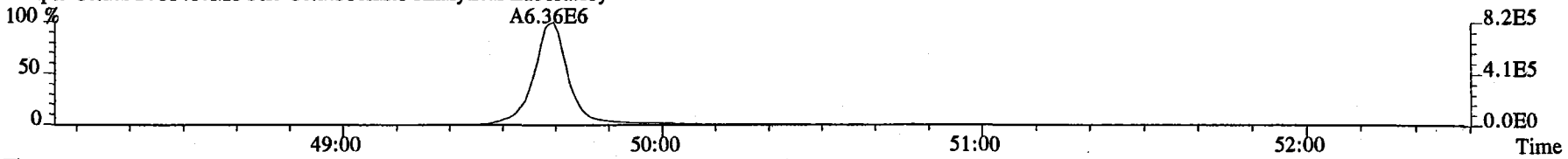
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



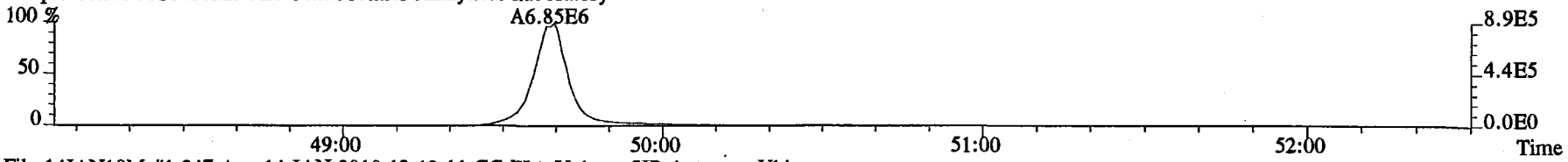
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



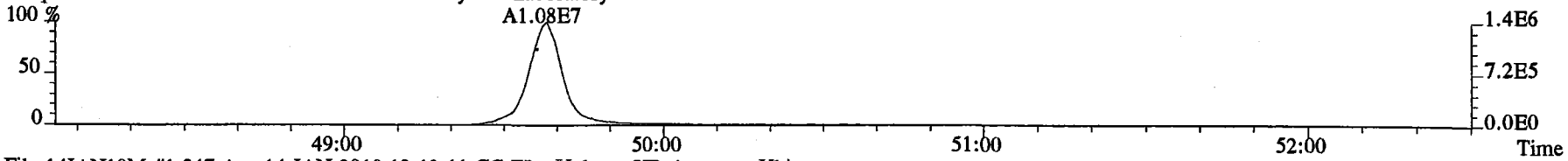
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



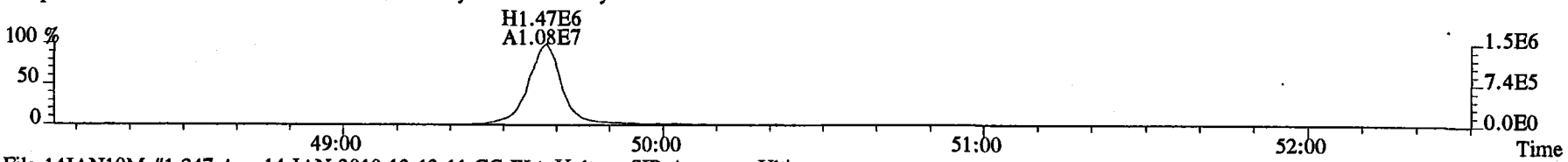
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



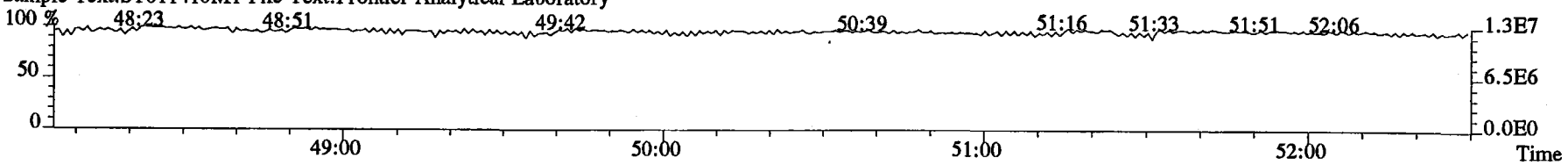
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



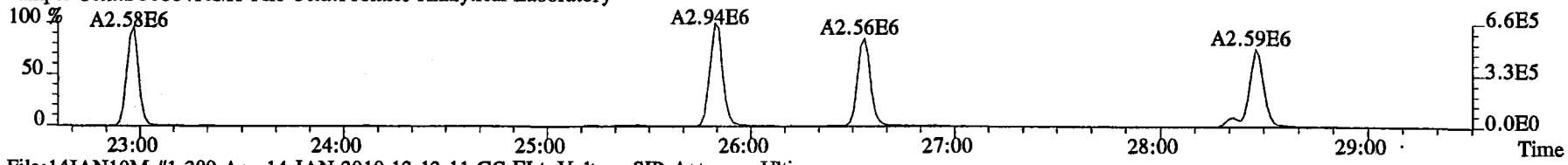
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



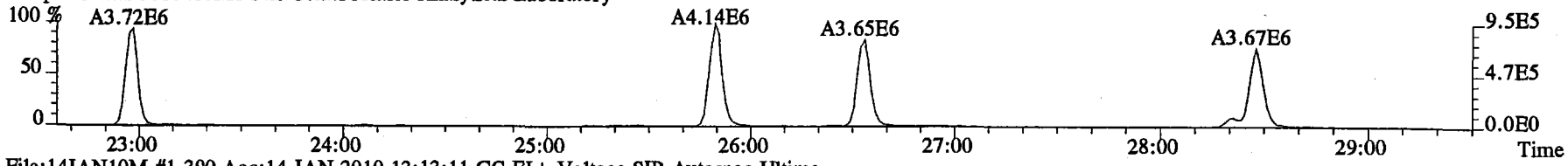
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



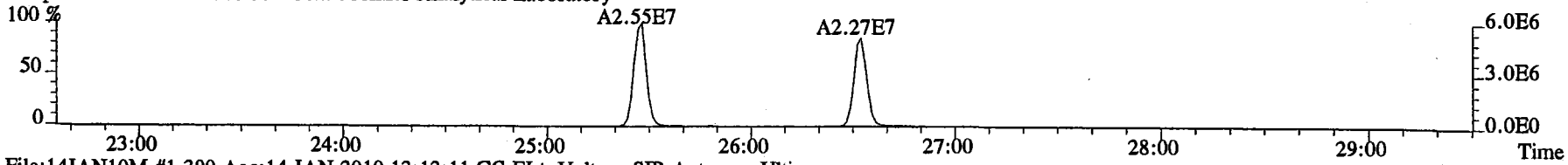
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



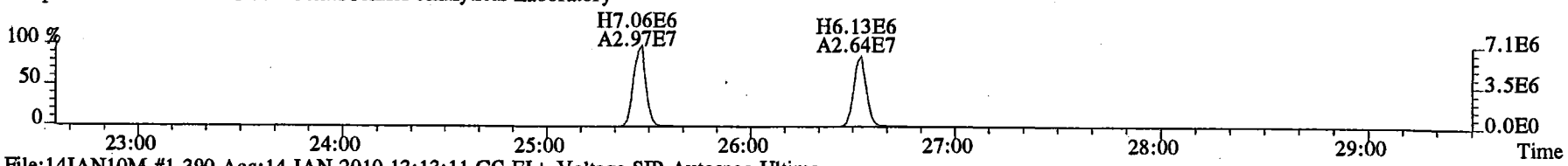
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



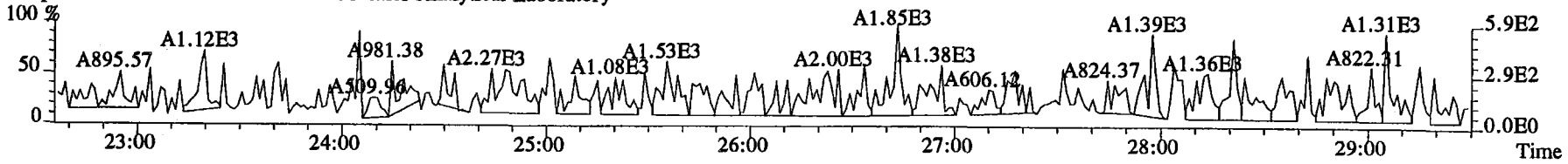
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



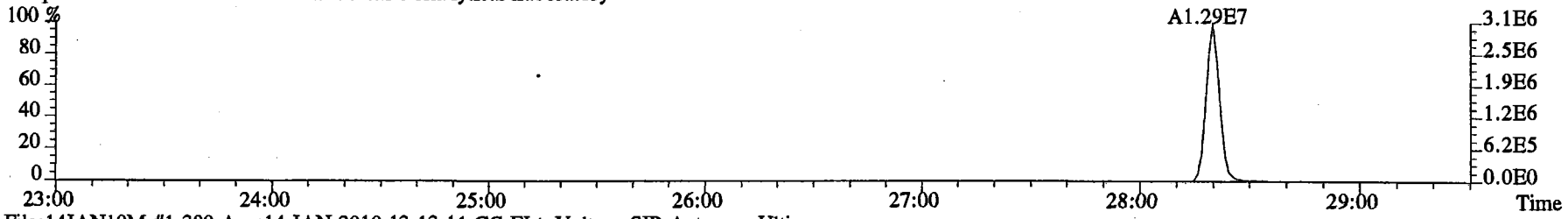
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



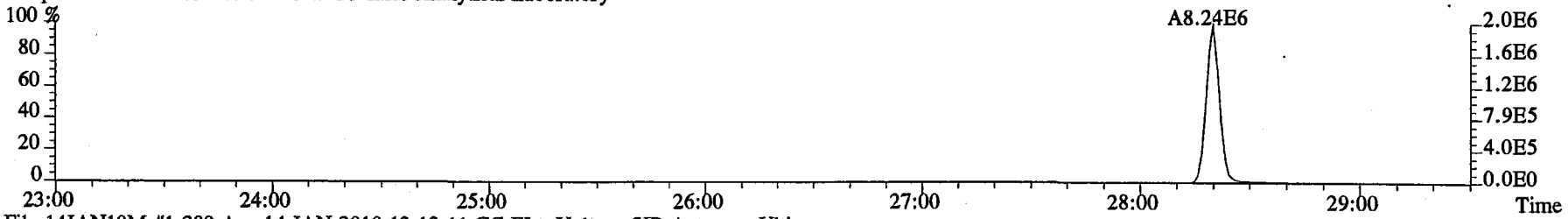
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



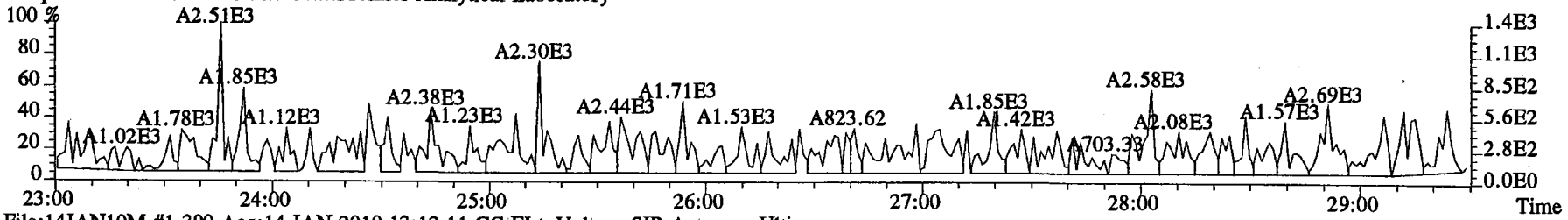
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



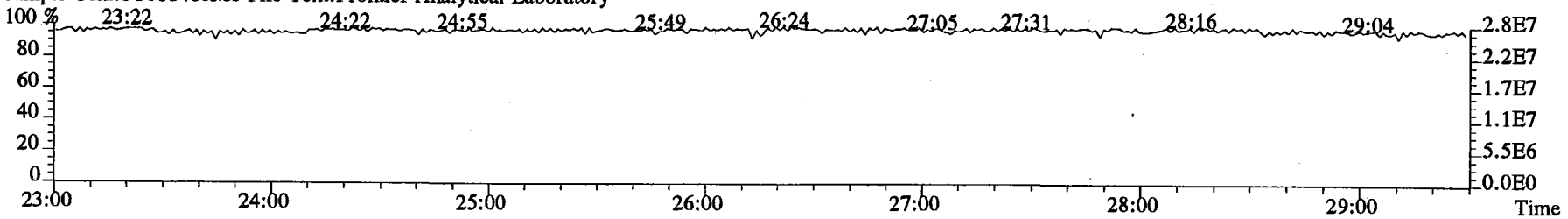
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



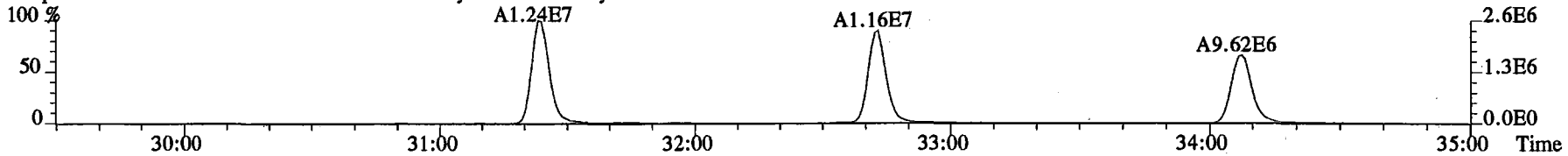
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



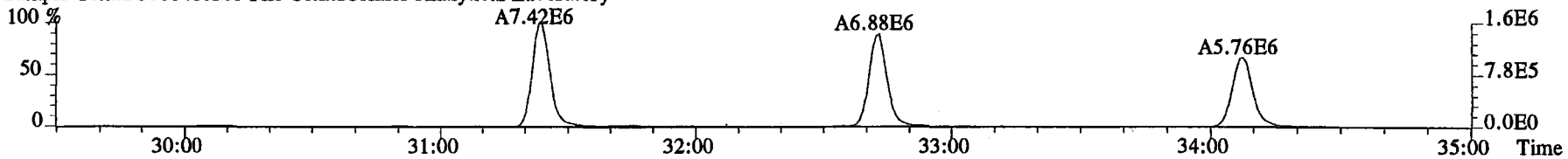
File:14JAN10M #1-390 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



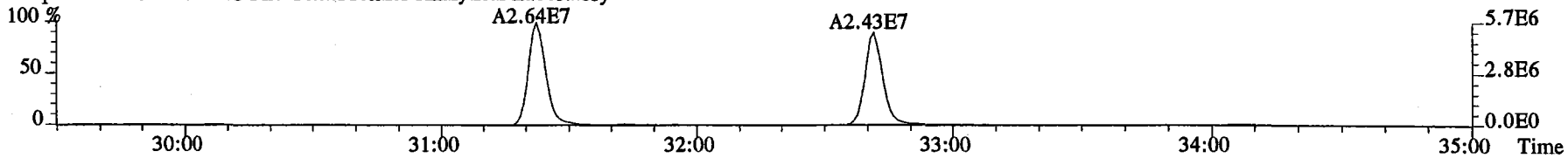
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



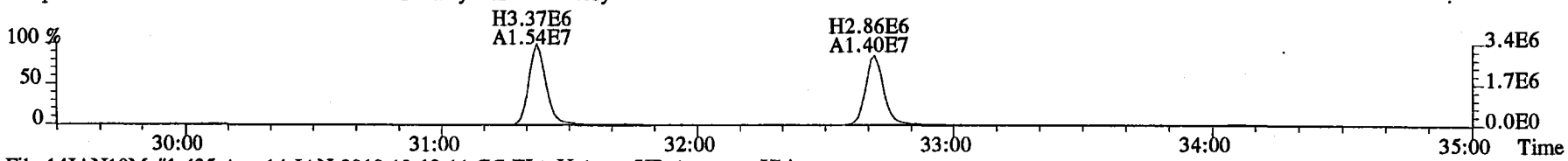
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



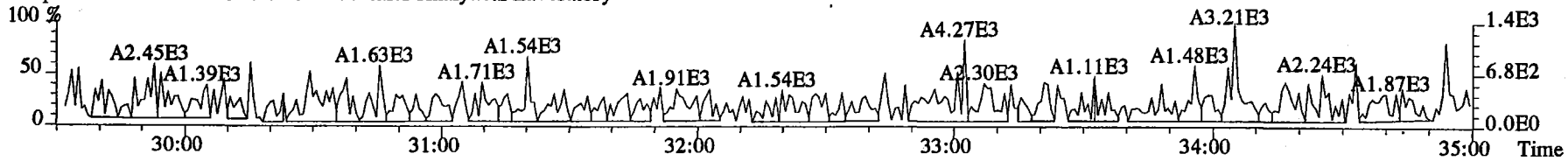
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



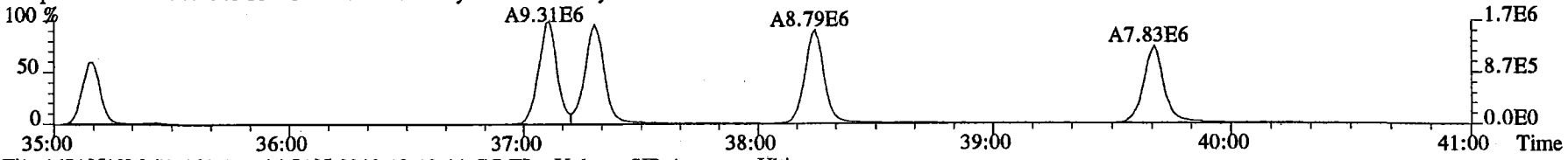
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



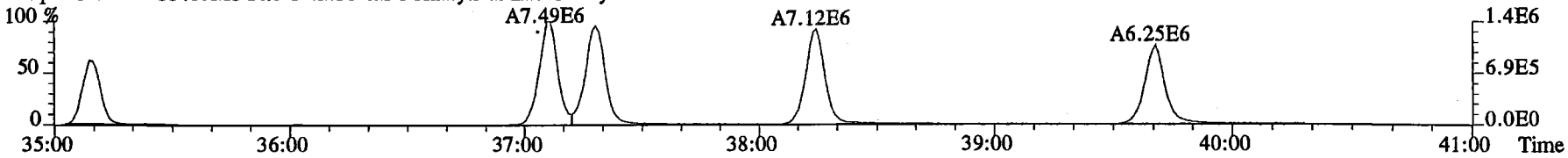
File:14JAN10M #1-425 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



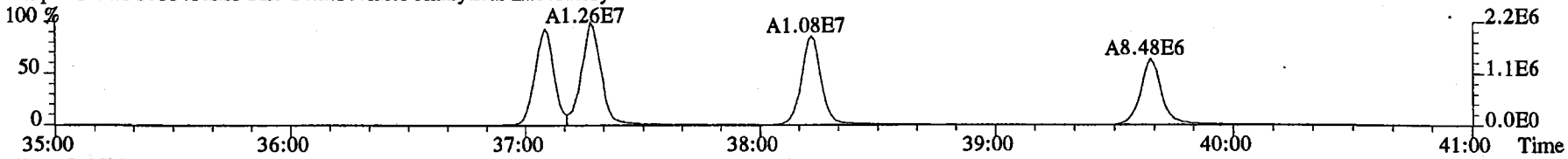
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



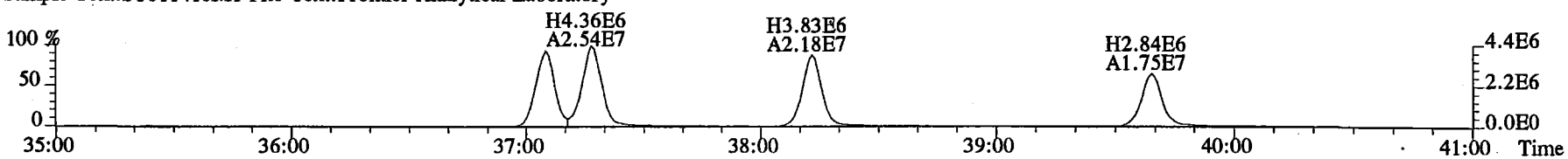
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



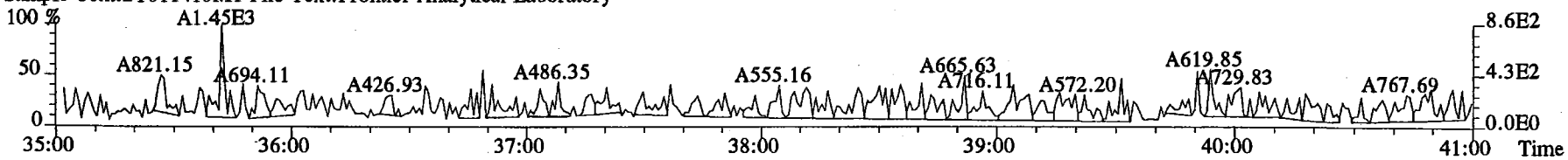
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



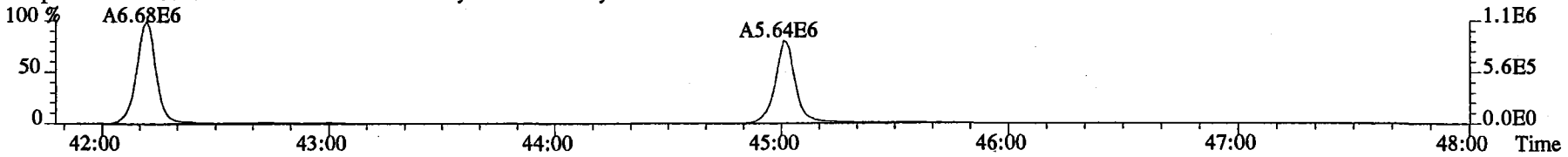
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



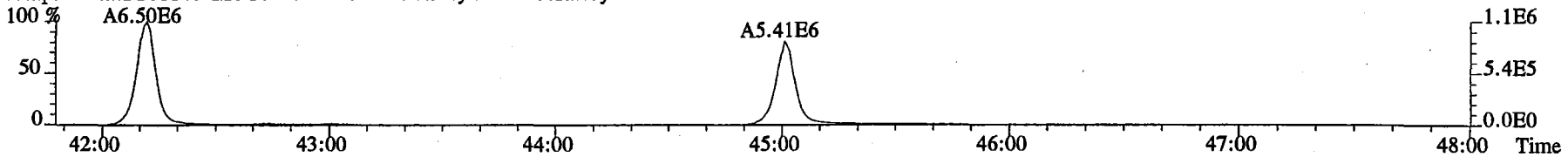
File:14JAN10M #1-464 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



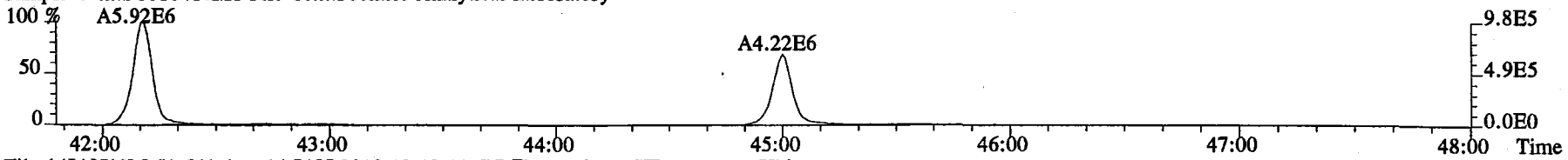
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



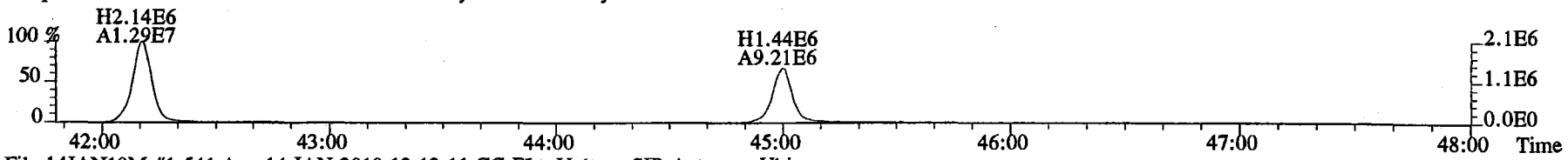
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



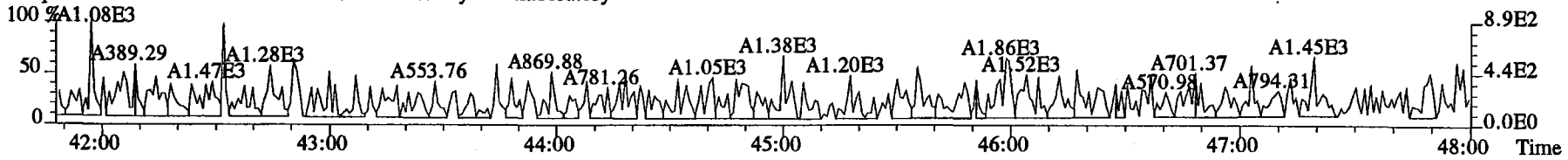
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



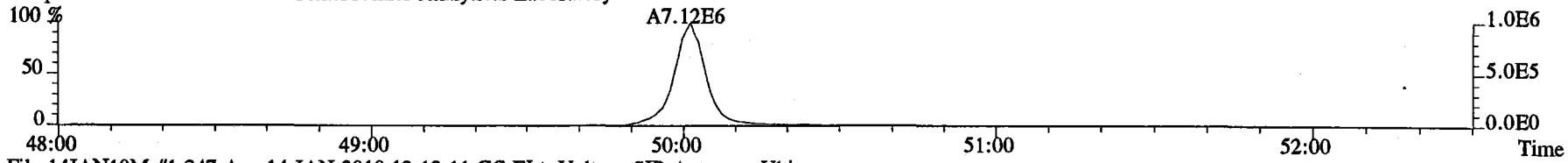
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



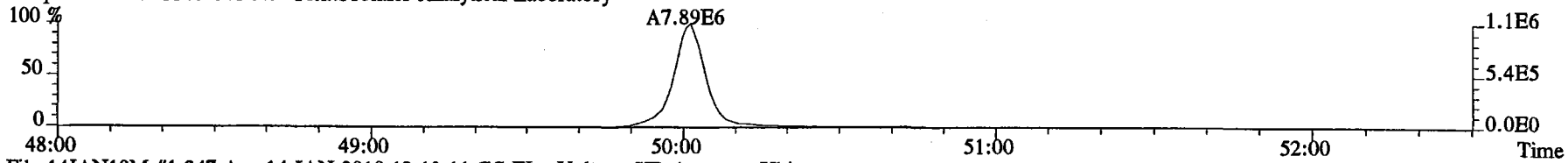
File:14JAN10M #1-541 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



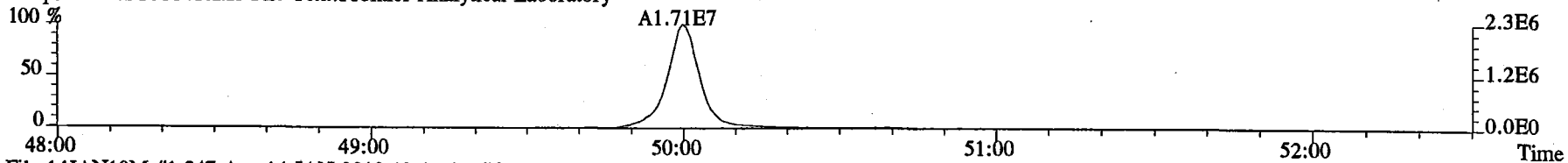
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



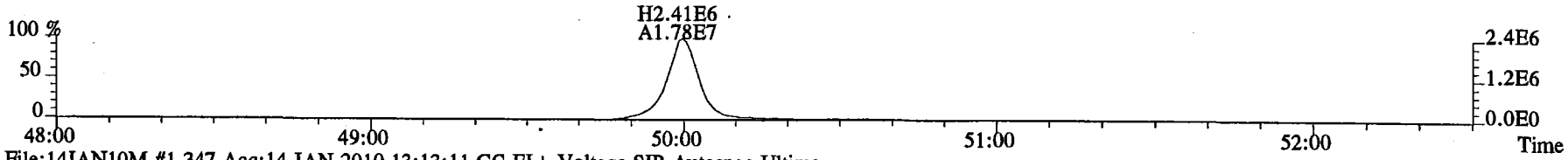
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



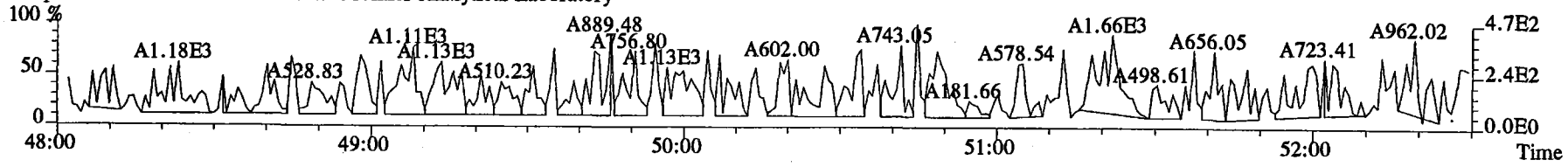
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory



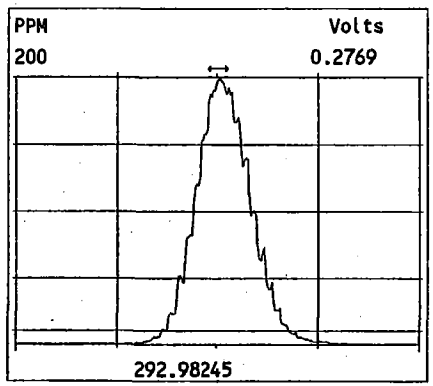
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory

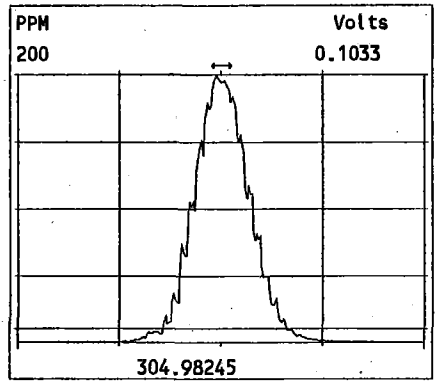


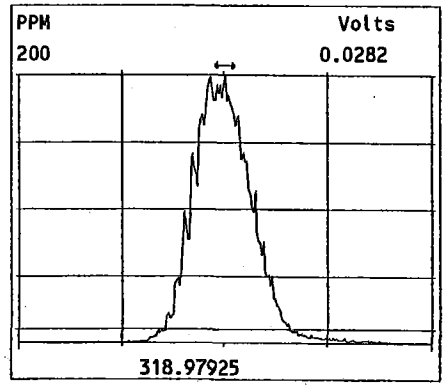
File:14JAN10M #1-347 Acq:14-JAN-2010 13:13:11 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M1 File Text:Frontier Analytical Laboratory

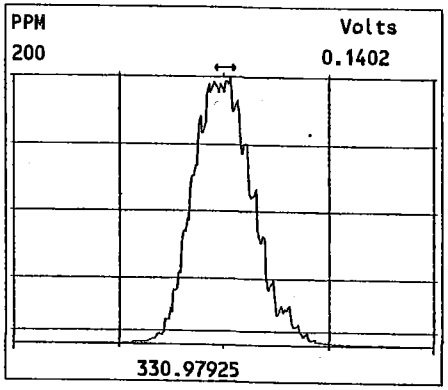


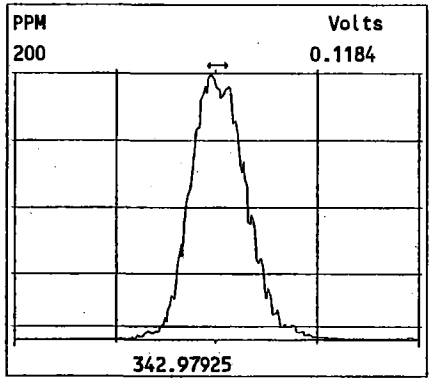
Peak Locate Examination:15-JAN-2010:00:18 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

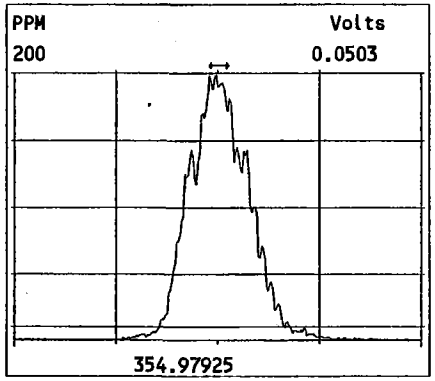


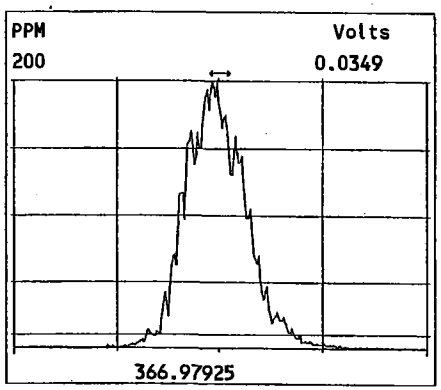


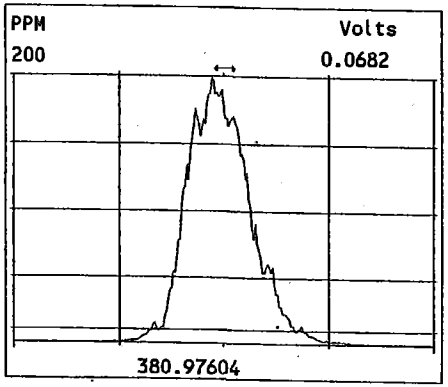


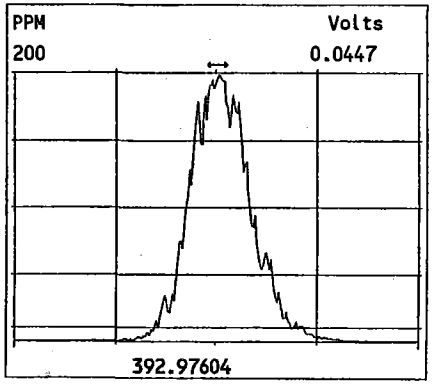


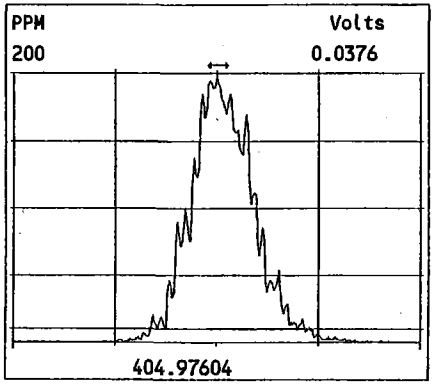


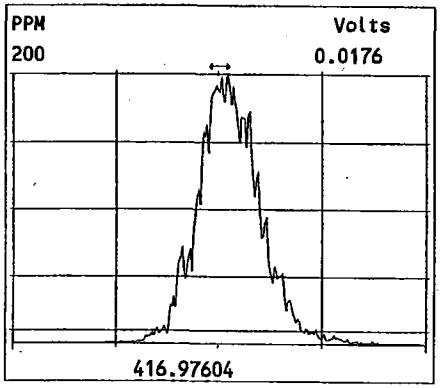




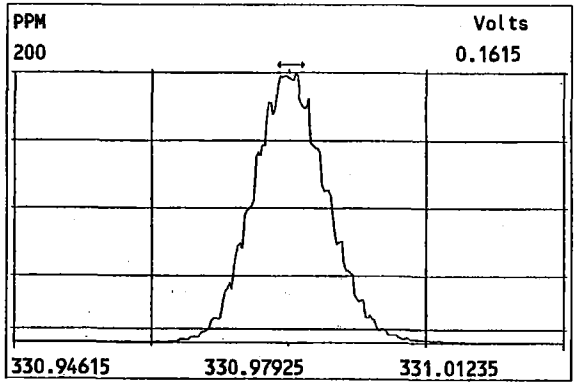


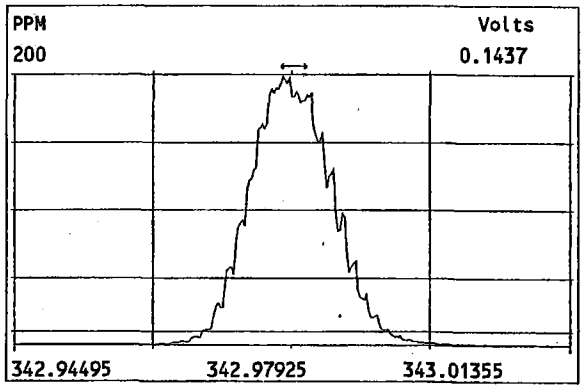


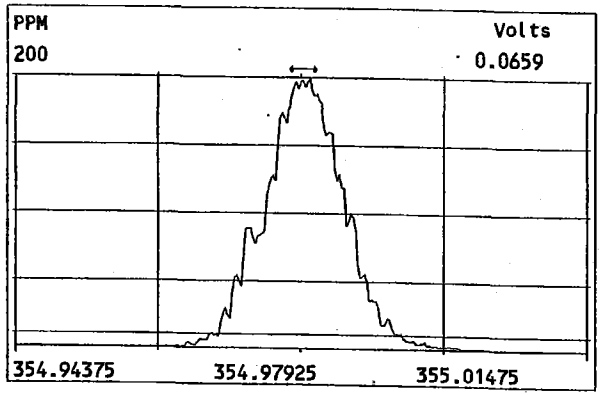


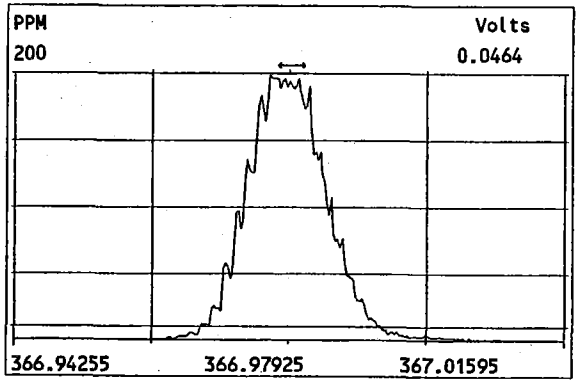


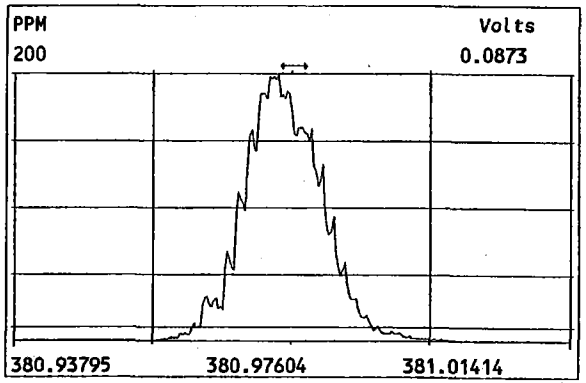
Peak Locate Examination:15-JAN-2010:00:20 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

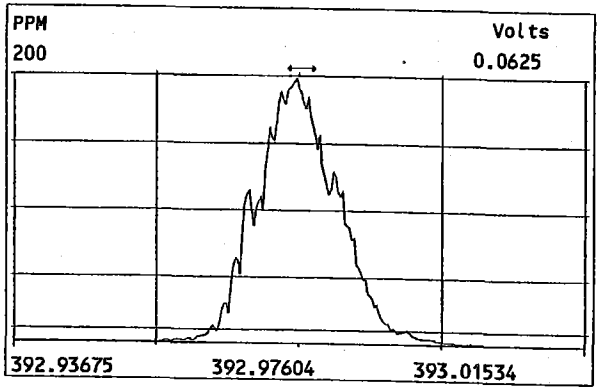


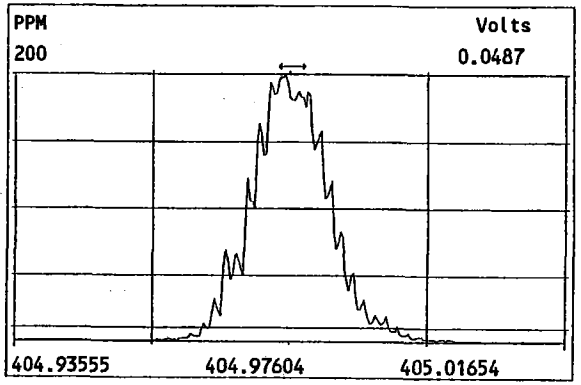


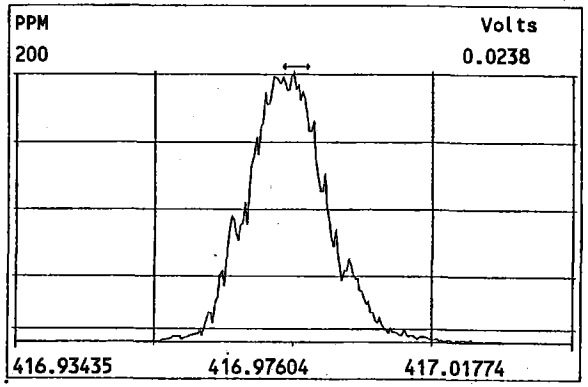




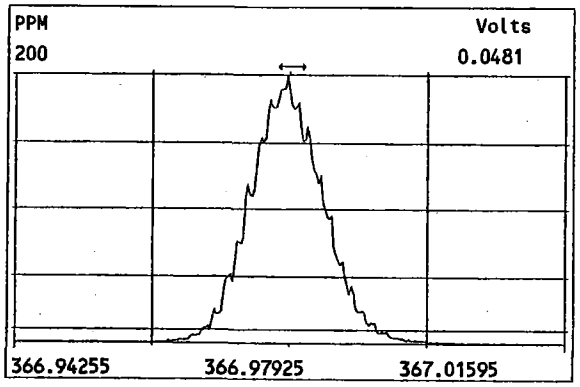


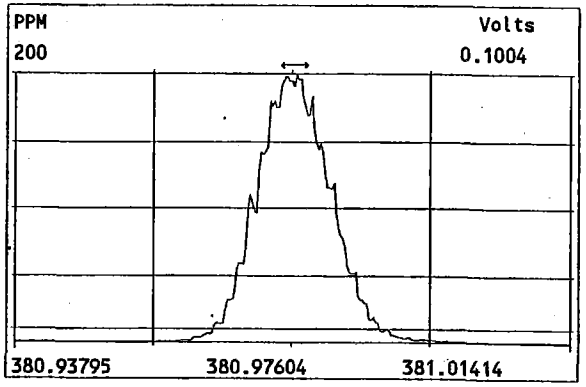


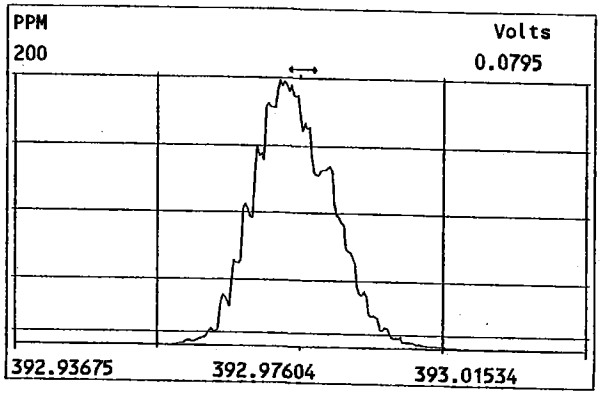


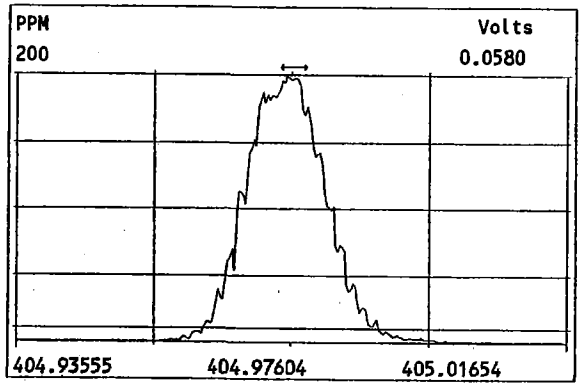


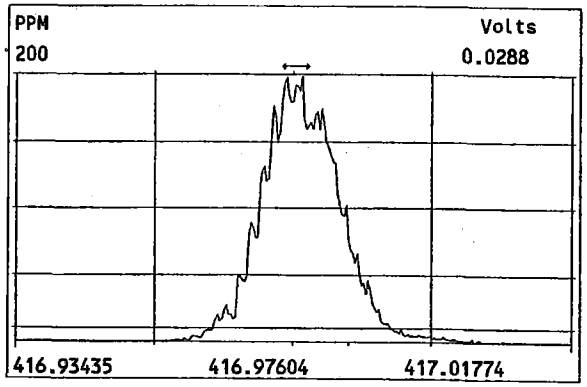
Peak Locate Examination:15-JAN-2010:00:22 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

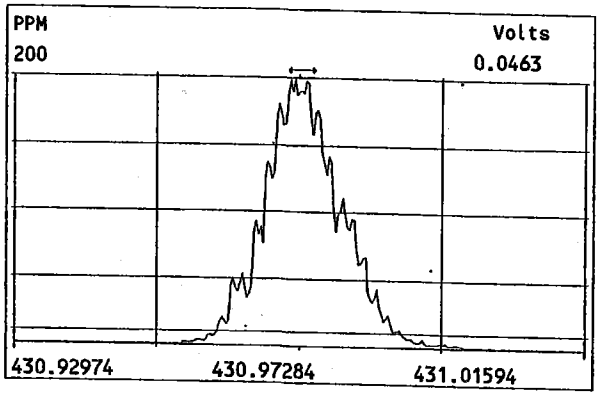


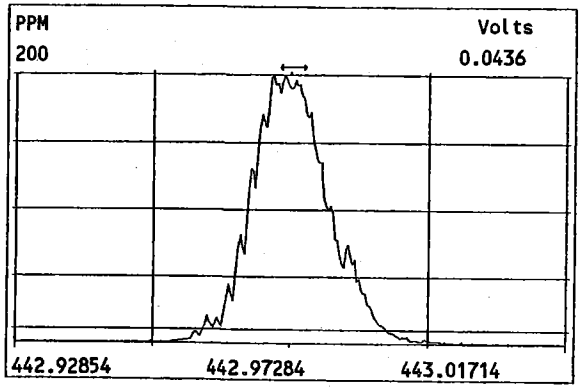


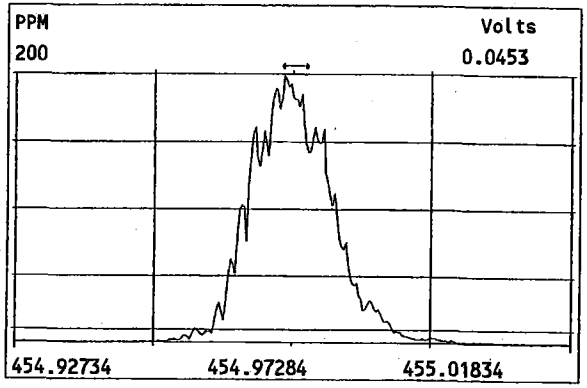




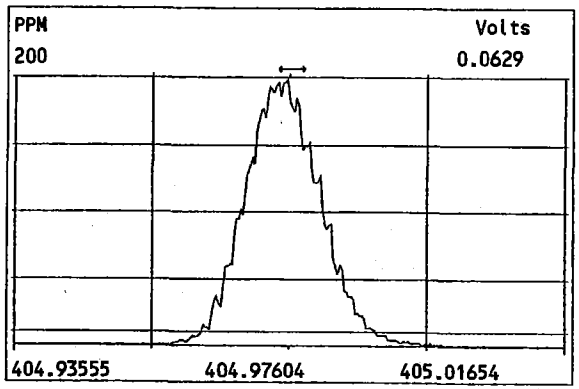


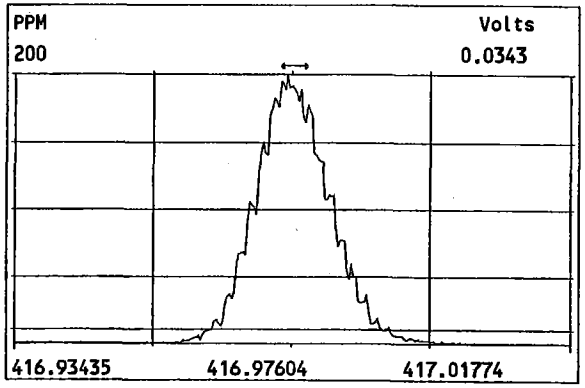


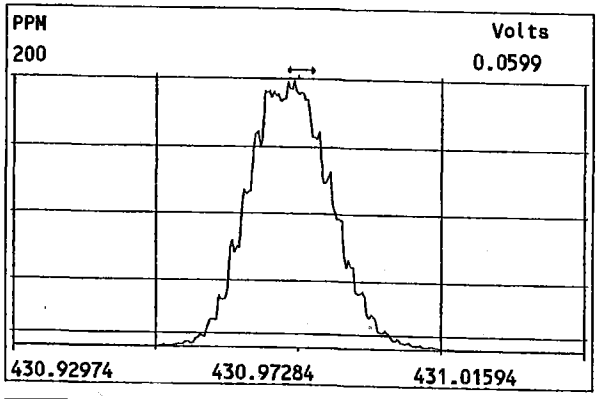


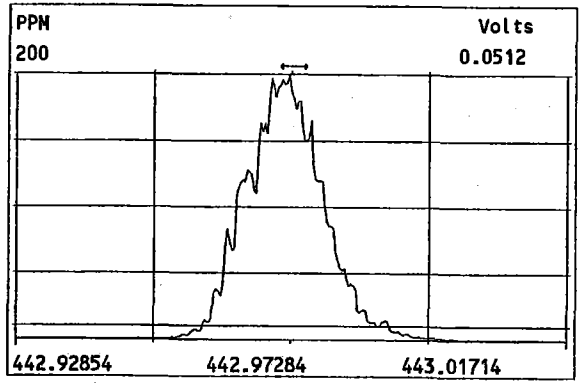


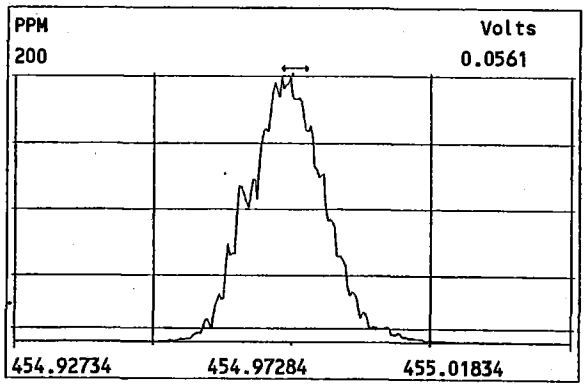
Peak Locate Examination:15-JAN-2010:00:24 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

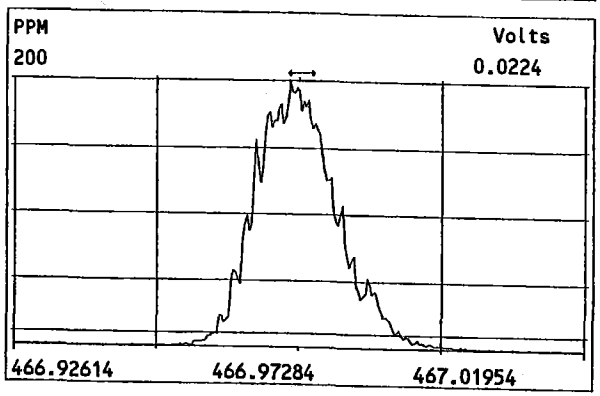


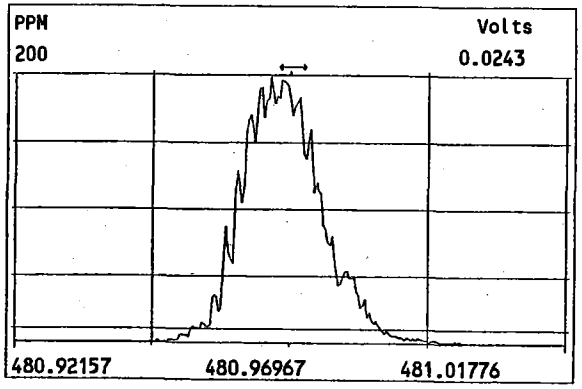




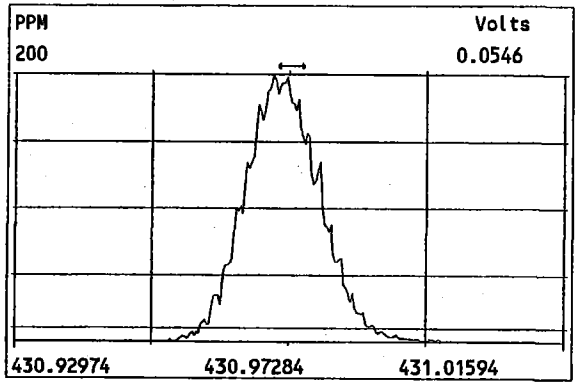


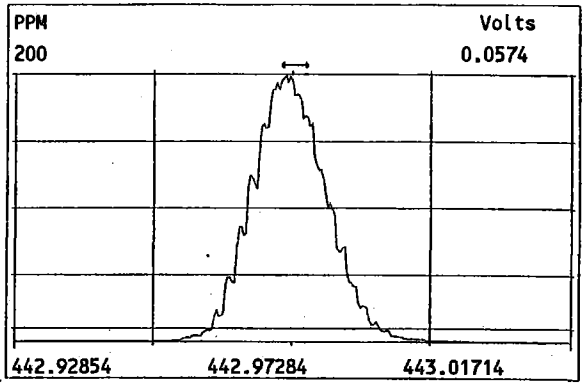


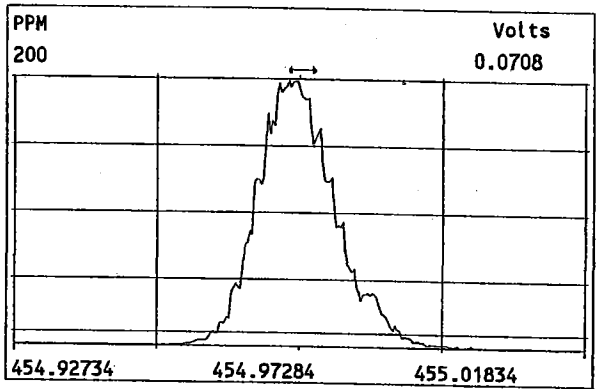


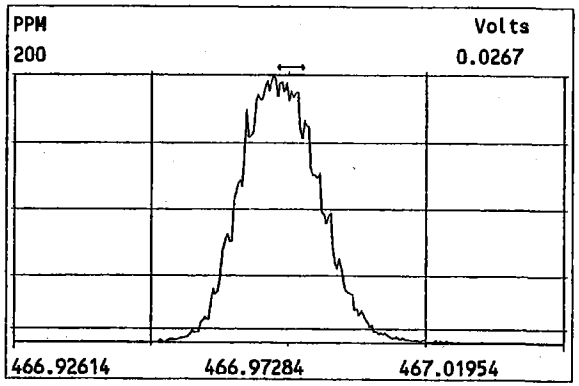


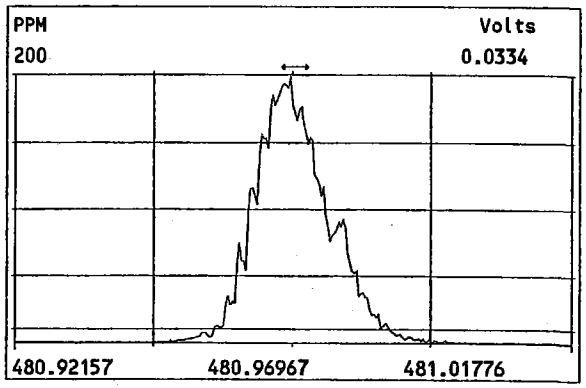
Peak Locate Examination:15-JAN-2010:00:26 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

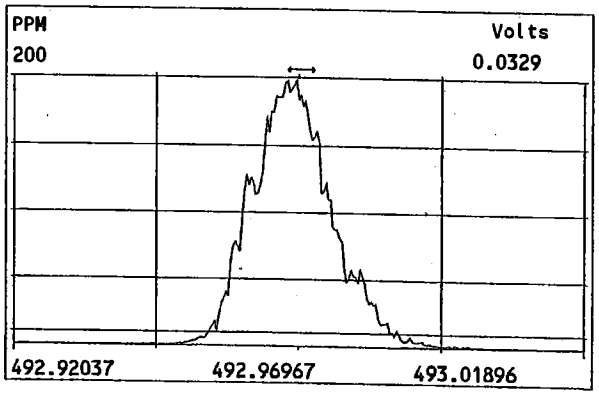


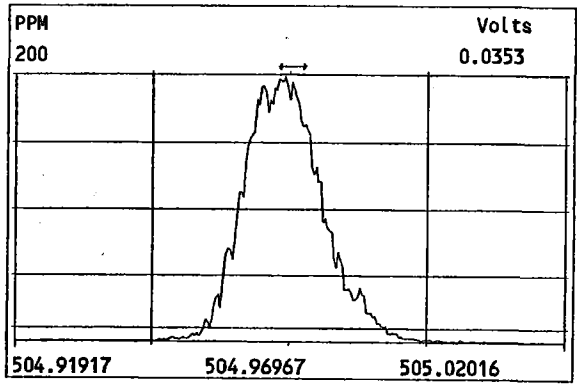


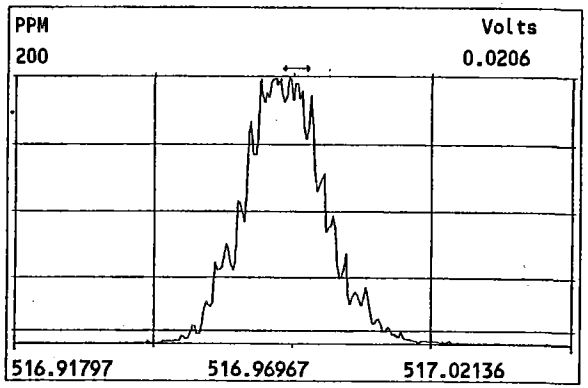












USEPA - ITD

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: 14JAN10M Sam:12 Analysis Date: 14-JAN-10 23:21:17

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	0.83	0.65-0.89	y	9.86	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32-1.78	y	48.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05-1.43	y	48.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	47.9	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05-1.43	y	49.0	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	0.95	0.88-1.20	y	50.4	43.0 - 58.0
OCDD	M+2/M+4	0.92	0.76-1.02	y	98.3	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.71	0.65-0.89	y	9.84	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.70	1.32-1.78	y	56.5	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.67	1.32-1.78	y	51.8	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.0	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	51.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	y	51.6	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	100.0	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: 1/15/10

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: 14JAN10M Sam:12 Analysis Date: 14-JAN-10 23:21:17

	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	103	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.77	1.32-1.78	y	92.1	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	1.30	1.05-1.43	y	94.1	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	98.0	72.0 - 138
13C-OCDD	M+2/M+4	0.99	0.76-1.02	y	195	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.86	0.65-0.89	y	99.6	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.74	1.32-1.78	y	84.9	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.71	1.32-1.78	y	88.8	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.50	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	96.2	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	98.2	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.50	0.43-0.59	y	95.8	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.47	0.37-0.51	y	91.0	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37-0.51	y	93.9	77.0 - 129
13C-OCDF	M+2/M+4	0.96	0.76-1.02	y	178	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					10.3	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: 11/15/10

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 11/18/09

RT Window Data Filename: 14JAN10M Sam:12 Analysis Date: 14-JAN-10 Time: 23:21:17

DB-5 IS Data Filename: 14JAN10M Sam:12 Analysis Date: 14-JAN-10 Time: 23:21:17

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)	23:05
1,2,8,9-TCDD (L)	28:22	1,2,8,9-TCDF (L)	28:35
1,2,4,7,9-PeCDD (F)	30:17	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)	39:13	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)	44:13	1,2,3,4,7,8,9-HpCDF (L)	45:08

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

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

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

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

Analyst: _____ Date: 11/15/10

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

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

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-JAN-10 23:21:17 CS3 or VER Data Filename: 14JAN10M Sam:12

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		1.223	0.923-1.303

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

Analyst: _____ Date: 1/15/10

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

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

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 14-JAN-10 23:21:17 CS3 or VER Data Filename: 14JAN10M 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	1.000	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	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	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		1.127	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: 1/18/10

FAL ID: STO11410M2 Filename: 14JAN10M Sam:12 Acquired: 14-JAN-10 23:21:17 ICal: PCDDFAL3-11-18-09
Client ID: 1613 CS3 (090918J) ConCal: STO11410M1 EndCal: STO11410M2
Results: 1918 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 100
WHO 1998 Tox: 125 WHO 2005 Tox: 113

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise-1	Noise-2	DL
2,3,7,8-TCDD	3.36e+06	0.83 y	27:25	1.02	9.86		2.50	-	-	*
1,2,3,7,8-PeCDD	1.53e+07	1.60 y	33:15	0.96	48.8		2.50	-	-	*
1,2,3,4,7,8-HxCDD	1.59e+07	1.32 y	38:36	1.37	48.4		2.50	-	-	*
1,2,3,6,7,8-HxCDD	1.31e+07	1.25 y	38:46	1.34	47.9		2.50	-	-	*
1,2,3,7,8,9-HxCDD	1.49e+07	1.30 y	39:13	1.37	49.0		2.50	-	-	*
1,2,3,4,6,7,8-HpCDD	1.20e+07	0.95 y	44:13	1.17	50.4		2.50	-	-	*
OCDD	1.80e+07	0.92 y	49:47	1.21	98.3		2.50	-	-	*
2,3,7,8-TCDF	6.99e+06	0.71 y	26:40	1.29	9.84		2.50	-	-	*
1,2,3,7,8-PeCDF	2.36e+07	1.70 y	31:30	0.89	56.5		2.50	-	-	*
2,3,4,7,8-PeCDF	2.24e+07	1.67 y	32:49	0.91	51.8		2.50	-	-	*
1,2,3,4,7,8-HxCDF	2.08e+07	1.25 y	37:13	1.00	50.5		2.50	-	-	*
1,2,3,6,7,8-HxCDF	2.08e+07	1.25 y	37:25	0.92	51.0		2.50	-	-	*
2,3,4,6,7,8-HxCDF	1.95e+07	1.24 y	38:21	0.99	50.2		2.50	-	-	*
1,2,3,7,8,9-HxCDF	1.83e+07	1.26 y	39:48	1.09	50.3		2.50	-	-	*
1,2,3,4,6,7,8-HpCDF	1.63e+07	1.05 y	42:19	1.36	51.8		2.50	-	-	*
1,2,3,4,7,8,9-HpCDF	1.53e+07	1.05 y	45:08	1.61	51.6		2.50	-	-	*
OCDF	2.04e+07	0.90 y	50:10	0.84	100.0		2.50	-	-	*
										Rec
13C-2,3,7,8-TCDD	3.36e+07	0.72 y	27:24	0.94	103					103
13C-1,2,3,7,8-PeCDD	3.25e+07	1.77 y	33:13	1.02	92.1					92.1
13C-1,2,3,4,7,8-HxCDD	2.39e+07	1.30 y	38:36	0.98	105					105
13C-1,2,3,6,7,8-HxCDD	2.04e+07	1.30 y	38:45	0.94	94.1					94.1
13C-1,2,3,4,6,7,8-HpCDD	2.04e+07	1.05 y	44:12	0.90	98.0					98.0
13C-OCDD	3.02e+07	0.99 y	49:47	0.67	195					97.7
13C-2,3,7,8-TCDF	5.53e+07	0.86 y	26:39	0.88	99.6					99.6
13C-1,2,3,7,8-PeCDF	4.71e+07	1.74 y	31:29	0.88	84.9					84.9
13C-2,3,4,7,8-PeCDF	4.77e+07	1.71 y	32:48	0.85	88.8					88.8
13C-1,2,3,4,7,8-HxCDF	4.13e+07	0.50 y	37:12	1.72	104					104
13C-1,2,3,6,7,8-HxCDF	4.46e+07	0.49 y	37:24	2.00	96.2					96.2
13C-2,3,4,6,7,8-HxCDF	3.95e+07	0.49 y	38:19	1.74	98.2					98.2
13C-1,2,3,7,8,9-HxCDF	3.34e+07	0.50 y	39:46	1.51	95.8					95.8
13C-1,2,3,4,6,7,8-HpCDF	2.31e+07	0.47 y	42:17	1.10	91.0					91.0
13C-1,2,3,4,7,8,9-HpCDF	1.84e+07	0.47 y	45:07	0.85	93.9					93.9
13C-OCDF	4.85e+07	0.96 y	50:09	1.17	178					89.2
37Cl-2,3,7,8-TCDD	3.47e+06		27:25	0.97	10.3					103
13C-1,2,3,4-TCDD	3.47e+07	0.72 y	26:49	-	133					
13C-1,2,3,4-TCDF	6.32e+07	0.87 y	25:34	-	137					
13C-1,2,3,7,8,9-HxCDD	2.31e+07	1.29 y	39:12	-	113					

						Fac	Noise-1	Noise-2	DL		#Hom
Total Tetra-Dioxins	1.84e+07		24:25	1.02	53.9	2.50	-	-	*		14
Total Penta-Dioxins	3.23e+07		30:17	0.96	103	2.50	-	-	*		6
Total Hexa-Dioxins	4.98e+07		36:09	1.36	165	2.50	-	-	*		9
Total Hepta-Dioxins	2.52e+07		42:51	1.17	106	2.50	-	-	*		14
Total Tetra-Furans	3.02e+07		23:05	1.29	42.5	2.50	-	-	*		16
1st Fn. Tot Penta-Furans	2.36e+07		28:26	0.90	55.4	2.50	-	-	*	PeCDF	1
Total Penta-Furans	6.56e+07		30:14	0.90	155	2.50	-	-	*	210	9
Total Hexa-Furans	9.18e+07		35:16	0.99	233	2.50	-	-	*		8
Total Hepta-Furans	3.18e+07		42:19	1.47	104	2.50	-	-	*		4

Analyst: _____ Date: 1/15/10

Frontier Analytical Laboratory - Acquisition Log

Run Name:14JAN10M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
14JAN10M	1	ST011410M1	1613 CS3 (090918J)	14-JAN-10 13:13:11	ST011410M1	ST011410M2	TC
14JAN10M	2	1918-001-0001-OPR	OPR	14-JAN-10 14:08:25	ST011410M1	ST011410M2	TC
14JAN10M	3	1918-001-0001-MB	Method Blank	14-JAN-10 15:03:41	ST011410M1	ST011410M2	TC
14JAN10M	4	5911-001-0001-SA	MW-8.3-010810	14-JAN-10 15:58:55	ST011410M1	ST011410M2	TC
14JAN10M	5	5912-001-0001-SA	Well #1	14-JAN-10 16:54:17	ST011410M1	ST011410M2	TC
14JAN10M	6	5902-001-0001-SA	9121091-01	14-JAN-10 17:49:36	ST011410M1	ST011410M2	TC
14JAN10M	7	5902-002-0001-SA	9121091-02	14-JAN-10 18:44:55	ST011410M1	ST011410M2	TC
14JAN10M	8	5904-001-0001-SA	CB31A123109COMP	14-JAN-10 19:40:14	ST011410M1	ST011410M2	TC
14JAN10M	9	5904-002-0001-SA	CB4857123109COMP	14-JAN-10 20:35:29	ST011410M1	ST011410M2	TC
14JAN10M	10	5904-003-0001-SA	CB1123109COMP	14-JAN-10 21:30:44	ST011410M1	ST011410M2	TC
14JAN10M	11	SB011410M1	Solvent Blank	14-JAN-10 22:25:59	ST011410M1	ST011410M2	TC
14JAN10M	12	ST011410M2	1613 CS3 (090918J)	14-JAN-10 23:21:17	ST011410M1	ST011410M2	TC

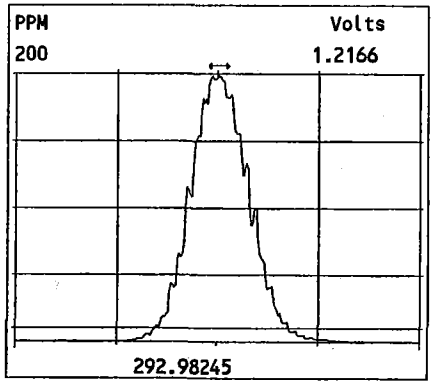
1/15/10

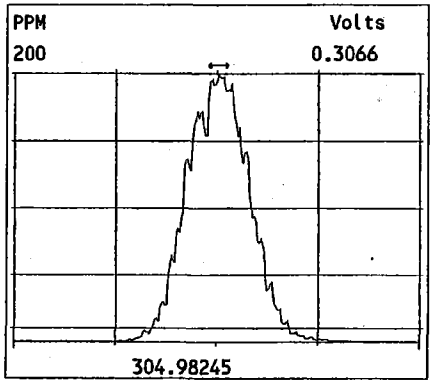
Data Backed Up:_____

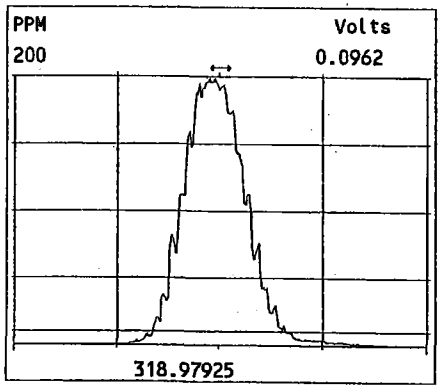
Date:_____

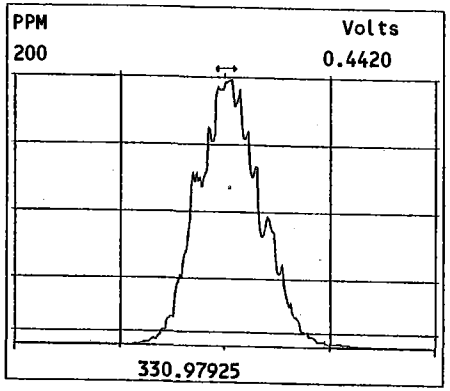
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M

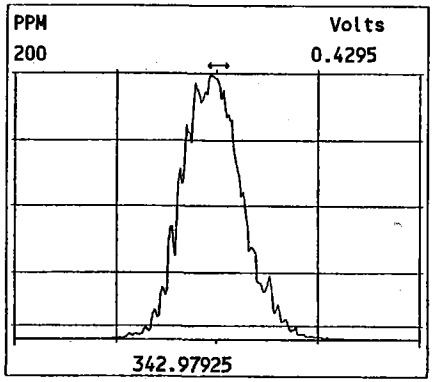
Experiment:PCDD Function:1 Reference:PFK

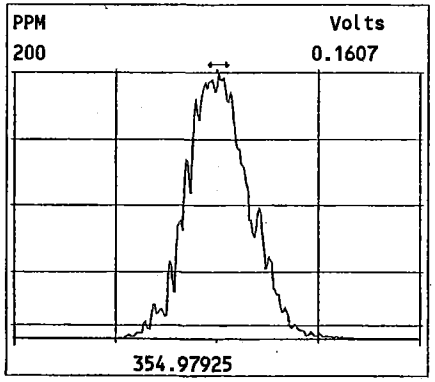


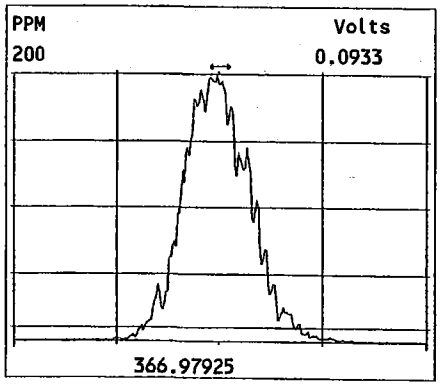


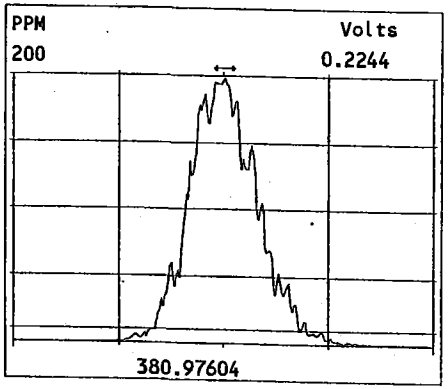


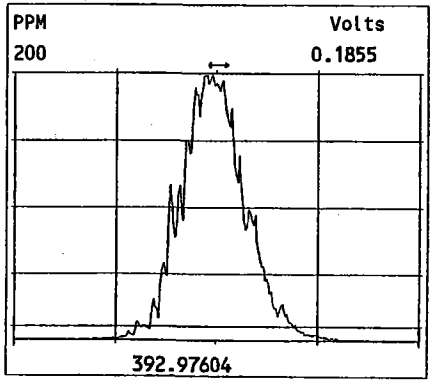


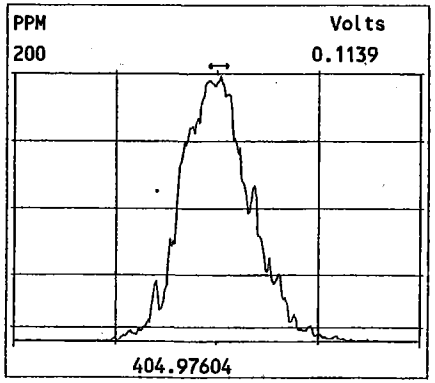


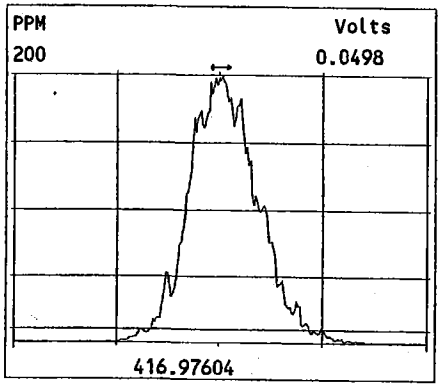






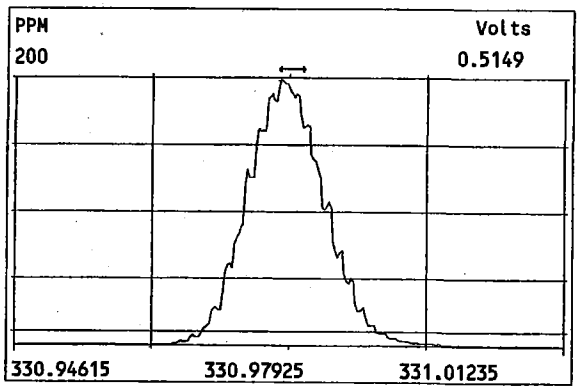


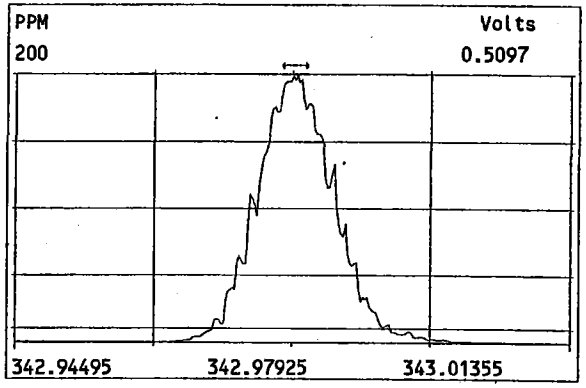


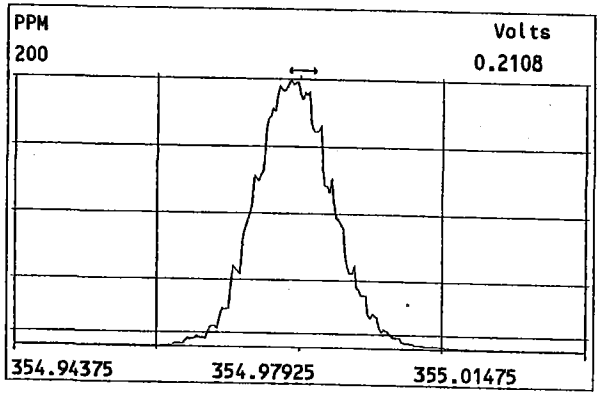


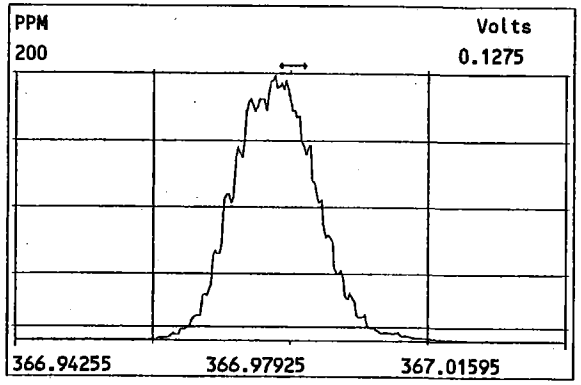
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M

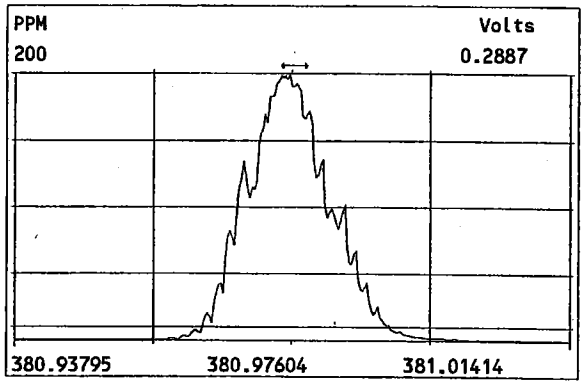
Experiment:PCDD Function:2 Reference:PFK

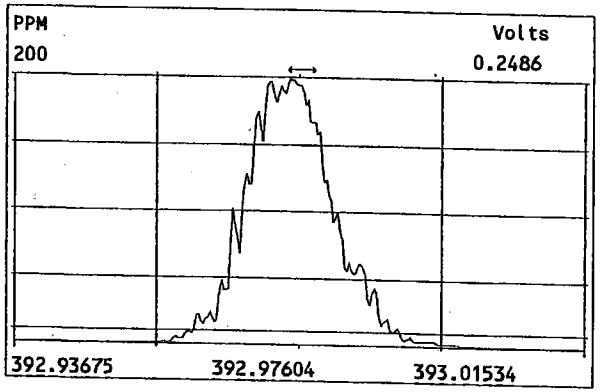


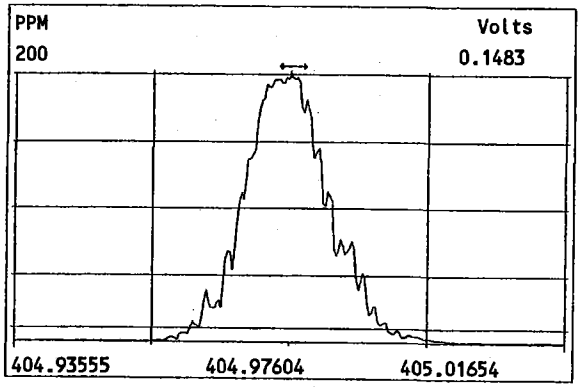


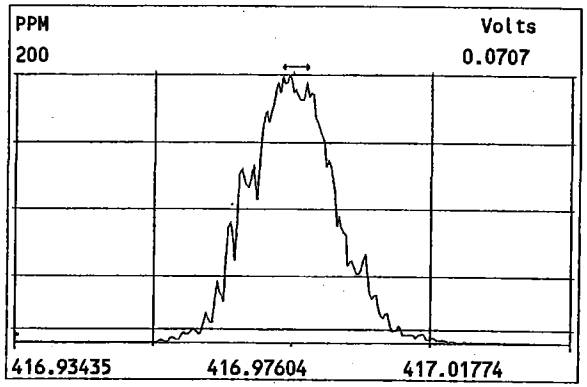




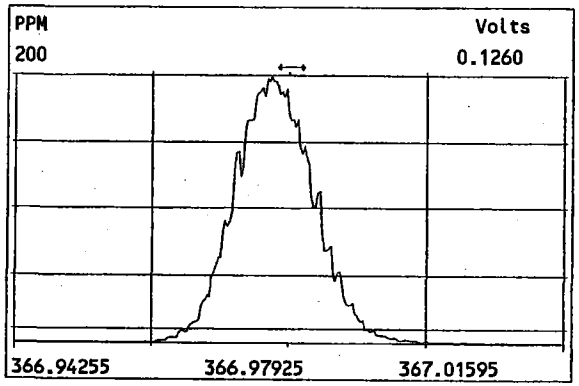


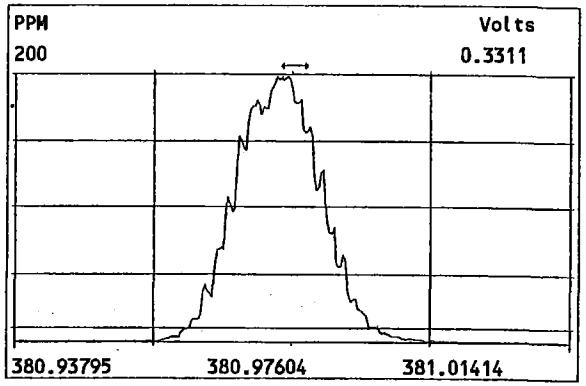


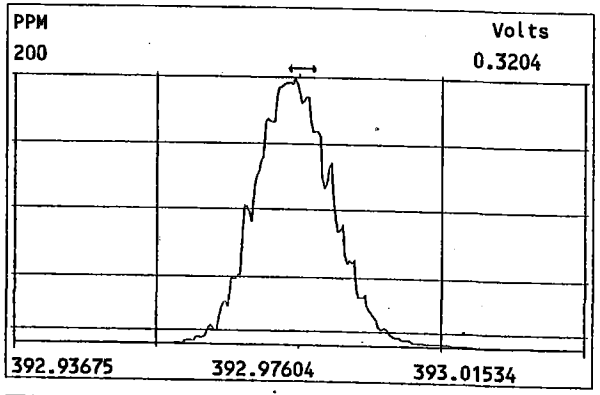


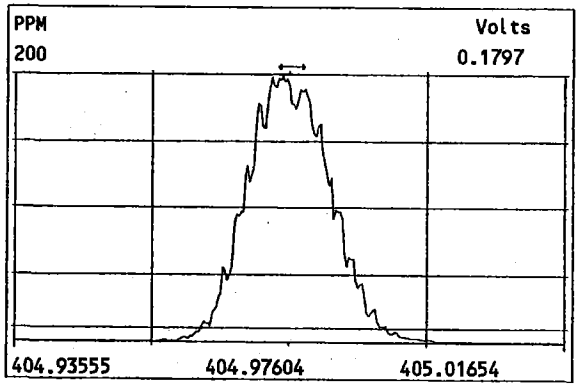


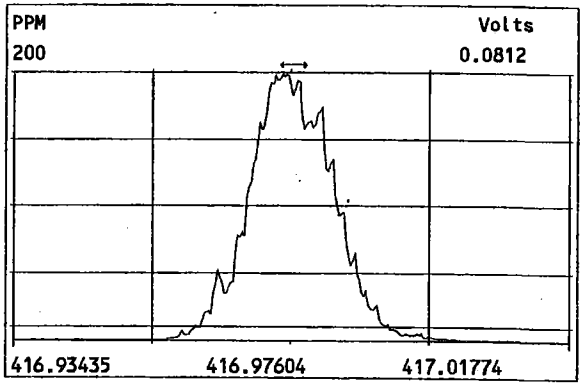
Peak Locate Examination:14-JAN-2010:13:11 File:14JAN10M
Experiment:PCDD Function:3 Reference:PFK

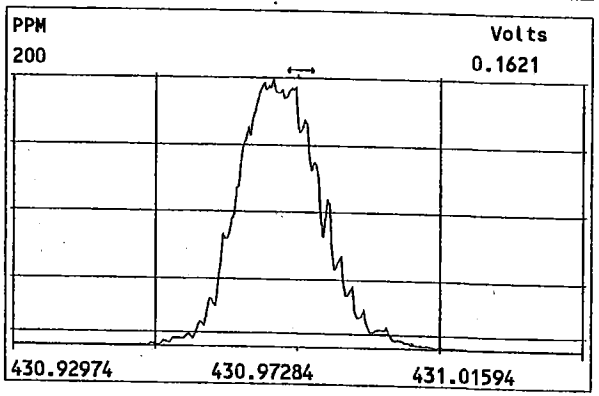


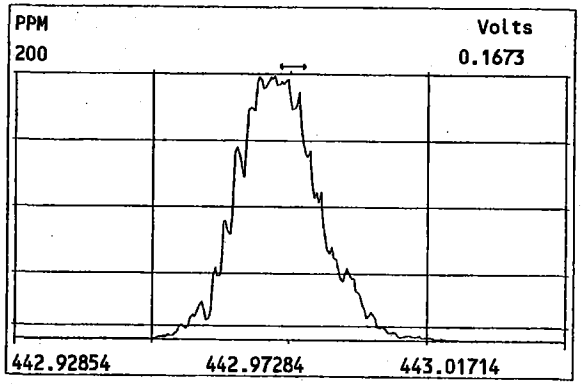


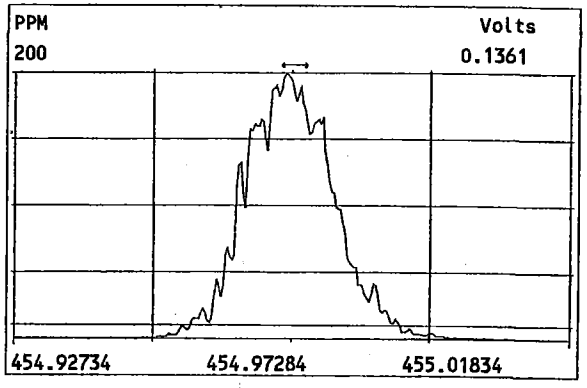




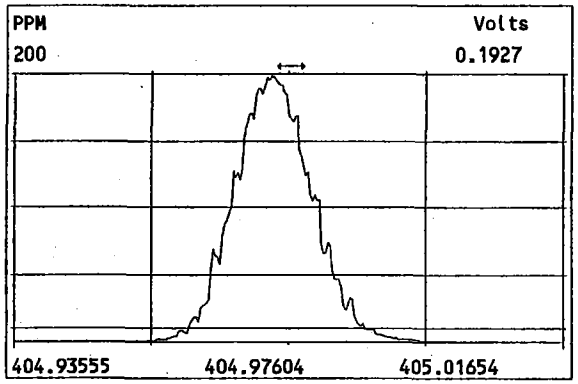


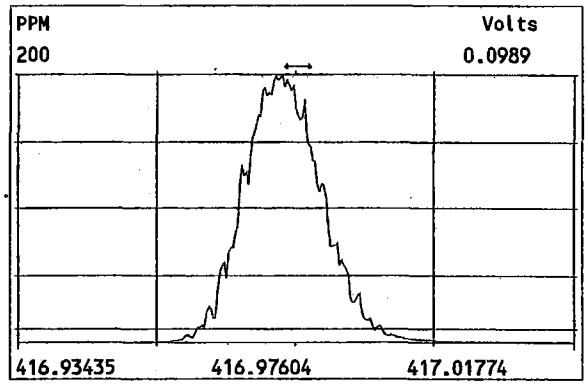


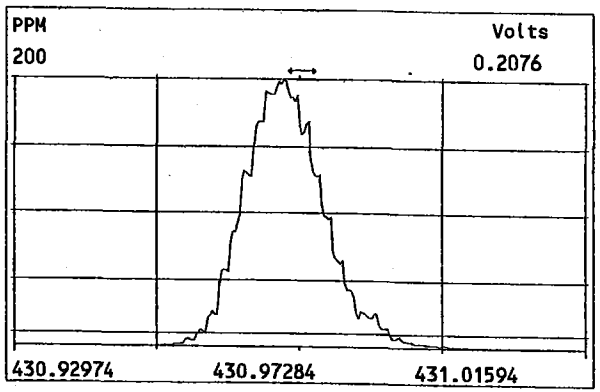


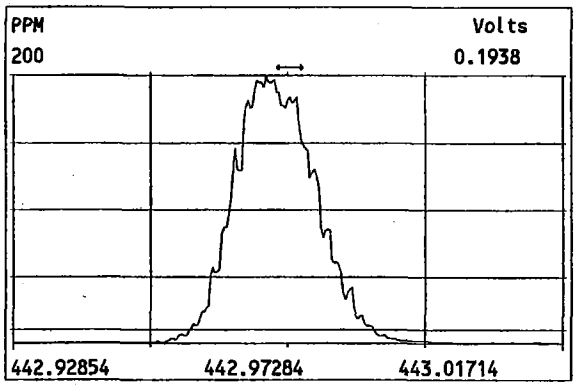


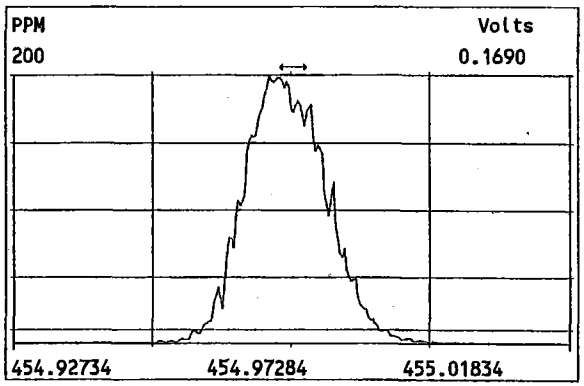
Peak Locate Examination:14-JAN-2010:13:12 File:14JAN10M
Experiment:PCDD Function:4 Reference:PFK

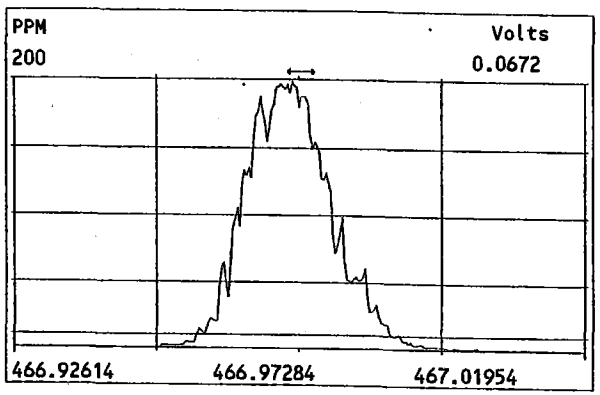


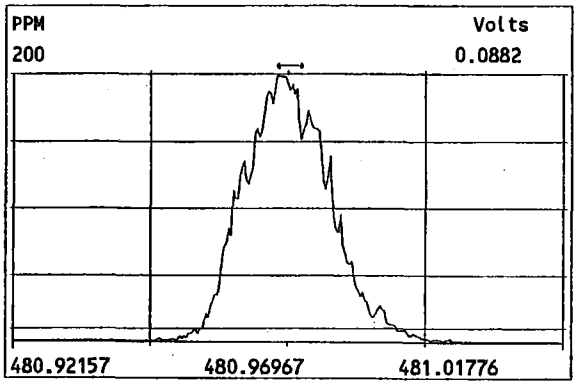




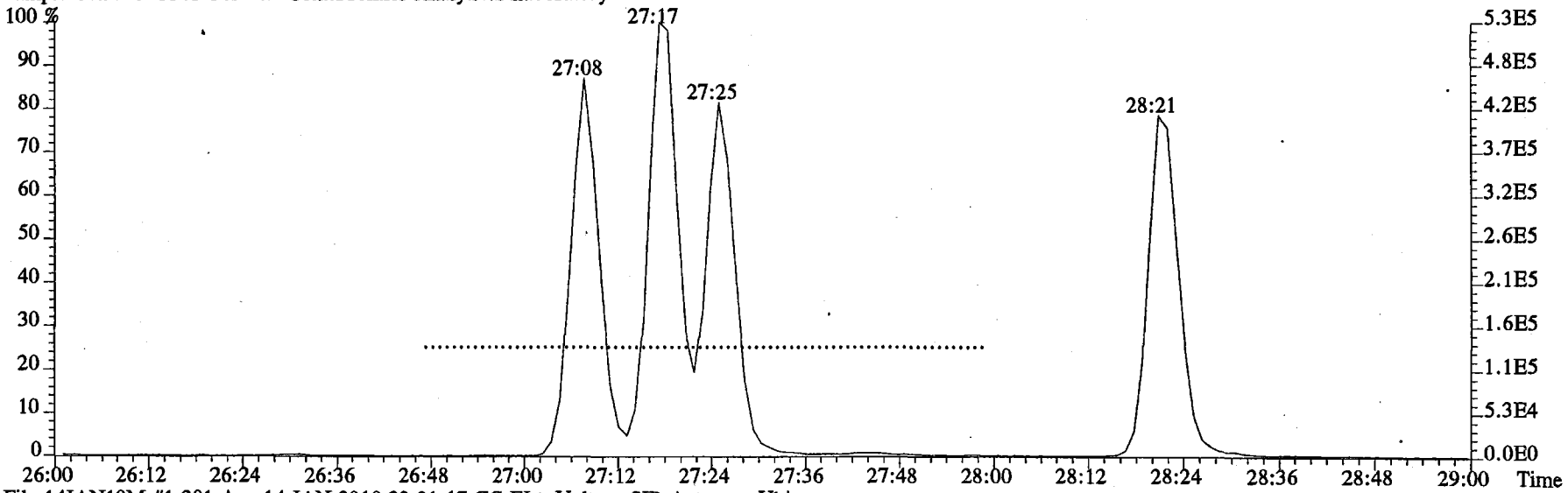




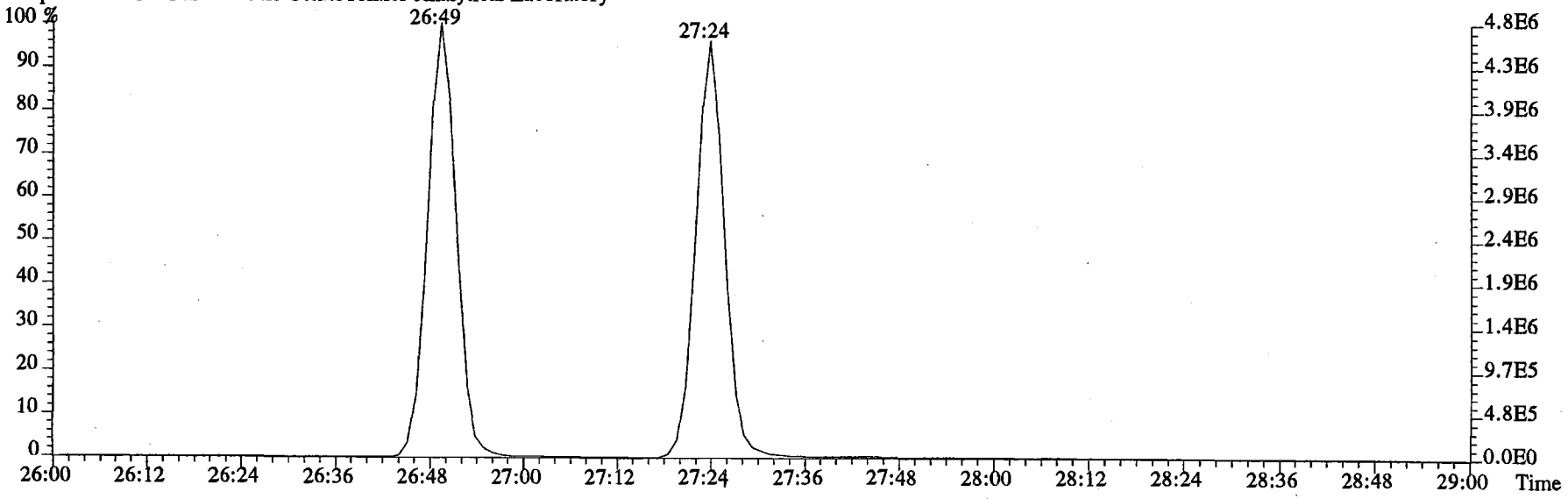




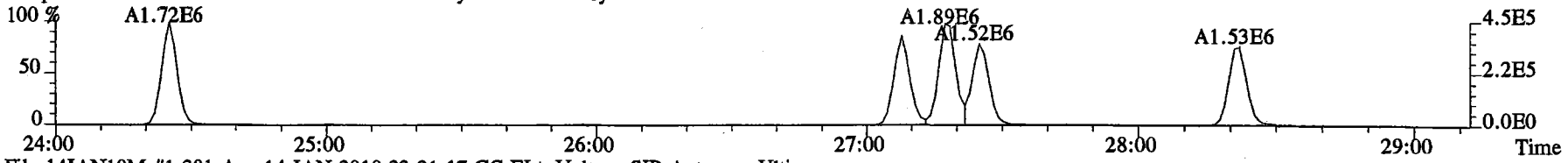
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:12 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



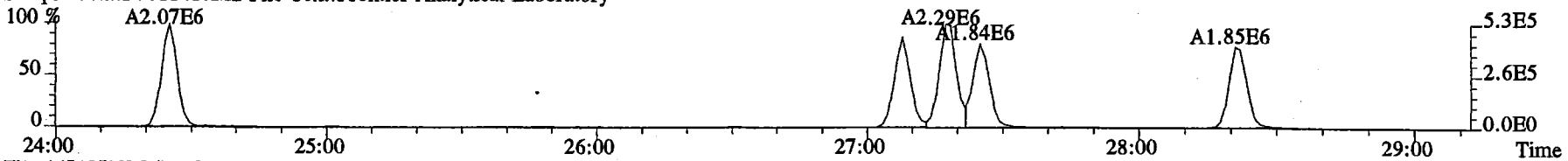
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:12 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



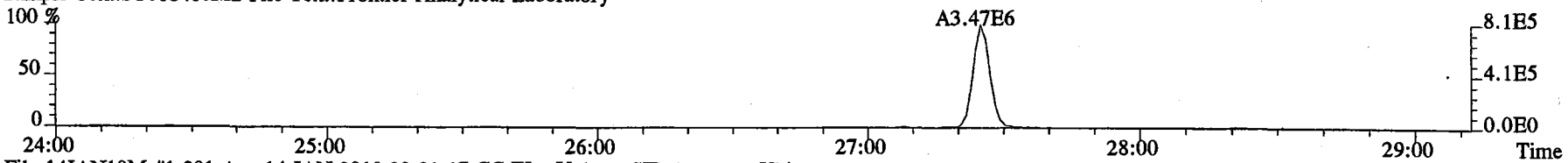
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



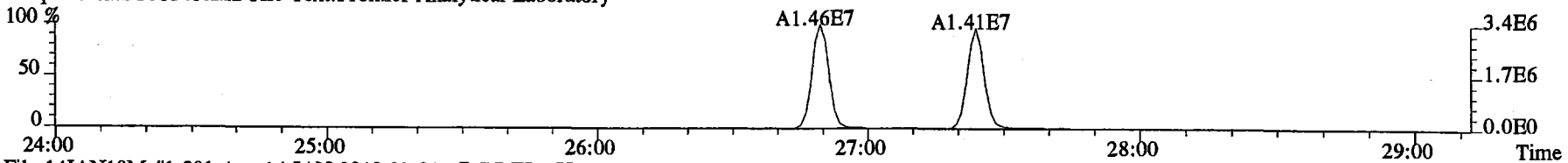
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



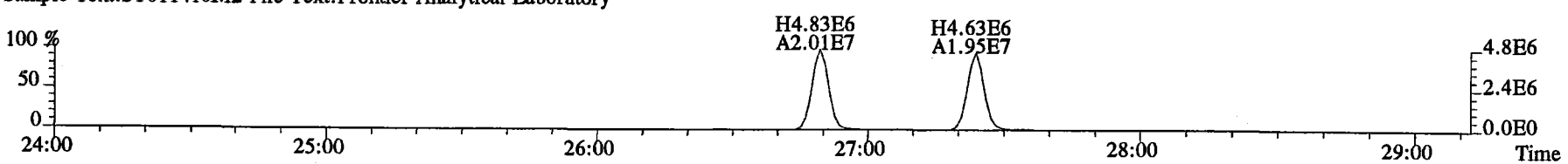
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



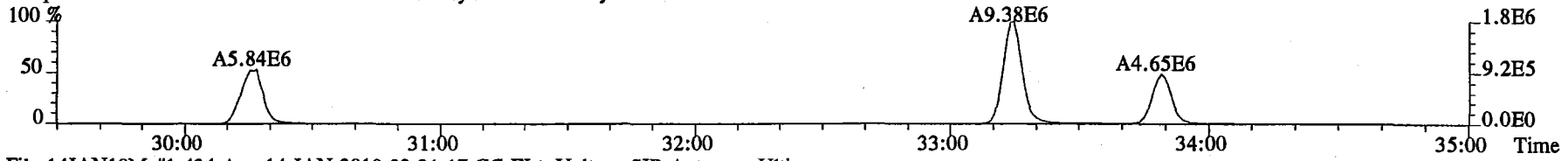
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



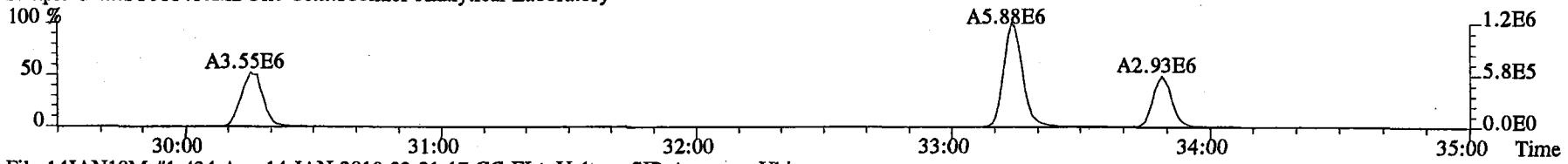
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



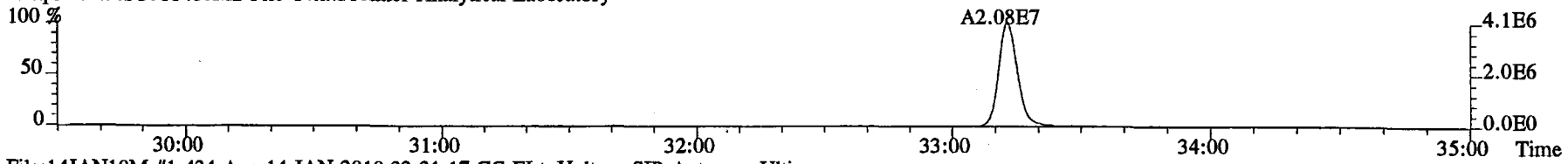
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



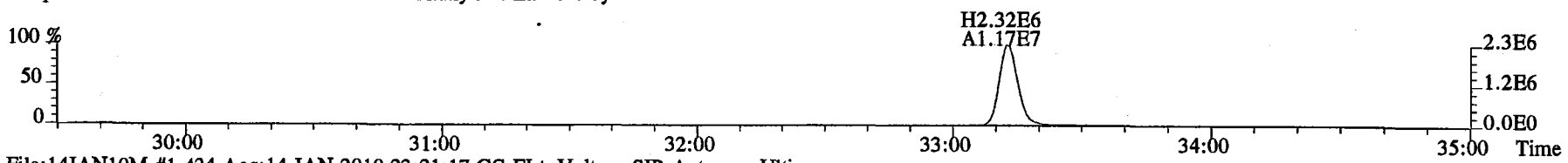
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



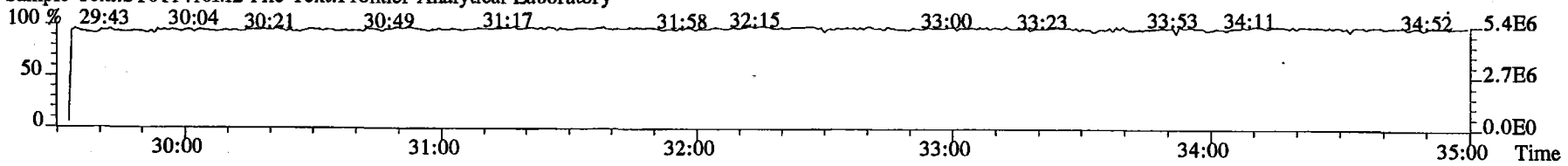
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



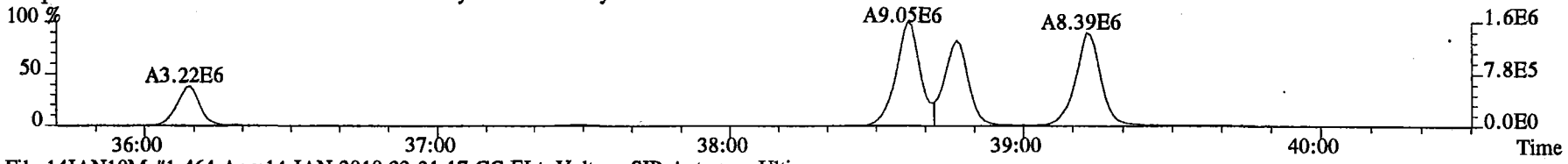
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



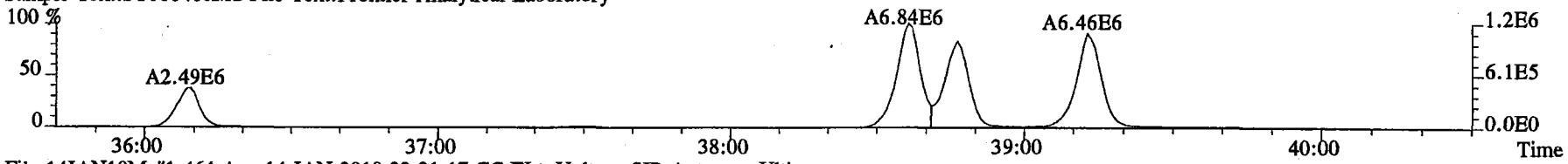
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:12 F:2 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



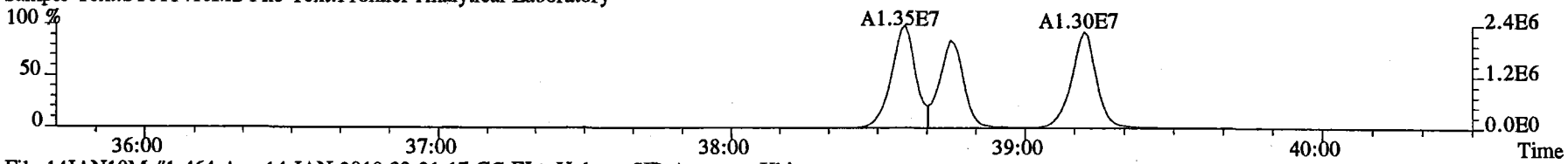
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



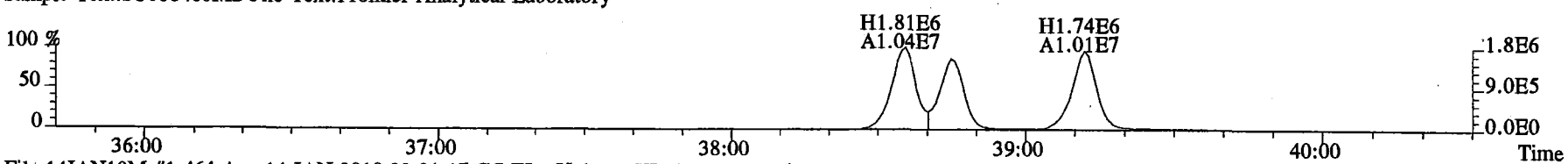
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



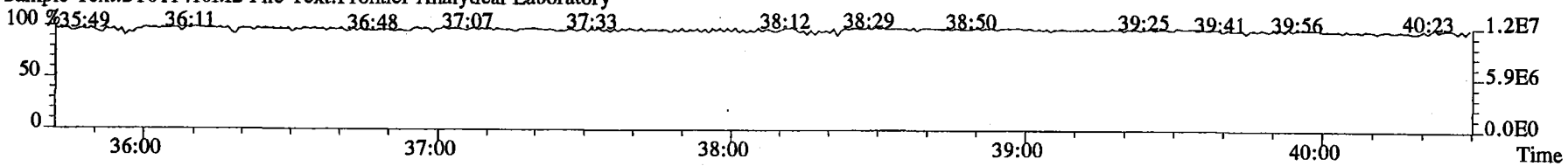
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



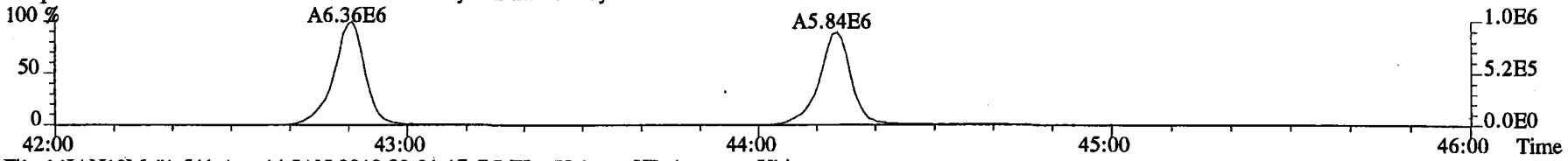
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



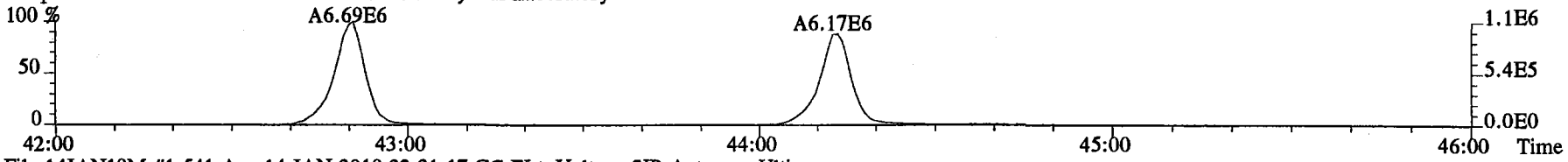
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:12 F:3 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



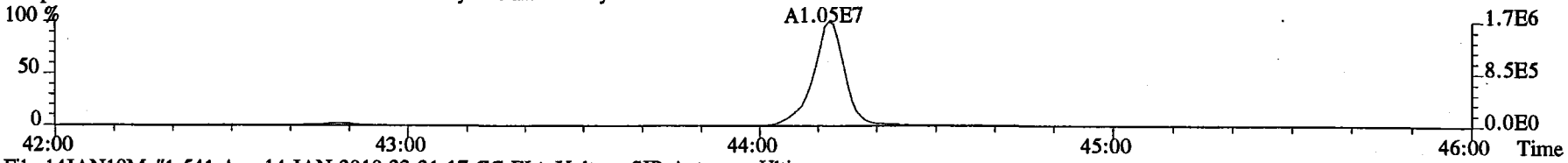
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



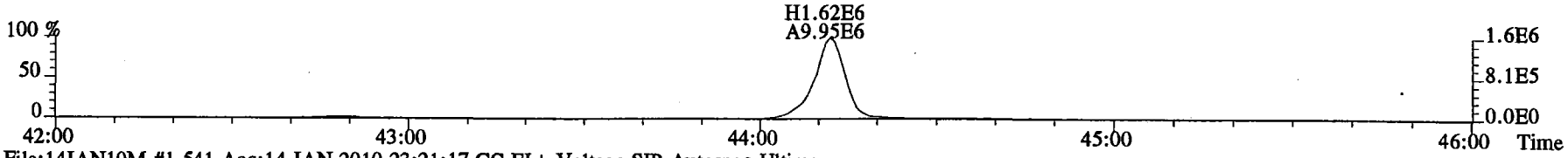
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



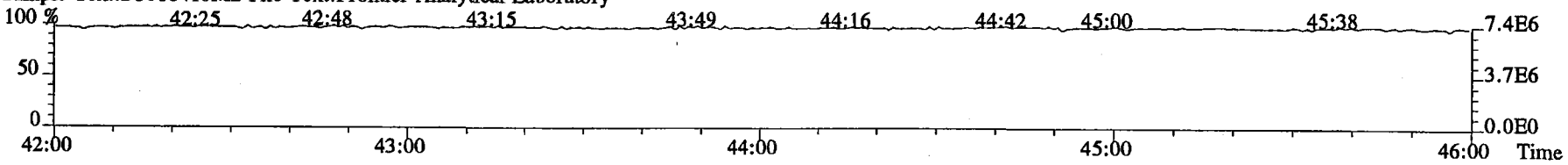
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



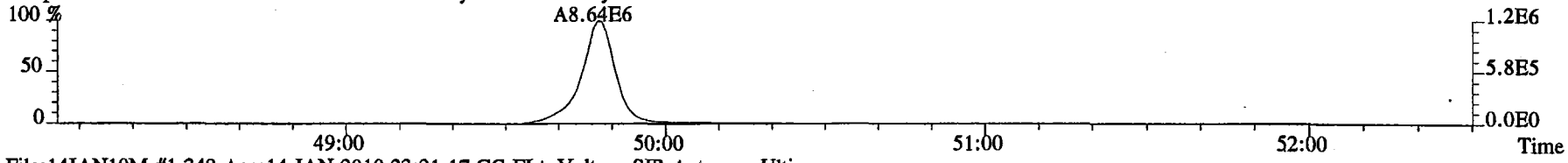
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



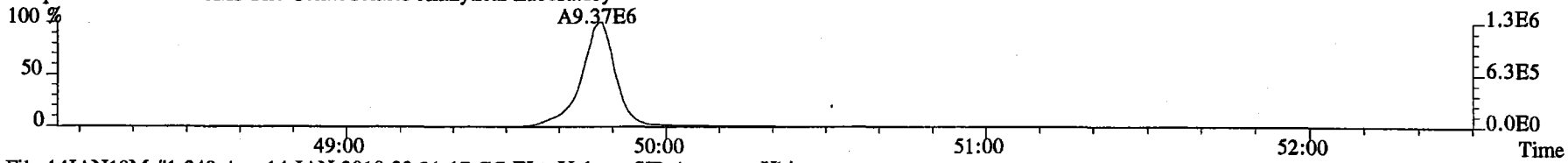
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:12 F:4 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



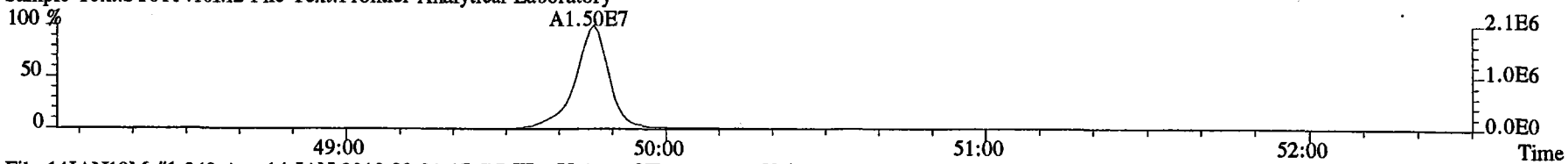
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



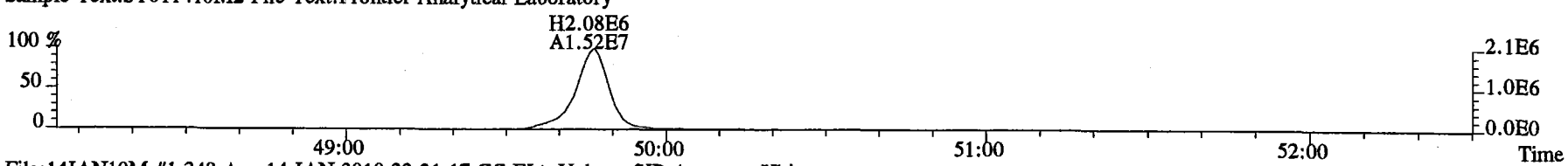
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



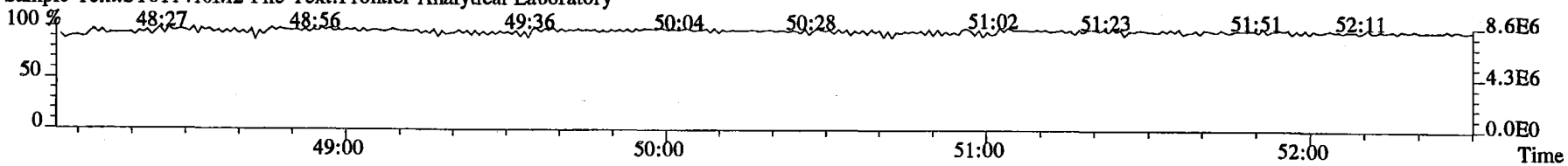
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



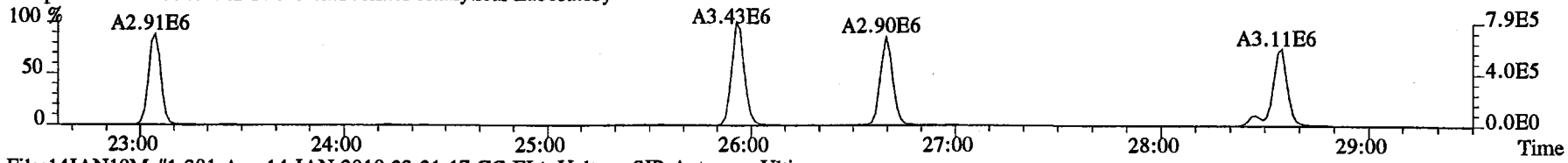
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



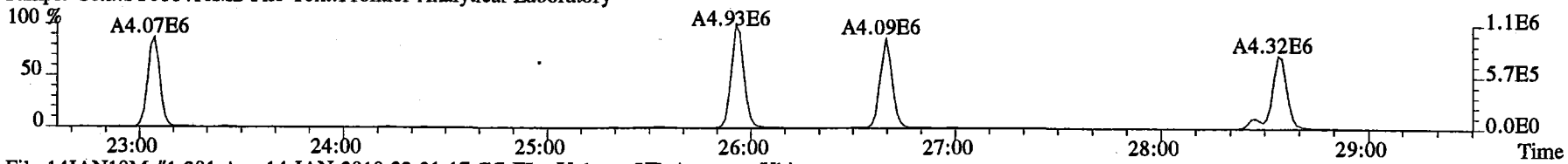
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:12 F:5 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



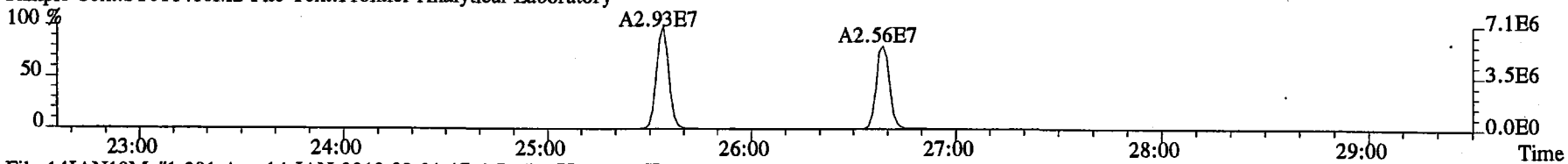
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



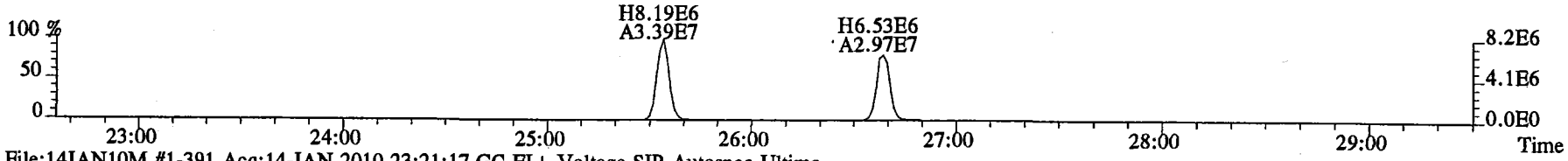
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



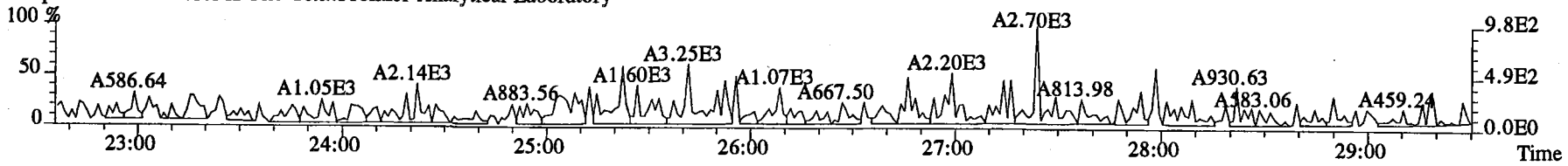
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



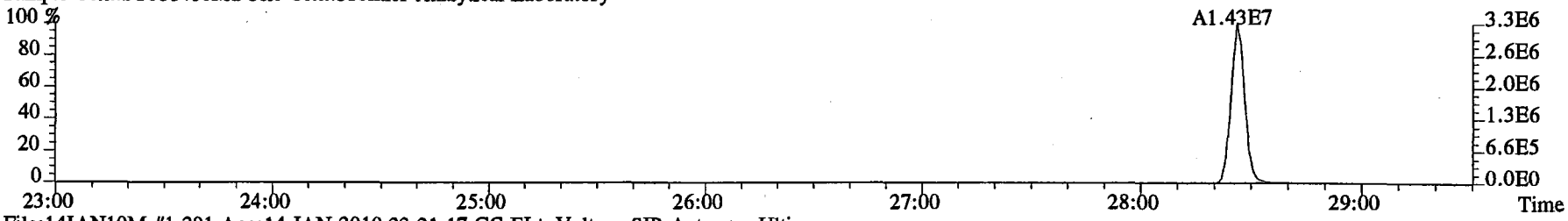
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



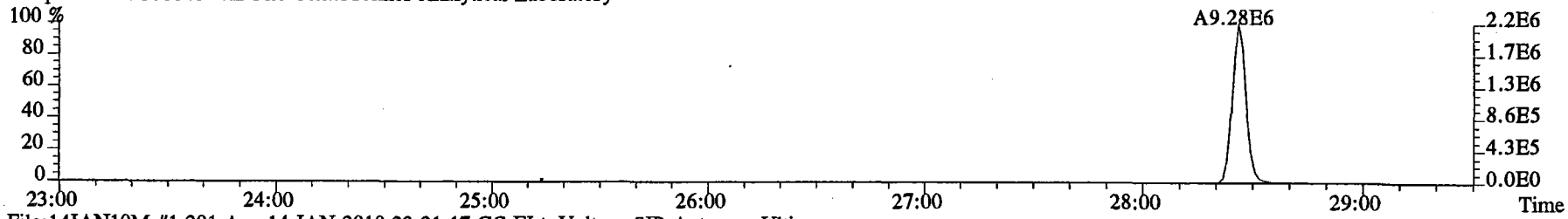
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



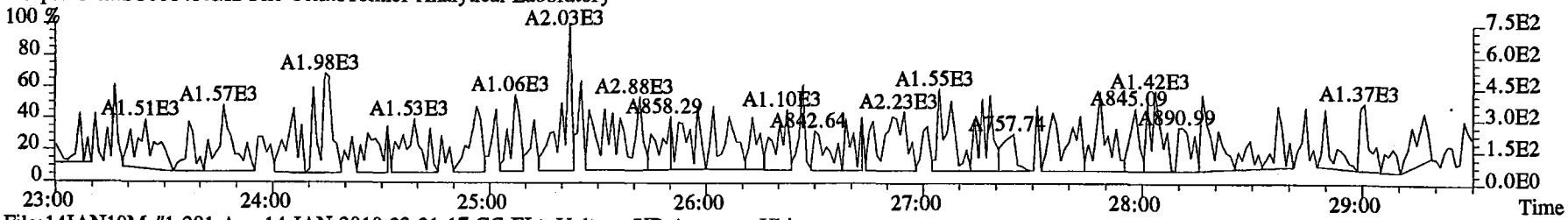
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



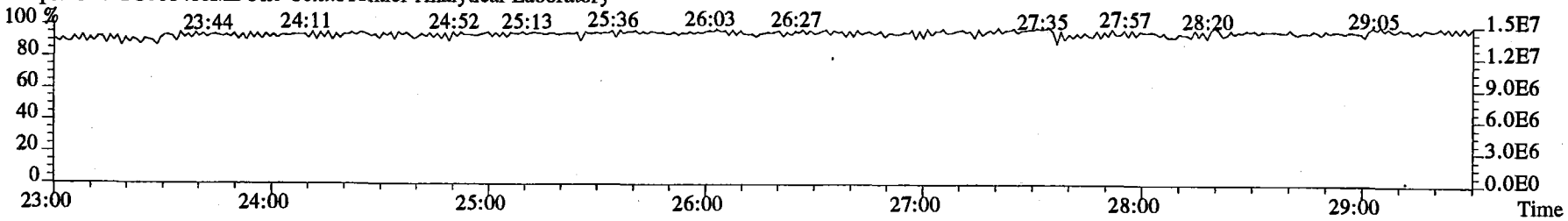
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



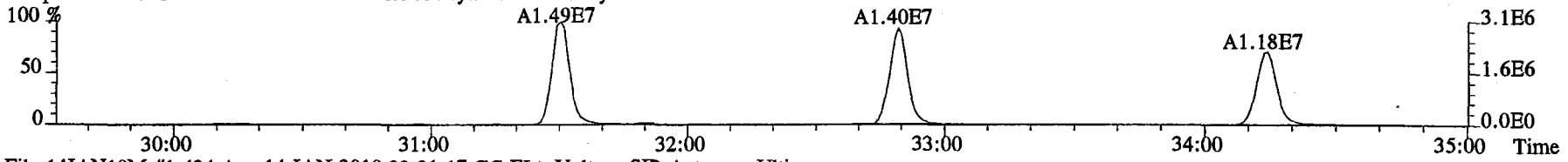
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:12 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



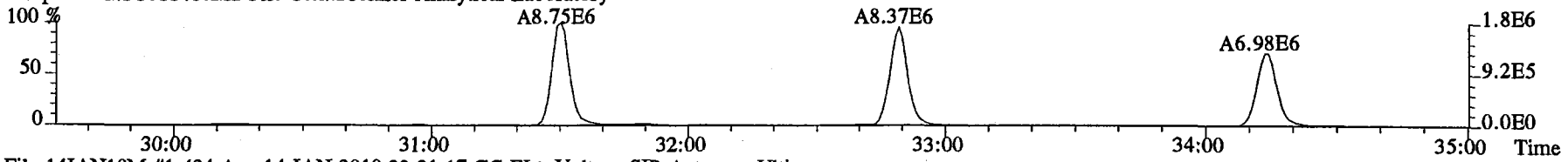
File:14JAN10M #1-391 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:12 Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



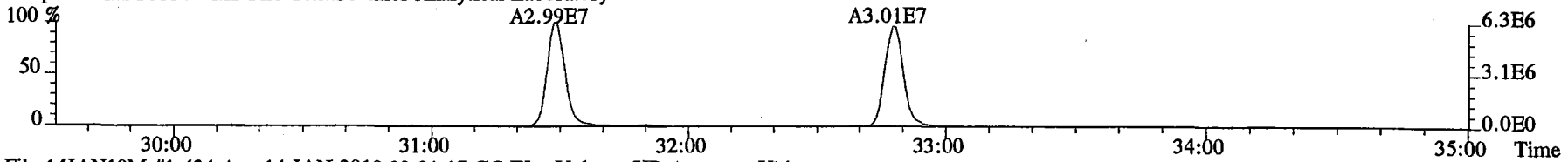
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



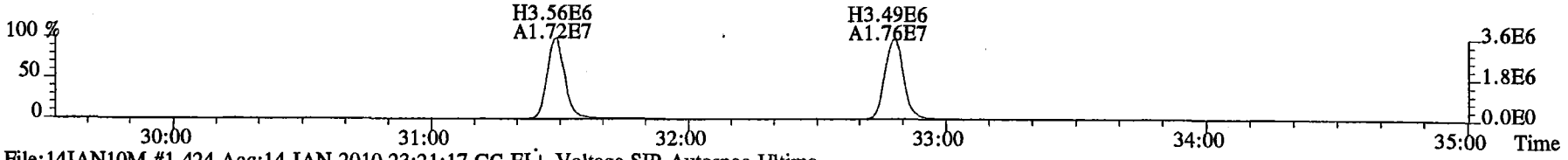
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



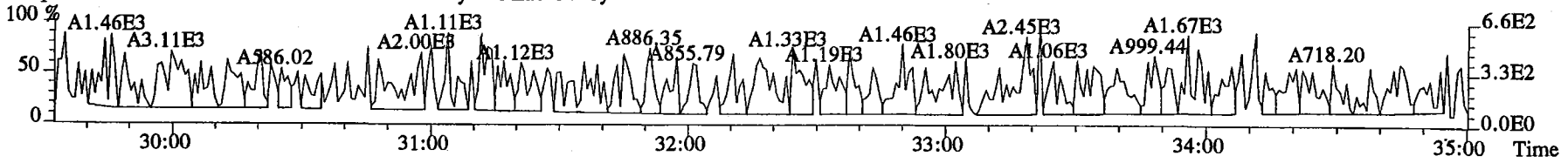
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



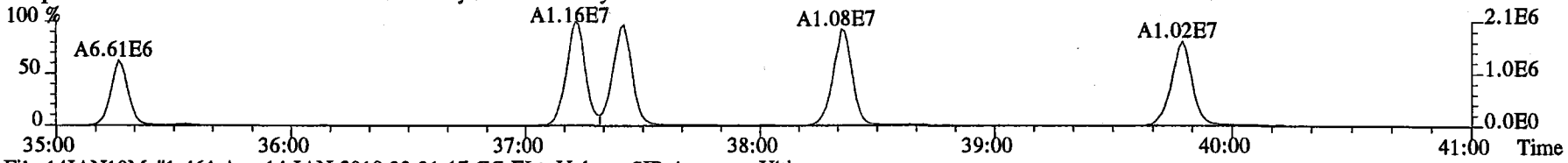
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



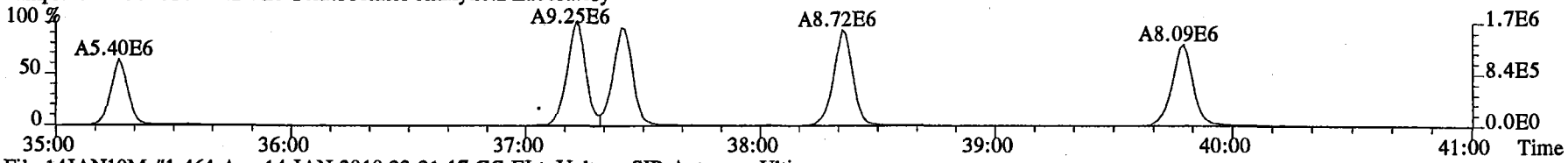
File:14JAN10M #1-424 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:12 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



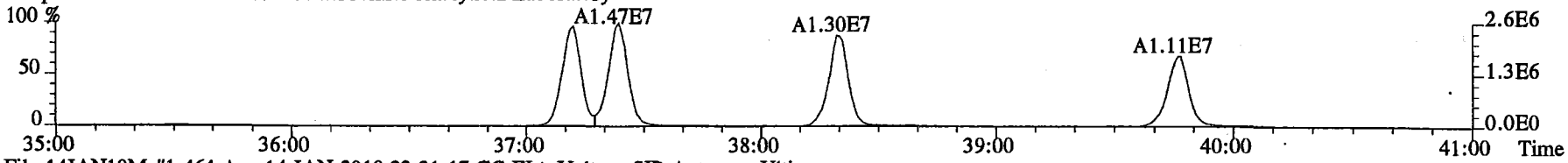
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



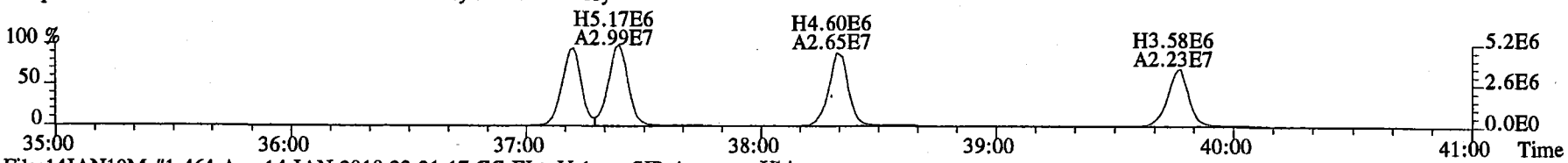
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



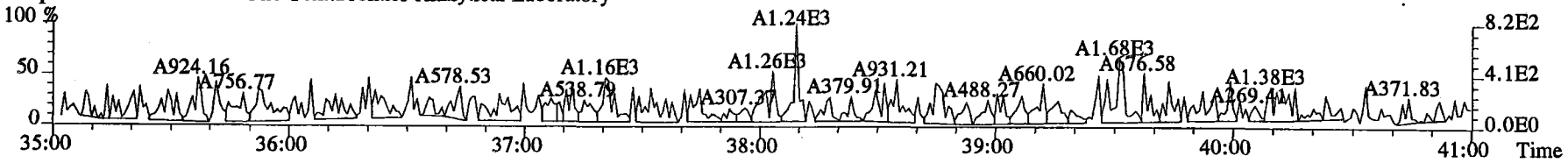
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



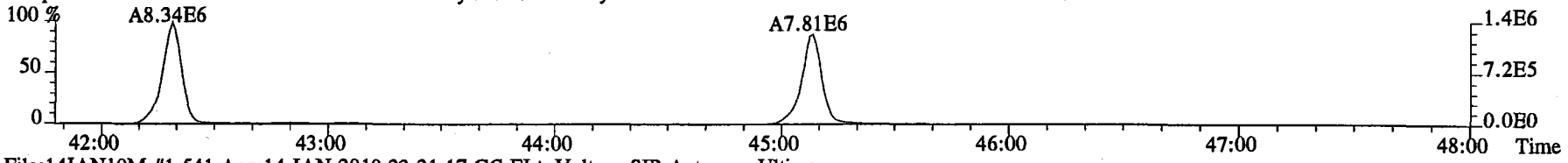
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



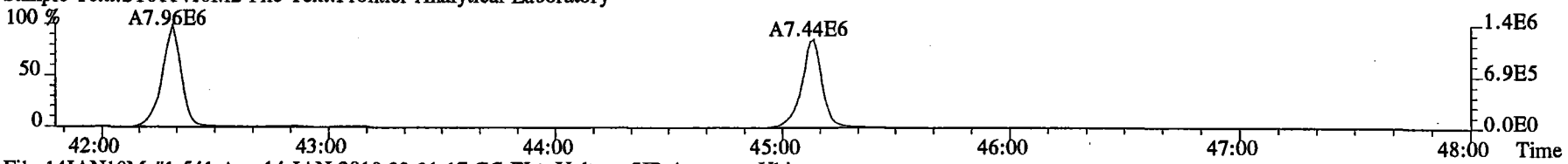
File:14JAN10M #1-464 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:12 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



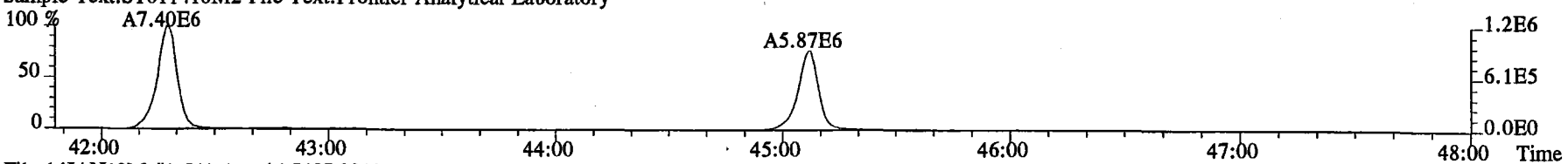
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



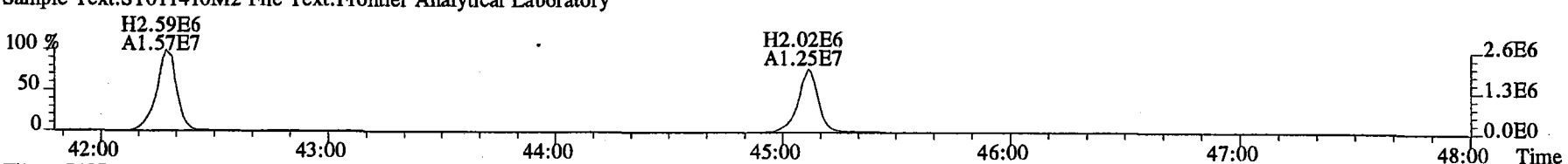
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



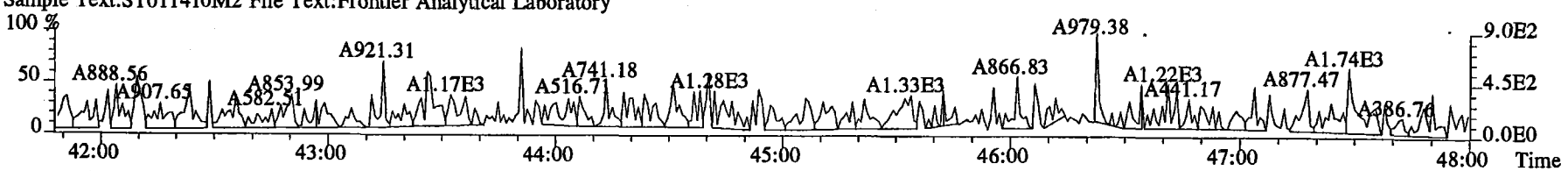
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



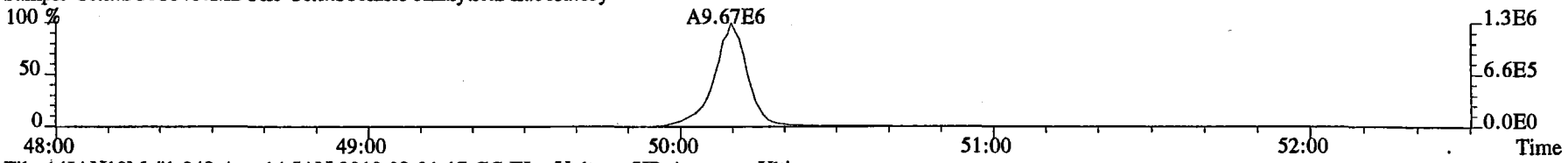
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



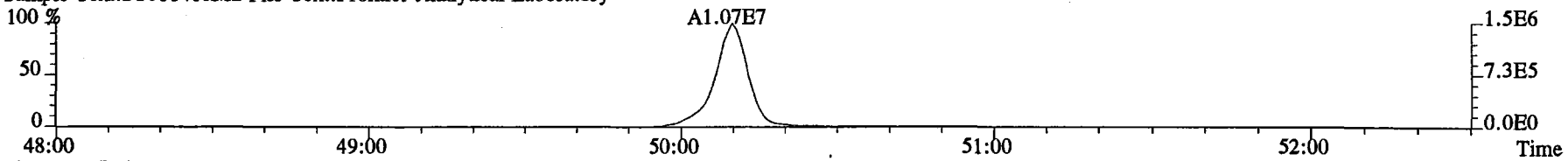
File:14JAN10M #1-541 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:12 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



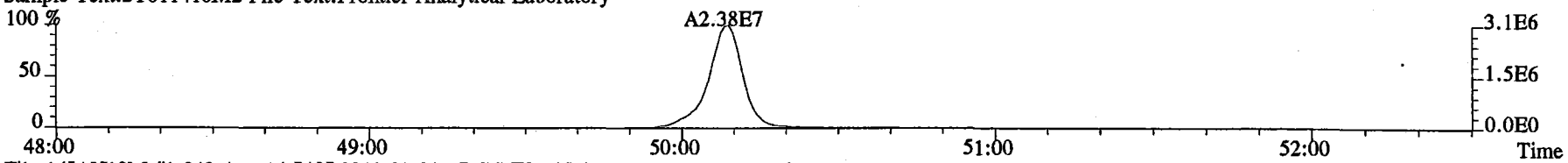
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



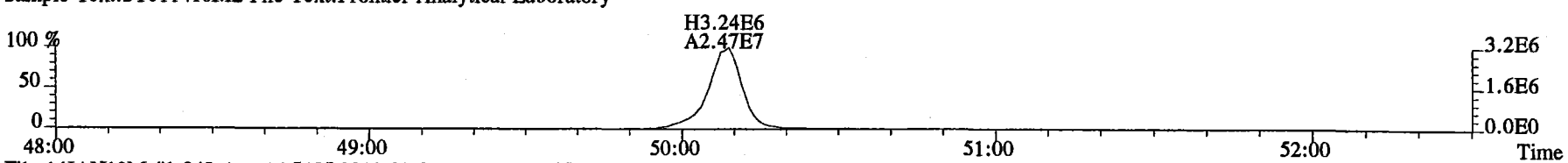
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



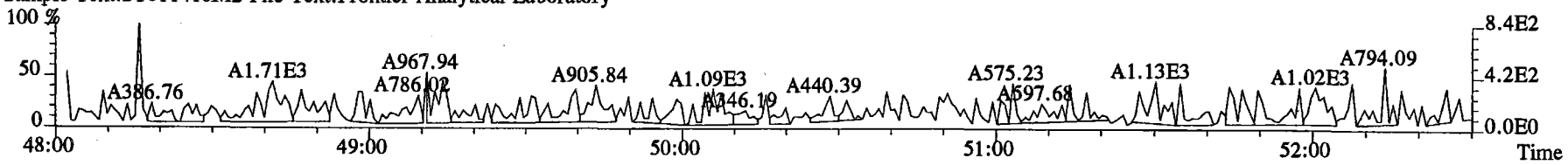
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



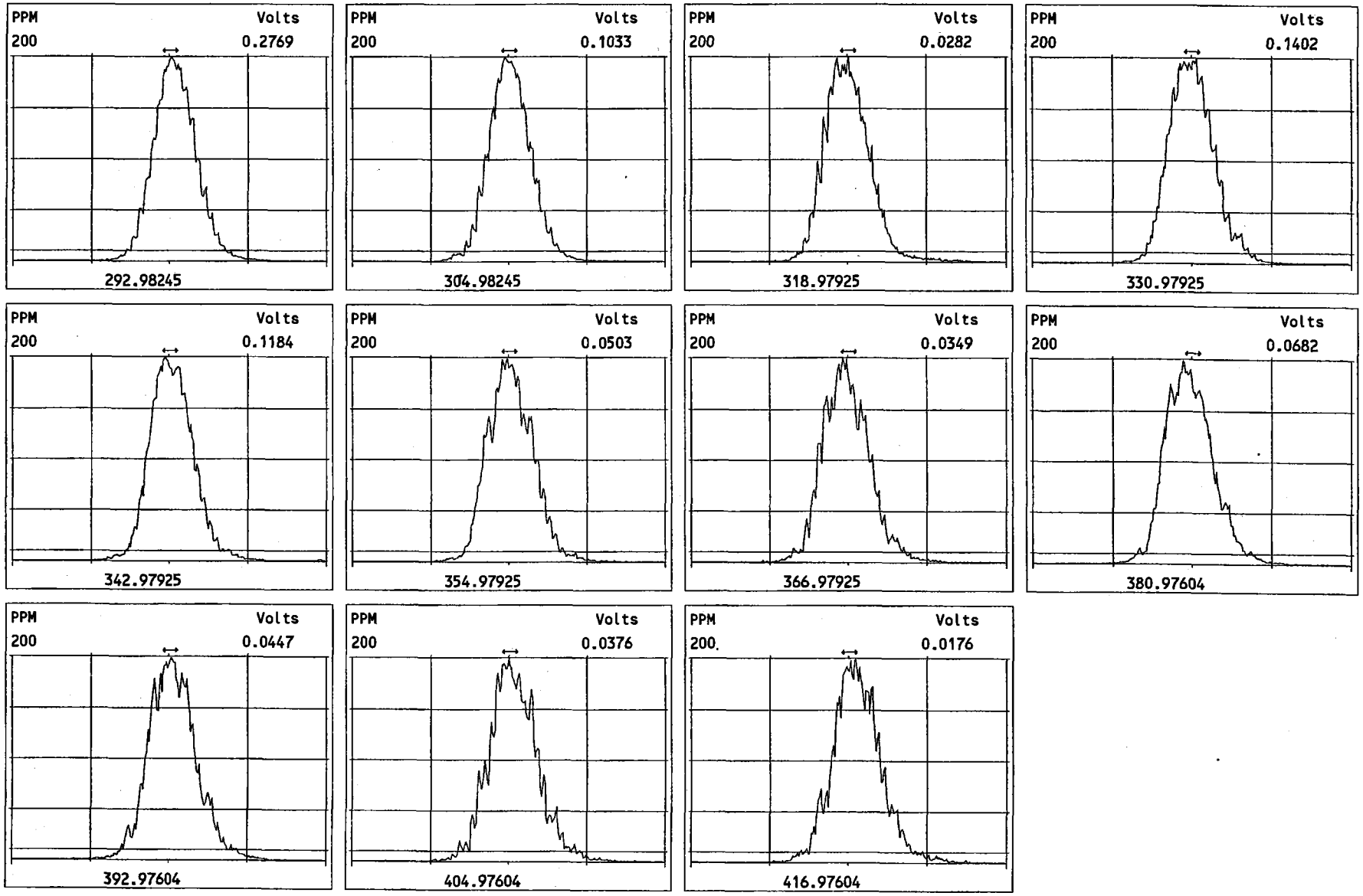
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory



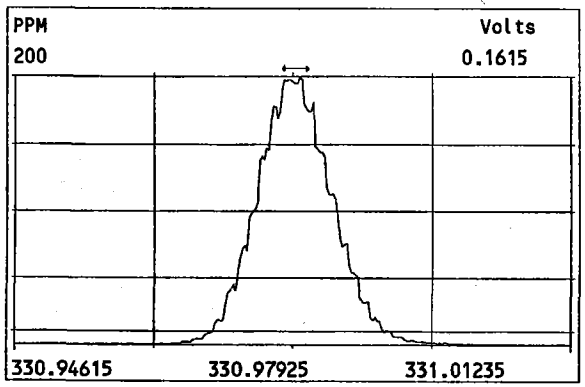
File:14JAN10M #1-348 Acq:14-JAN-2010 23:21:17 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:12 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST011410M2 File Text:Frontier Analytical Laboratory

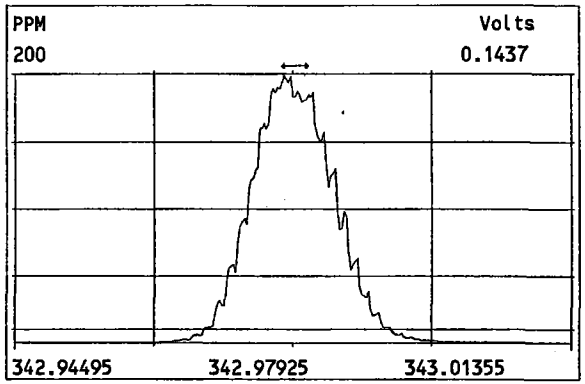


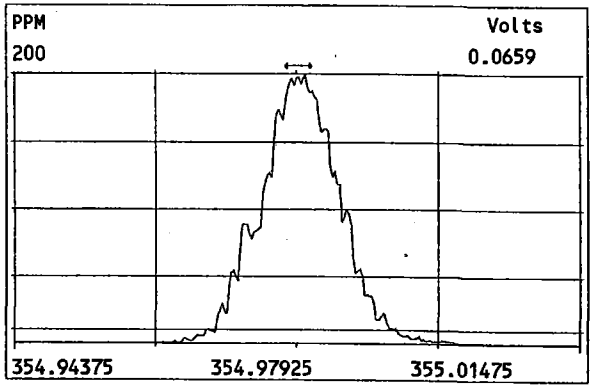
Peak Locate Examination:15-JAN-2010:00:18 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

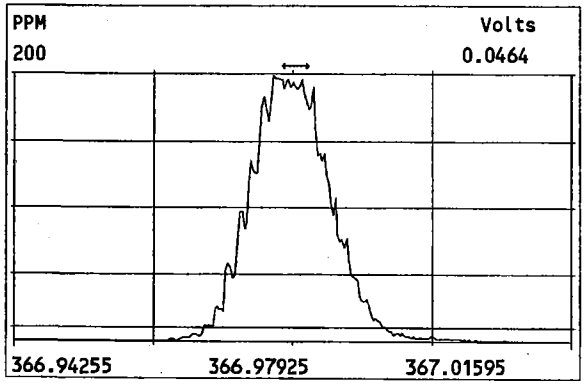


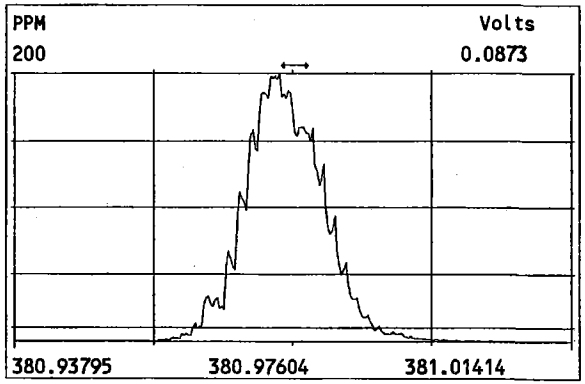
Peak Locate Examination:15-JAN-2010:00:20 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

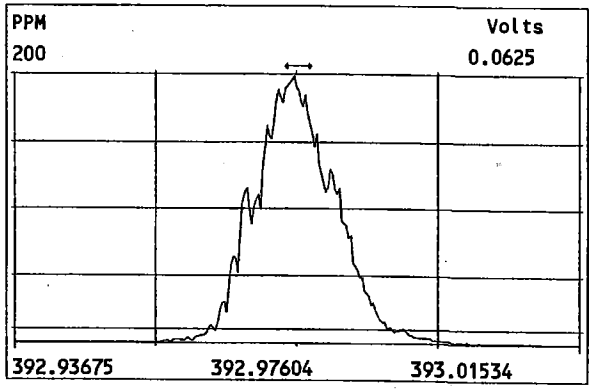


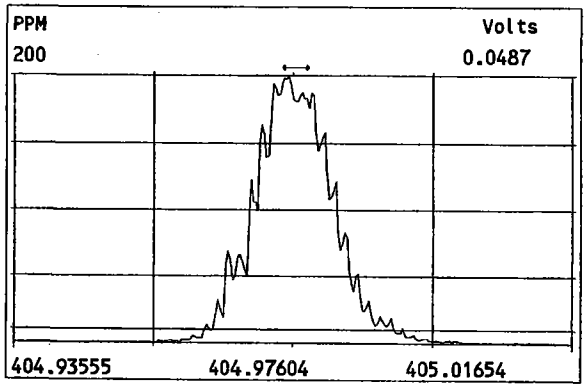


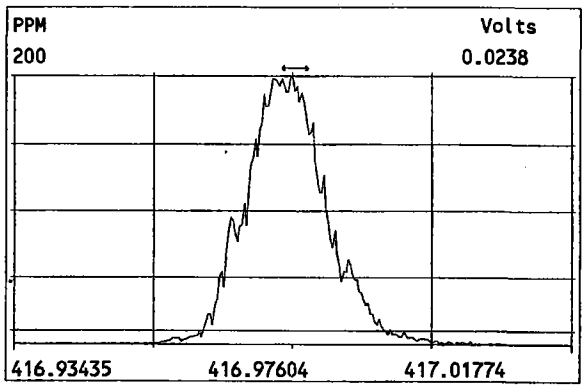




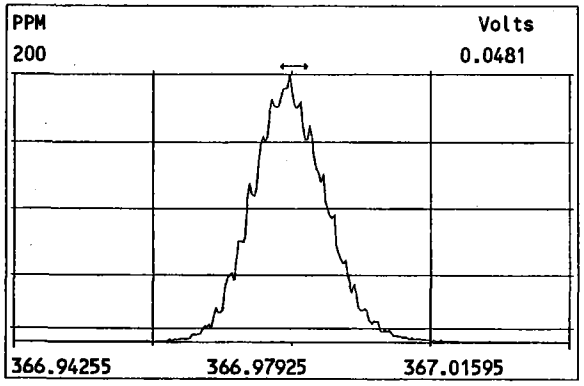


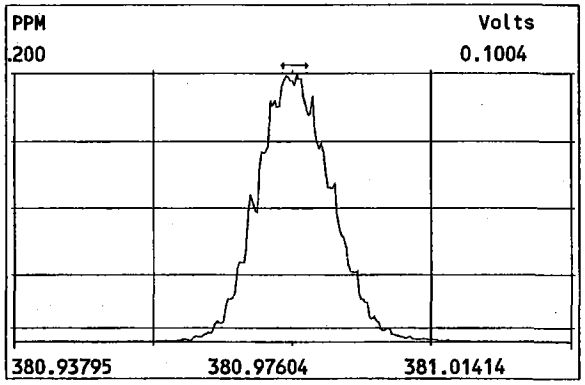


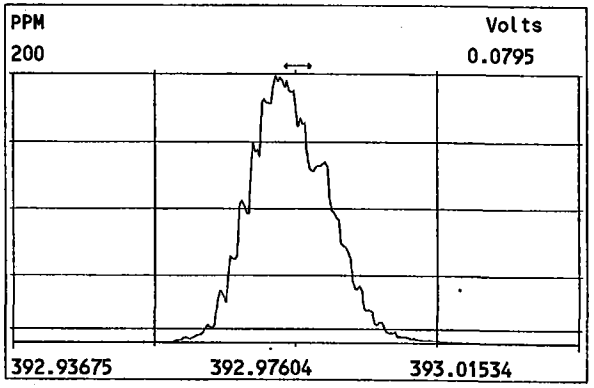


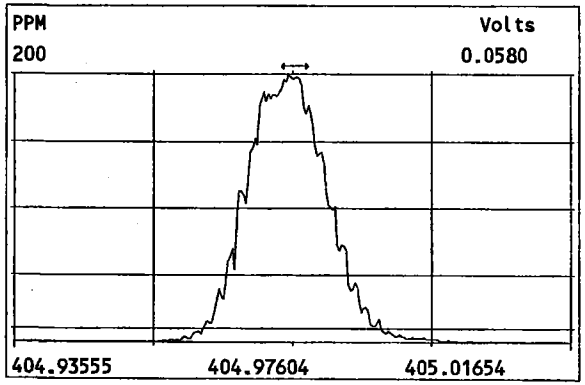


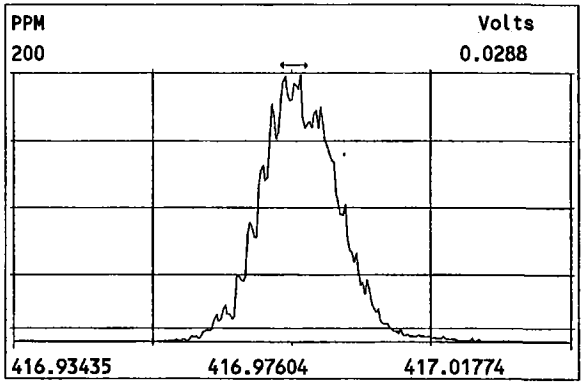
Peak Locate Examination:15-JAN-2010:00:22 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

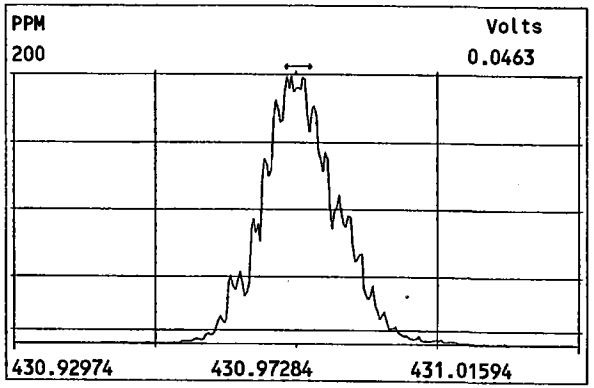


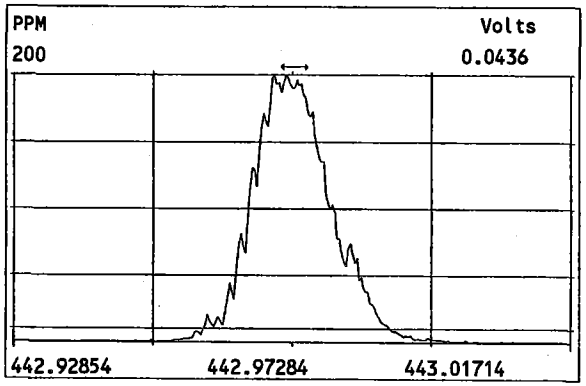


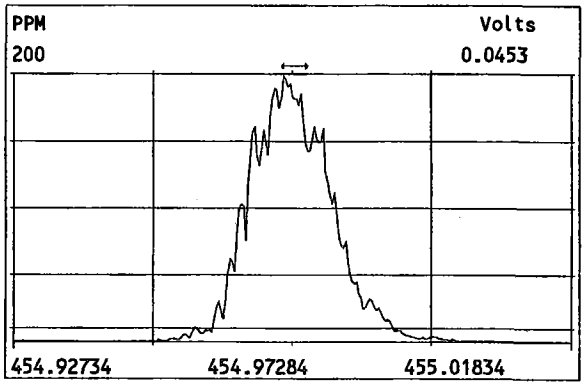




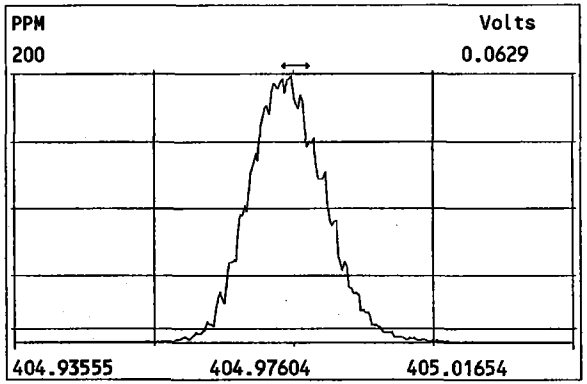


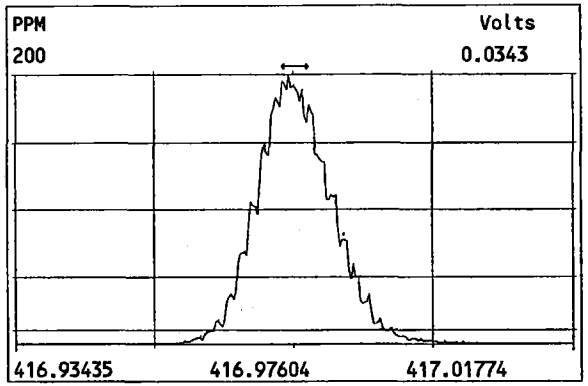


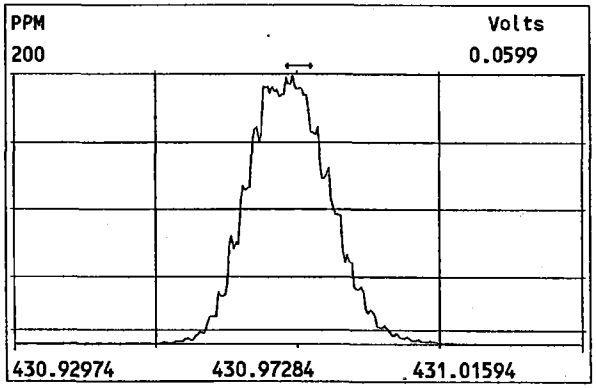


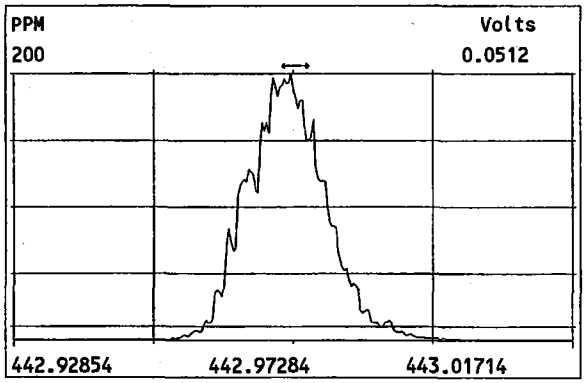


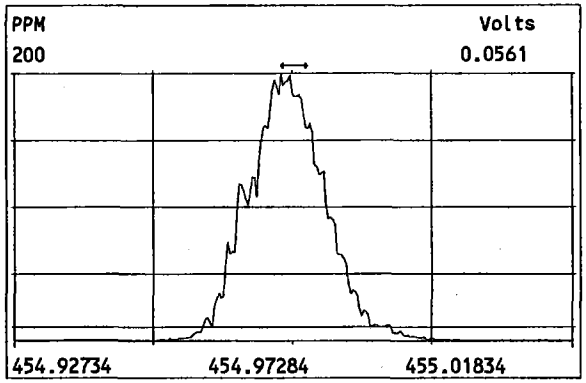
Peak Locate Examination:15-JAN-2010:00:24 File:14JAN10M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

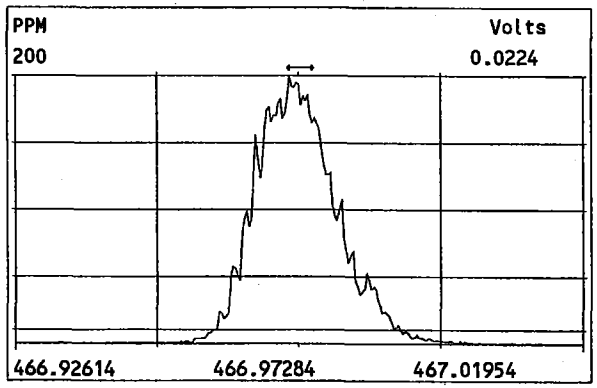


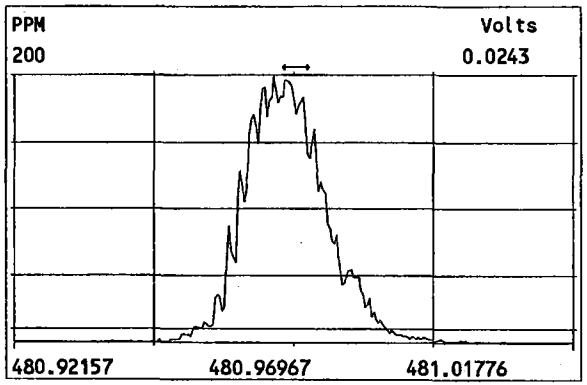












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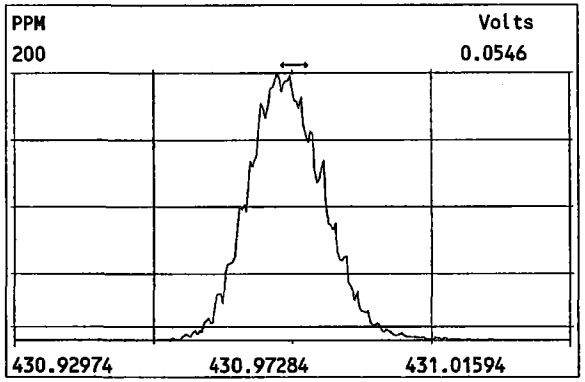
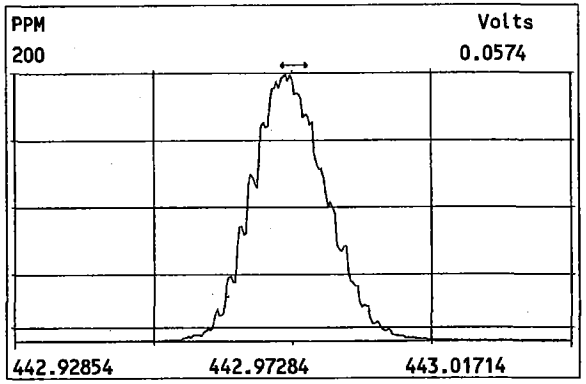
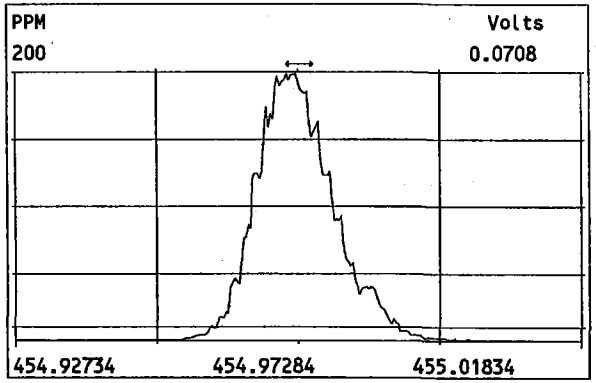
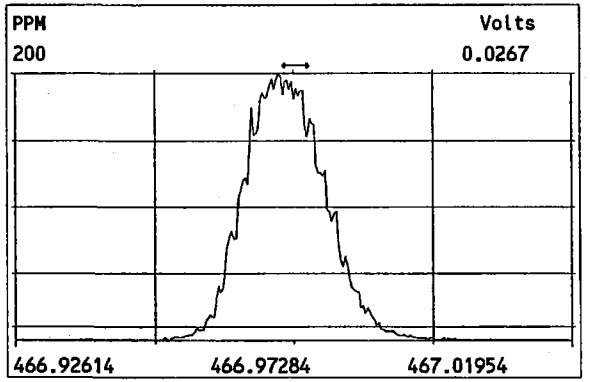
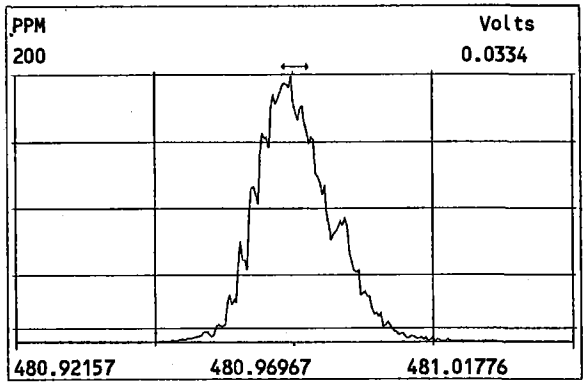
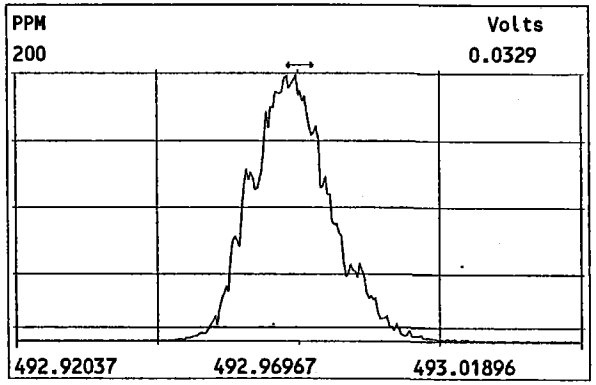


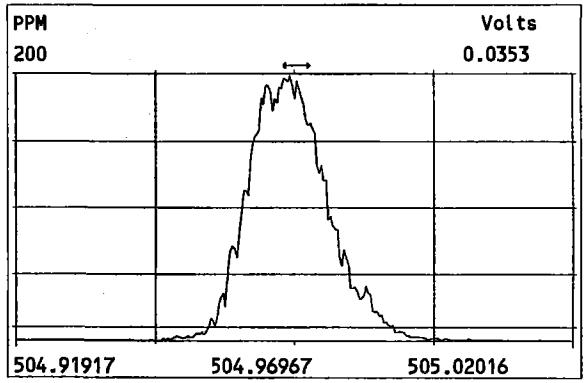


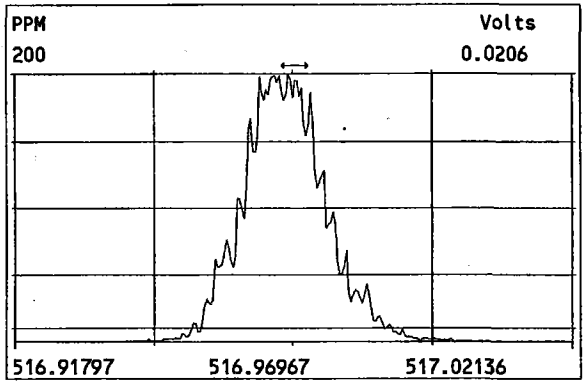












FRONTIER
ANALYTICAL LABORATORY

January 26, 2010

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

Dear Ms. Dunnihoo,

Attached are the results for Frontier Analytical Laboratory project **5914**. This corresponds to your **POS-Lora Lake Apts Interim Action** project under ARI project number **QF10**. Two soil samples were received on 1/13/2010 in good condition. These samples were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. The toxic equivalents (TEQ) for your samples were calculated using the 2005 World Health Organizations toxic equivalent factors. Analytical Resources Incorporated requested a level IV data package, an electronic disk deliverable (EDD) and a turnaround time of fifteen business days for project **5914**.

The following level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and 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. You also requested Electronic Data Deliverables (EDD) for this project. The EDD and Level I summary have been sent to you via email, per your request. A hardcopy of the Level IV data package and compact disk have been sent to you via OnTrac. 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 **5914**, 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: **5914**

Received on: **01/13/2010** Project Due: **02/04/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
5914-001-SA	1	QF10	CB31A011110SED	EPA 1613 D/F	Soil	01/11/2010	10:00 am	01/11/2011
5914-002-SA	0	QF10	CB99011110SED	EPA 1613 D/F	Soil	01/11/2010	10:30 am	01/11/2011

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-MB
Client ID: Method Blank
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.155		-	0.0252				
1,2,3,7,8-PeCDD	ND	0.218		-	0.0457				
1,2,3,4,7,8-HxCDD	ND	0.274		-	0.0496				
1,2,3,6,7,8-HxCDD	ND	0.320		-	0.0680	Total TCDD	ND	0.256	
1,2,3,7,8,9-HxCDD	ND	0.294		-	0.0666	Total PeCDD	ND	0.218	
1,2,3,4,6,7,8-HpCDD	ND	0.386		-	0.0927	Total HxCDD	ND	0.320	
OCDD	ND	1.27		-	0.272	Total HpCDD	ND	0.386	
2,3,7,8-TCDF	ND	0.109		-	0.0252				
1,2,3,7,8-PeCDF	ND	0.184		-	0.0365				
2,3,4,7,8-PeCDF	ND	0.210		-	0.0486				
1,2,3,4,7,8-HxCDF	ND	0.174		-	0.0267				
1,2,3,6,7,8-HxCDF	ND	0.179		-	0.0289				
2,3,4,6,7,8-HxCDF	ND	0.190		-	0.0298				
1,2,3,7,8,9-HxCDF	ND	0.221		-	0.0493	Total TCDF	ND	0.109	
1,2,3,4,6,7,8-HpCDF	ND	0.214		-	0.0404	Total PeCDF	ND	0.210	
1,2,3,4,7,8,9-HpCDF	ND	0.238		-	0.0469	Total HxCDF	ND	0.221	
OCDF	ND	0.507		-	0.177	Total HpCDF	ND	0.238	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	86.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	65.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	87.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	86.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	79.6	23.0 - 140	
13C-OCDD	68.7	17.0 - 157	
13C-2,3,7,8-TCDF	84.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	65.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	89.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	88.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	85.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	82.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	82.2	26.0 - 138	
13C-OCDF	68.6	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	90.5	35.0 - 197

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 01-22-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.83	6.70 - 15.8	
1,2,3,7,8-PeCDD	50.2	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.0	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	49.1	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	48.4	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	52.6	35.0 - 70.0	
OCDD	102	78.0 - 144	
2,3,7,8-TCDF	9.82	7.50 - 15.8	
1,2,3,7,8-PeCDF	49.7	40.0 - 67.0	
2,3,4,7,8-PeCDF	50.5	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	49.9	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50.3	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	49.9	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	51.1	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	51.2	39.0 - 69.0	
OCDF	96.4	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.4	20.0 - 175	
13C-1,2,3,7,8-PeCDD	70.8	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	91.2	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	87.9	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	79.7	26.0 - 166	
13C-OCDD	67.5	13.0 - 198	
13C-2,3,7,8-TCDF	89.3	22.0 - 152	
13C-1,2,3,7,8-PeCDF	76.6	21.0 - 192	
13C-2,3,4,7,8-PeCDF	71.8	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	91.2	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	87.3	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	86.1	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	85.8	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	76.9	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	84.4	20.0 - 186	
13C-OCDF	68.4	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	96.1	31.0 - 191	

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

Analyst: _____
Date: 1/26/10

Reviewed By: _____
Date: 1/26/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-SA
Client ID: CB31A011110SED
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 5.03 g
% Solids: 73.39

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-25-2010
2005 WHO TEQ: 36.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.632	-	J	0.632	0.0252				
1,2,3,7,8-PeCDD	3.96	-	J	3.96	0.0457				
1,2,3,4,7,8-HxCDD	9.13	-		0.913	0.0496				
1,2,3,6,7,8-HxCDD	32.3	-		3.23	0.0680	Total TCDD	2.23	-	
1,2,3,7,8,9-HxCDD	17.6	-		1.76	0.0666	Total PeCDD	15.4	-	
1,2,3,4,6,7,8-HpCDD	1210	-		12.1	0.0927	Total HxCDD	149	-	
OCDD	11200	-		3.36	0.272	Total HpCDD	1960	-	
2,3,7,8-TCDF	0.332	-	J	0.0332	0.0252				
1,2,3,7,8-PeCDF	1.00	-	J	0.0300	0.0365				
2,3,4,7,8-PeCDF	2.23	-	J	0.669	0.0486				
1,2,3,4,7,8-HxCDF	39.4	-		3.94	0.0267				
1,2,3,6,7,8-HxCDF	8.55	-		0.855	0.0289				
2,3,4,6,7,8-HxCDF	12.4	-		1.24	0.0298				
1,2,3,7,8,9-HxCDF	2.96	-	J	0.296	0.0493	Total TCDF	8.48	-	D,M
1,2,3,4,6,7,8-HpCDF	246	-		2.46	0.0404	Total PeCDF	49.5	-	D,M
1,2,3,4,7,8,9-HpCDF	22.6	-		0.226	0.0469	Total HxCDF	349	-	D,M
OCDF	914	-		0.274	0.177	Total HpCDF	991	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	74.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	63.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	75.2	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	71.0	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.8	23.0 - 140	
13C-OCDD	77.7	17.0 - 157	
13C-2,3,7,8-TCDF	76.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	72.1	24.0 - 185	
13C-2,3,4,7,8-PeCDF	67.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	74.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	72.7	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	72.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	64.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	70.1	26.0 - 138	
13C-OCDF	66.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	80.9	35.0 - 197	

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-002-SA
Client ID: CB99011110SED
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 5.02 g
% Solids: 72.90

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 35.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.636	-	J	0.636	0.0252				
1,2,3,7,8-PeCDD	3.99	-	J	3.99	0.0457				
1,2,3,4,7,8-HxCDD	8.27	-		0.827	0.0496				
1,2,3,6,7,8-HxCDD	28.3	-		2.83	0.0680	Total TCDD	1.26	-	
1,2,3,7,8,9-HxCDD	16.7	-		1.67	0.0666	Total PeCDD	13.0	-	
1,2,3,4,6,7,8-HpCDD	1070	-		10.7	0.0927	Total HxCDD	125	-	
OCDD	11500	-		3.45	0.272	Total HpCDD	1680	-	
2,3,7,8-TCDF	0.405	-	J	0.0405	0.0252				
1,2,3,7,8-PeCDF	0.989	-	J	0.0297	0.0365				
2,3,4,7,8-PeCDF	2.87	-	J	0.861	0.0486				
1,2,3,4,7,8-HxCDF	43.7	-		4.37	0.0267				
1,2,3,6,7,8-HxCDF	9.40	-		0.940	0.0289				
2,3,4,6,7,8-HxCDF	13.8	-		1.38	0.0298				
1,2,3,7,8,9-HxCDF	3.57	-	J	0.357	0.0493	Total TCDF	8.45	-	
1,2,3,4,6,7,8-HpCDF	237	-		2.37	0.0404	Total PeCDF	47.5	-	D,M
1,2,3,4,7,8,9-HpCDF	24.7	-		0.247	0.0469	Total HxCDF	340	-	D,M
OCDF	899	-		0.270	0.177	Total HpCDF	890	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	77.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	60.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	79.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	73.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	78.8	23.0 - 140	
13C-OCDD	77.3	17.0 - 157	
13C-2,3,7,8-TCDF	79.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	64.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	62.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	76.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	71.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	74.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	78.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	69.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	78.0	26.0 - 138	
13C-OCDF	67.4	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	78.6	35.0 - 197

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

Analyst: _____
Date: 1/26/10

Reviewed By: DAJ
Date: 1/26/10

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 01/12/10

ANALYTICAL RESOURCES INCORPORATED

5914 QC

ARI Project: QF10

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: POS-Lora Lake Apts Interim Action
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **01/20/10**
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
10-690-QF10A	CB31A011110SED	01/11/10 10:00	Soil	2	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-691-QF10B	CB99011110SED	01/11/10 10:30	Soil	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					

Full Package and EDD

Carrier UPS		Airbill 1Z 832 695 01 4501 8212		Date 1/12/2010	
Relinquished by Mikka Mulumba	Company ARI		Date 1/12/2010		Time 1425
Received by	Company Frontier		Date 1-13-10		Time 10:52

Frontier Analytical Laboratory

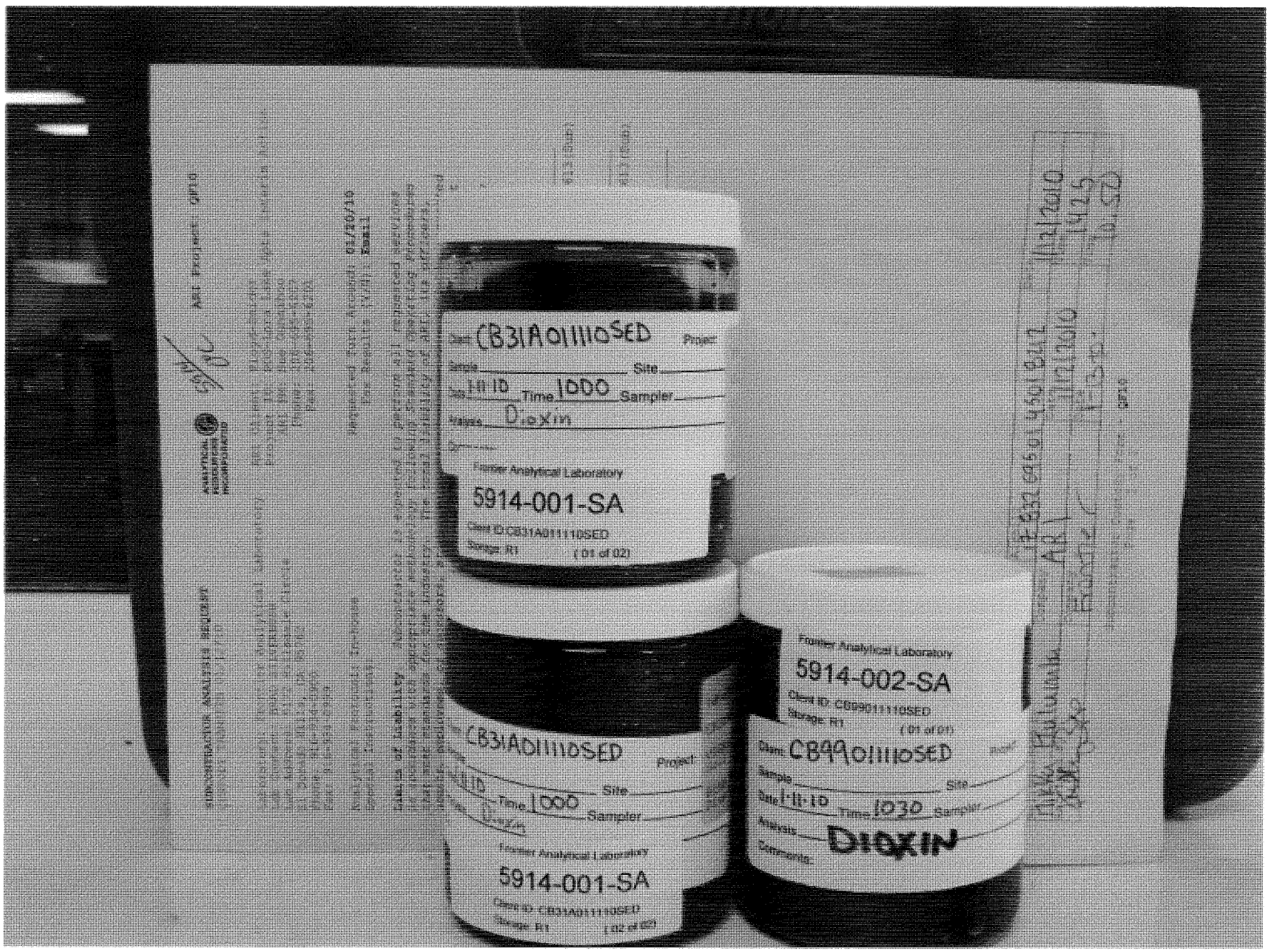
Sample Login Form

FAL Project ID: **5914**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	QF10
Date Received:	01/13/2010
Time Received:	10:50 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	2
Duplicates:	1
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z83269501045018212
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	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	01/11/2011
Adequate Sample Volume	Yes

Anomalies or additional comments:



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

FRONTIER
ANALYTICAL LABORATORY

January 26, 2010

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

Dear Ms. Dunnihoo,

Attached are the results for Frontier Analytical Laboratory project **5913**. This corresponds to your **POS-LLA (Lora Lake Apts.)** project under ARI project number **QE56**. Three sediment samples were received on 1/13/2010 in good condition. These samples were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. The toxic equivalents (TEQ) for your samples were calculated using the 2005 World Health Organizations toxic equivalent factors. Analytical Resources Incorporated requested a level IV data package, an electronic disk deliverable (EDD) and a turnaround time of fifteen business days for project **5913**.

The following level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and 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. You also requested Electronic Data Deliverables (EDD) for this project. The EDD and Level I summary have been sent to you via email, per your request. A hardcopy of the Level IV data package and compact disk have been sent to you via OnTrac. 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 **5913**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

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

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **5913**

Received on: **01/13/2010** Project Due: **02/04/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
5913-001-SA	0	QE56	CB19010710SED	EPA 1613 D/F	Sediment	01/07/2010	11:50 am	01/07/2011
5913-002-SA	0	QE56	CB12010710SED	EPA 1613 D/F	Sediment	01/07/2010	01:30 pm	01/07/2011
5913-003-SA	0	QE56	CB2010710SED	EPA 1613 D/F	Sediment	01/07/2010	02:30 pm	01/07/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5913-001-MB
Client ID: Method Blank
Matrix: Sediment
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.155		-	0.0252				
1,2,3,7,8-PeCDD	ND	0.218		-	0.0457				
1,2,3,4,7,8-HxCDD	ND	0.274		-	0.0496				
1,2,3,6,7,8-HxCDD	ND	0.320		-	0.0680	Total TCDD	ND	0.256	
1,2,3,7,8,9-HxCDD	ND	0.294		-	0.0666	Total PeCDD	ND	0.218	
1,2,3,4,6,7,8-HpCDD	ND	0.386		-	0.0927	Total HxCDD	ND	0.320	
OCDD	ND	1.27		-	0.272	Total HpCDD	ND	0.386	
2,3,7,8-TCDF	ND	0.109		-	0.0252				
1,2,3,7,8-PeCDF	ND	0.184		-	0.0365				
2,3,4,7,8-PeCDF	ND	0.210		-	0.0486				
1,2,3,4,7,8-HxCDF	ND	0.174		-	0.0267				
1,2,3,6,7,8-HxCDF	ND	0.179		-	0.0289				
2,3,4,6,7,8-HxCDF	ND	0.190		-	0.0298				
1,2,3,7,8,9-HxCDF	ND	0.221		-	0.0493	Total TCDF	ND	0.109	
1,2,3,4,6,7,8-HpCDF	ND	0.214		-	0.0404	Total PeCDF	ND	0.210	
1,2,3,4,7,8,9-HpCDF	ND	0.238		-	0.0469	Total HxCDF	ND	0.221	
OCDF	ND	0.507		-	0.177	Total HpCDF	ND	0.238	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	86.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	65.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	87.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	86.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	79.6	23.0 - 140	
13C-OCDD	68.7	17.0 - 157	
13C-2,3,7,8-TCDF	84.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	65.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	89.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	88.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	85.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	82.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	82.2	26.0 - 138	
13C-OCDF	68.6	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	90.5	35.0 - 197

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

Analyst: _____
Date: 1/25/10

Reviewed By: _____
Date: 1/25/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5913-001-OPR
Client ID: OPR
Matrix: Sediment
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 01-22-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.83	6.70 - 15.8	
1,2,3,7,8-PeCDD	50.2	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.0	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	49.1	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	48.4	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	52.6	35.0 - 70.0	
OCDD	102	78.0 - 144	
2,3,7,8-TCDF	9.82	7.50 - 15.8	
1,2,3,7,8-PeCDF	49.7	40.0 - 67.0	
2,3,4,7,8-PeCDF	50.5	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	49.9	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50.3	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	49.9	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	51.1	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	51.2	39.0 - 69.0	
OCDF	96.4	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.4	20.0 - 175	
13C-1,2,3,7,8-PeCDD	70.8	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	91.2	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	87.9	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	79.7	26.0 - 166	
13C-OCDD	67.5	13.0 - 198	
13C-2,3,7,8-TCDF	89.3	22.0 - 152	
13C-1,2,3,7,8-PeCDF	76.6	21.0 - 192	
13C-2,3,4,7,8-PeCDF	71.8	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	91.2	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	87.3	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	86.1	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	85.8	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	76.9	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	84.4	20.0 - 186	
13C-OCDF	68.4	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	96.1	31.0 - 191	

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

Analyst: _____
Date: 1/25/10

Reviewed By: _____
Date: 1/25/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5913-001-SA
Client ID: CB19010710SED
Matrix: Sediment
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 2.04 g
% Solids: 18.78

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 89.5

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	4.56	-		4.56	0.0252				
1,2,3,7,8-PeCDD	19.1	-		19.1	0.0457				
1,2,3,4,7,8-HxCDD	29.6	-		2.96	0.0496				
1,2,3,6,7,8-HxCDD	79.8	-		7.98	0.0680	Total TCDD	77.8	-	
1,2,3,7,8,9-HxCDD	69.8	-		6.98	0.0666	Total PeCDD	192	-	
1,2,3,4,6,7,8-HpCDD	2370	-		23.7	0.0927	Total HxCDD	754	-	
OCDD	23300	-		6.99	0.272	Total HpCDD	4680	-	
2,3,7,8-TCDF	5.83	-	F	0.583	0.0252				
1,2,3,7,8-PeCDF	6.06	-	J	0.182	0.0365				
2,3,4,7,8-PeCDF	10.7	-	J	3.21	0.0486				
1,2,3,4,7,8-HxCDF	28.9	-		2.89	0.0267				
1,2,3,6,7,8-HxCDF	19.2	-		1.92	0.0289				
2,3,4,6,7,8-HxCDF	25.3	-		2.53	0.0298				
1,2,3,7,8,9-HxCDF	4.65	-	J	0.465	0.0493	Total TCDF	141	-	
1,2,3,4,6,7,8-HpCDF	481	-		4.81	0.0404	Total PeCDF	198	-	
1,2,3,4,7,8,9-HpCDF	22.3	-		0.223	0.0469	Total HxCDF	513	-	D,M
OCDF	1340	-		0.402	0.177	Total HpCDF	1360	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	85.6	25.0 - 164	
13C-1,2,3,7,8-PeCDD	71.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	88.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	81.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.1	23.0 - 140	
13C-OCDD	62.5	17.0 - 157	
13C-2,3,7,8-TCDF	89.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	76.7	24.0 - 185	
13C-2,3,4,7,8-PeCDF	73.6	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	80.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	74.7	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	78.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	80.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	68.6	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	74.2	26.0 - 138	
13C-OCDF	54.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	90.1	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: 1/25/10

Reviewed By: _____
Date: 1/26/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5913-002-SA
Client ID: CB12010710SED
Matrix: Sediment
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 2.03 g
% Solids: 13.82

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 143

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	6.33	-		6.33	0.0252				
1,2,3,7,8-PeCDD	27.3	-		27.3	0.0457				
1,2,3,4,7,8-HxCDD	34.9	-		3.49	0.0496				
1,2,3,6,7,8-HxCDD	130	-		13.0	0.0680	Total TCDD	92.6	-	
1,2,3,7,8,9-HxCDD	95.8	-		9.58	0.0666	Total PeCDD	241	-	
1,2,3,4,6,7,8-HpCDD	4510	-		45.1	0.0927	Total HxCDD	1180	-	
OCDD	46200	-		13.9	0.272	Total HpCDD	9220	-	
2,3,7,8-TCDF	5.13	-	F	0.513	0.0252				
1,2,3,7,8-PeCDF	5.09	-	J	0.153	0.0365				
2,3,4,7,8-PeCDF	10.1	-	J	3.03	0.0486				
1,2,3,4,7,8-HxCDF	29.4	-		2.94	0.0267				
1,2,3,6,7,8-HxCDF	22.4	-		2.24	0.0289				
2,3,4,6,7,8-HxCDF	30.2	-		3.02	0.0298				
1,2,3,7,8,9-HxCDF	4.79	-	J	0.479	0.0493	Total TCDF	136	-	D,M
1,2,3,4,6,7,8-HpCDF	1060	-		10.6	0.0404	Total PeCDF	223	-	
1,2,3,4,7,8,9-HpCDF	31.8	-		0.318	0.0469	Total HxCDF	785	-	D,M
OCDF	3750	-		1.12	0.177	Total HpCDF	3220	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	79.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	69.5	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	81.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	75.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	76.9	23.0 - 140	
13C-OCDD	69.8	17.0 - 157	
13C-2,3,7,8-TCDF	83.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	72.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	73.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	74.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	69.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	72.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	76.1	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	66.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	72.3	26.0 - 138	
13C-OCDF	59.8	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: 1/25/10

Reviewed By: _____
Date: 1/26/10

EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5913-003-SA
Client ID: CB2010710SED
Matrix: Sediment
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 2.53 g
% Solids: 21.35

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 44.9

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	2.84	-		2.84	0.0252				
1,2,3,7,8-PeCDD	10.6	-		10.6	0.0457				
1,2,3,4,7,8-HxCDD	14.8	-		1.48	0.0496				
1,2,3,6,7,8-HxCDD	37.6	-		3.76	0.0680	Total TCDD	36.8	-	
1,2,3,7,8,9-HxCDD	37.3	-		3.73	0.0666	Total PeCDD	89.0	-	
1,2,3,4,6,7,8-HpCDD	1110	-		11.1	0.0927	Total HxCDD	366	-	
OCDD	13300	-		3.99	0.272	Total HpCDD	2160	-	
2,3,7,8-TCDF	2.34	-		0.234	0.0252				
1,2,3,7,8-PeCDF	2.38	-	J	0.0714	0.0365				
2,3,4,7,8-PeCDF	3.44	-	J	1.03	0.0486				
1,2,3,4,7,8-HxCDF	14.9	-		1.49	0.0267				
1,2,3,6,7,8-HxCDF	8.67	-	J	0.867	0.0289				
2,3,4,6,7,8-HxCDF	10.7	-		1.07	0.0298				
1,2,3,7,8,9-HxCDF	2.27	-	J	0.227	0.0493	Total TCDF	57.1	-	
1,2,3,4,6,7,8-HpCDF	209	-		2.09	0.0404	Total PeCDF	77.1	-	
1,2,3,4,7,8,9-HpCDF	10.6	-		0.106	0.0469	Total HxCDF	228	-	
OCDF	569	-		0.171	0.177	Total HpCDF	594	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	80.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	69.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	78.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	72.0	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	70.7	23.0 - 140	
13C-OCDD	57.0	17.0 - 157	
13C-2,3,7,8-TCDF	81.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	72.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	71.8	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	71.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	66.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	68.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	62.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	66.9	26.0 - 138	
13C-OCDF	50.3	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	76.3	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: 1/25/10

Reviewed By: _____
Date: 1/26/10

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 01/08/10

ANALYTICAL RESOURCES INCORPORATED

5913
0oc

ARI Project: QE56

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: POS-LLA (Lora Lake Apts.)
ARI PM: Sue Dunnihoo
Phone: 206-695-6207
Fax: 206-695-6201

Analytical Protocol: PSDDA
Special Instructions:

Requested Turn Around: **01/29/10**
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
10-433-QE56B	CB19010710Sed	01/07/10 11:50	Sediment	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-434-QE56C	CB12010710Sed	01/07/10 13:30	Sediment	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					
10-435-QE56D	CB2010710Sed	01/07/10 14:30	Sediment	1	Dioxin/Furans 1613(Sub)
Special Instructions: None					

Full Package and EDD

Carrier UPS	Airbill 1Z8326950146018212		Date 1/12/2010
Relinquished by Mikka Mulumba	Company ARI	Date 1/12/2010	Time 1425
Received by [illegible]	Company frontier	Date 1-13-2010	Time 10:50

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **5913**

Client:	Analytical Resources Inc. Sue Dunnihoo
Client Project ID:	QE56
Date Received:	01/13/2010
Time Received:	10:50 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	3
Duplicates:	0
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z8326950145018212
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	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	01/07/2011
Adequate Sample Volume	Yes
Anomalies or additional comments:	

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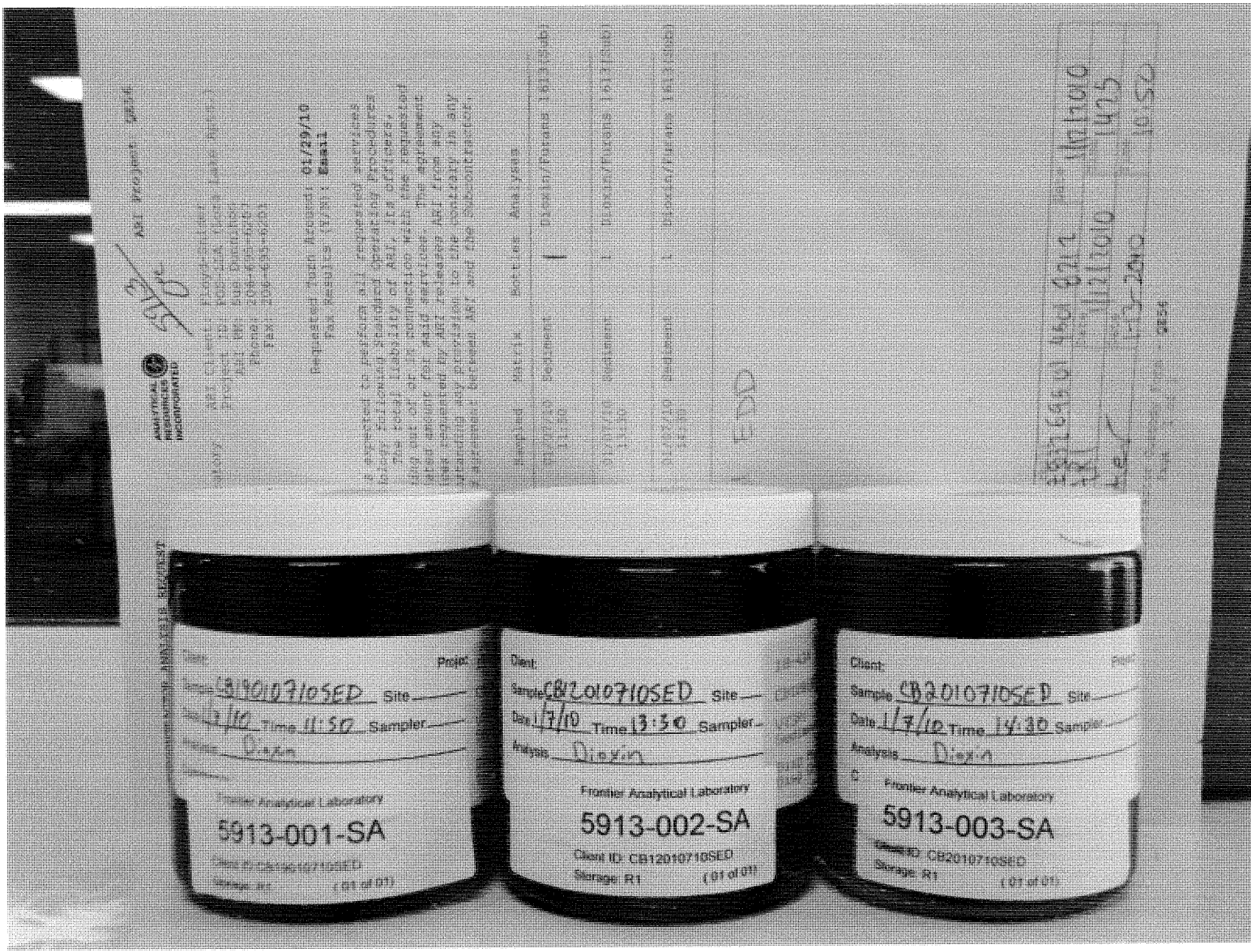

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Analytical Resources, Incorporated
Analytical Chemists and Consultants

January 28, 2010

Jessi Massingale
Floyd-Snider Inc.
601 Union Street, Suite 600
Seattle, WA 98101-2341

RE: Client Project: POS Lora Lake Apartments, POS-LLA
ARI Job No: QF10

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 QF10

SD/co

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: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: QF10	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Floyd/Snider	Phone: (206) 292-2078	Date: 1-11-2010	Ice Present? Yes
Client Contact: Jessi Massingale / Matt Woltman		No. of Coolers: 1	Cooler Temps: 2.2
Client Project Name: POS - Lora Lake Apts Interim Action			
Client Project #: POS-LLA	Samplers: D. Metallo		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: VOC (1) 8260C	PAH 8270	PCP 8041	TPH NWTPH-DX	Metals As+Pb 6010	Dioxin/Furans 1613	Total Solids SM2540B	T.O.C. Plumb 1981	Notes/Comments
CB31A011110SED	1.11.10	1000	Sed	18	X	X	X	X	X	X	X	X	run MS/MSD
CB9901111OSED	1.11.10	1030	Sed	9	X	X	X	X	X	X	X	X	
TB011110	1.11.10	0900	Water	3	X								trip blank

Comments/Special Instructions
(1) includes; PCE, TCE and 1,2-DCA

Relinquished by: (Signature) Dave Metallo	Received by: (Signature) D. Peterson	Relinquished by: (Signature)	Received by: (Signature)
Printed Name: Dave Metallo	Printed Name: D. Peterson	Printed Name:	Printed Name:
Company: Taylor Associates Inc.	Company: ART	Company:	Company:
Date & Time: 1-12-10 (1044)	Date & Time: 1/12/10 1044	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: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Floyd Snider
Project Name: POS-Lora Lake Apt Interim Action
COC No(s): _____ (NA)
Delivered by: Fed-Ex UPS Courier (Hand) Delivered Other: _____
Assigned ARI Job No: QF10
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) 2.2		
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#: 90877952	

Cooler Accepted by: JP Date: 1/12/10 Time: 1044

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	1/9/10	

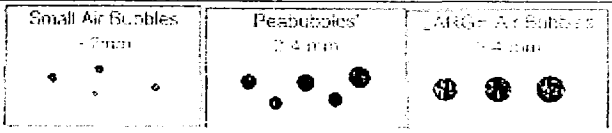
Samples Logged by: JP Date: 1/12/10 Time: 1105

*** 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"

Case Narrative

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Case Narrative

Client: Floyd Snider
Project: POS Lora Lake Apartments, POS-LLA
Matrix: Sediment
ARI Job No.: QF10

Sample receipt

Analytical Resources, Inc. (ARI) accepted two sediment samples and a trip blank on January 12, 2010 under ARI job QF10. The cooler temperature measured by IR thermometer following ARI SOP was 2.2°C. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

Dioxin/Furan analyses were subcontracted to Frontier Analytical Laboratory in El Dorado Hills, CA. The Frontier report is included here in its entirety.

Volatiles by SW8260C

The samples and associated laboratory 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 were within control limits.

Several matrix spike and matrix spike duplicate percent recoveries fell outside the advisory control limits low for sample **CB31A011110SED**. No corrective action is required for matrix QC.

Water sample preservation was confirmed within limits after analysis.

Semivolatile PAHs by SW8270D

The samples were initially screened to determine if a response was present that would require modification of the extraction process. Based on the screen, no modifications were required. The samples and associated laboratory QC were extracted and 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 percent recoveries were within control limits.

The matrix spike and matrix spike duplicate percent recoveries of Pyrene fell outside the advisory control limits low for sample **CB31A011110SED**. No corrective action was required for matrix QC.

Pentachlorophenol by SW8041

The samples and associated laboratory QC were extracted and 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 percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were outside the advisory control limits high for sample **CB31A011110SED**. No corrective action is required for matrix QC.

NW-TPHDx with Acid Silica cleanups

The samples and associated laboratory QC 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 limits. The LCS percent recovery was within control limits.

The matrix spike and matrix spike duplicate percent recoveries were within advisory control limits.

Total Arsenic and Lead by SW6010B

The samples and associated laboratory QC were digested and analyzed within the method recommended holding time.

The third CCV percent recovery of lead was outside the control limits high. No sample results were associated with this CCV. No corrective action was required.

The method blank was clean at the reporting limits. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries were within control limits.

The duplicate RPD of Lead was outside the control limit high for sample **CB31A011110SED**. All relevant data have been flagged with a "*" qualifier on the appropriate Form VI. No further corrective action was required.

General Chemistry (TOC/TS)

The samples and associated laboratory QC were prepared and analyzed within the method recommended holding time.

The method blanks were clean at the reporting limits. The LCS percent recovery was within control limits.

The SRM percent recovery was within limits.

The matrix spike percent recovery and replicate RSDs were within control limits.

No corrective action is required for matrix replicate RSDs.

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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

1/5/2010

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	1677-3	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	1621-4	ABN ACID	100/200	MEOH	07/14/10
11	1642-2	TPHD	15000	ACETONE	09/07/10
12	1622-2	ABN BASE	200	ACETONE	02/05/10
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	1613-2	LOW ABN	10	ACETONE	02/28/10
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
31	1596-1	TERPINEOL	100	MEOH	04/03/10

LCS SOLUTIONS

1/5/2010

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	1611-3	DDTS	2.5	ACETONE	06/04/10
52	1613-5	1232 PCB	20	ACETONE	06/16/10
	*=REVERIFIED SOLUTION				
	#=PROJECT SPECIFIC SOLUTION				

SURR SOLUTIONS

1/5/2010

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	1647-2	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					

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

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

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
LCS Spike Recovery [8]				
Dichlorodifluoromethane	53 - 148	37 - 164	25 - 128	**10** - 145
Chloromethane	64 - 125	54 - 135	55 - 121	44 - 132
Vinyl Chloride	63 - 137	51 - 149	66 - 123	57 - 133
Bromomethane	57 - 136	44 - 149	40 - 154	21 - 173
Chloroethane	64 - 131	53 - 142	72 - 128	63 - 137
Trichlorofluoromethane	69 - 132	59 - 143	69 - 135	58 - 146
Acrolein	54 - 137	40 - 151	39 - 135	23 - 151
1,1,2-Trichloro-1,2,2-trifluoroethane	74 - 130	65 - 139	65 - 139	53 - 151
Acetone	60 - 131	48 - 143	55 - 130	43 - 143
1,1-Dichloroethene	75 - 126	67 - 135	73 - 133	63 - 143
Bromoethane	76 - 126	68 - 134	74 - 133	64 - 143
Methyl Iodide	65 - 139	53 - 151	47 - 155	29 - 173
Methylene Chloride	70 - 123	61 - 132	**80 - 120**	75 - 122
Acrylonitrile	67 - 125	57 - 135	62 - 129	51 - 140
Methyl tert-Butyl Ether	70 - 120	62 - 128	69 - 128	59 - 138
Carbon Disulfide	71 - 129	61 - 139	64 - 135	52 - 147
trans-1,2-Dichloroethene	80 - **120**	74 - 126	78 - 125	70 - 133
Vinyl Acetate	60 - 136	47 - 149	66 - 132	55 - 143
1,1-Dichloroethane	**80 - 120**	75 - 124	77 - 124	69 132
2-Butanone	70 - **120**	62 - 127	65 - 126	55 - 136
2,2-Dichloropropane	74 - 123	66 - 131	75 - 127	66 - 136
cis-1,2-Dichloroethene	**80 - 120**	76 - 123	**80** - 125	74 - 132
Chloroform	80 - **120**	74 - 123	**80** - 124	73 - 131
Bromodichloromethane	77 - 121	70 - 128	78 - 130	69 - 139
1,1,1-Trichloroethane	77 - 121	70 - 128	76 - 130	67 - 139
1,1-Dichloropropene	**80 - 120**	77 - 123	77 - 131	68 - 140
Carbon Tetrachloride	77 - 122	70 - 130	74 - 129	65 - 138
1,2-Dichloroethane	76 - **120**	69 - 123	73 - 123	65 - 131
Benzene	**80** - 120	80 - 126	**80 - 120**	75 - 130
Trichloroethene	**80 - 120**	77 - 123	**80** - 125	75 - 132
1,2-Dichloropropane	**80 - 120**	76 - 120	**80** - 122	74 - 129
Bromochloromethane	80 - 120	73 - 127	**80** - 127	73 - 135
Dibromomethane	80 - **120**	74 - 121	**80** - 121	76 - 128
2-Chloroethylvinylether	**10** - 191	**10** - 222	61 - 128	50 - 139

Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

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

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
4-Methyl-2-Pentanone	67 - **120**	59 - 125	80 - 123	73 - 130
cis-1,3-Dichloropropene	74 - **120**	67 - 125	80 - 122	73 - 129
Toluene	**80** - **120**	79 - **120**	**80** - 122	**80** - 127
trans-1,3-Dichloropropene	65 - **120**	57 - 125	**80** - 123	79 - 129
2-Hexanone	65 - 130	54 - 141	58 - 129	46 - 141
1,1,2-Trichloroethane	**80** - **120**	75 - 122	**80** - 120	77 - 126
1,3-Dichloropropane	80 - **120**	74 - 122	**80** - 120	76 - 126
Tetrachloroethene	**80** - 121	79 - 127	**80** - 130	73 - 138
Dibromochloromethane	64 - **120**	55 - 128	77 - 120	70 - 127
Ethylene Dibromide	75 - **120**	68 - 124	**80** - **120**	**80** - 120
Chlorobenzene	**80** - **120**	82 - 120	**80** - 121	80 - 127
Ethylbenzene	**80** - 127	80 - 134	**80** - 126	**80** - 132
1,1,2,2-Tetrachloroethane	74 - 120	66 - 128	79 - **120**	73 - 123
m,p-Xylene	**80** - 125	**80** - 131	**80** - 130	**80** - 137
o-Xylene	78 - **120**	71 - 126	**80** - 124	**80** - 130
Styrene	**80** - 123	78 - 130	**80** - 132	77 - 140
Isopropylbenzene	**80** - 127	84 - 133	**80** - 130	**80** - 137
Bromoform	60 - **120**	50 - 128	68 - 129	58 - 139
1,1,1,2-Tetrachloroethane	69 - 121	60 - 130	**80** - 126	76 - 133
1,2,3-Trichloropropane	72 - 121	64 - 129	77 - **120**	71 - 121
trans-1,4-Dichloro-2-butene	65 - 126	55 - 136	66 - 127	56 - 137
n-Propylbenzene	**80** - 132	**80** - 139	**80** - 132	77 - 140
Bromobenzene	**80** - **120**	78 - 122	**80** - 121	80 - 127
1,3,5-Trimethylbenzene	**80** - 125	**80** - 131	78 - 137	68 - 147
2-Chlorotoluene	**80** - 125	77 - 132	**80** - 123	**80** - 129
4-Chlorotoluene	**80** - 127	77 - 134	**80** - 130	74 - 138
tert-Butylbenzene	87 - 122	**80** - 128	**80** - 133	78 - 141
1,2,4-Trimethylbenzene	**80** - 126	**80** - 132	**80** - 131	79 - 139
sec-Butylbenzene	**80** - 134	80 - 142	**80** - 136	76 - 146
4-Isopropyltoluene	**80** - 131	**80** - 138	**80** - 141	71 - 151
1,3-Dichlorobenzene	**80** - 120	**80** - 126	**80** 126	77 - 133
1,4-Dichlorobenzene	**80** - 120	79 - 126	**80** 121	77 - 127
n-Butylbenzene	**80** - 138	**80** - 146	**80** - 138	77 - 147
1,2-Dichlorobenzene	**80** - **120**	78 - 122	**80** - **120**	**80** - 121
1,2-Dibromo-3-chloropropane	59 - 120	49 - 130	67 - 121	58 - 130
1,2,4-Trichlorobenzene	78 - 130	69 - 139	**80** - 133	72 - 142

Spike Recovery Control Limits for Analysis of Solid Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [7]

Effective:5/18/09

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

	Low Level [1]	Low Level ME Limits [3]	Medium Level [2]	Medium Level ME Limits [3]
Hexachloro-1,3-butadiene	76 - 129	67 - 138	62 - 148	48 - 162
Naphthalene	66 - **120**	58 - 126	74 - 133	64 - 143
1,2,3-Trichlorobenzene	73 - 123	65 - 131	80 - 126	72 - 134
MB/LCS Surrogate Recovery				
Dibromofluoromethane	**80 - 120**	(4)	**80 - 120**	(4)
d4-1,2-Dichloroethane	79 - 121	(4)	76 - **120**	(4)
d8-Toluene	**80 - 120**	(4)	**80 - 120**	(4)
4-Bromofluorobenzene	**80 - 120**	(4)	**80 - 120**	(4)
d4-1,2-Dichlorobenzene	**80 - 120**	(4)	**80 - 120**	(4)
Sample Surrogate Recovery				
Dibromofluoromethane	30 - 160[6]	(4)	30 - 160[6]	(4)
d4-1,2-Dichloroethane	75 - 152	(4)	69 - **120**	(4)
d8-Toluene	82 - 115	(4)	**80 - 120**	(4)
4-Bromofluorobenzene	64 - **120**	(4)	76 - 128	(4)
d4-1,2-Dichlorobenzene	**80 - 120**	(4)	**80 - 120**	(4)

(1) Control Limits calculated using all data generated 1/1/08 through 12/31/08.
(2) Control Limits calculated using all data generated 3/1/07 through 11/15/07.
(3) **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 four marginal exceedances are acceptable. Five or more marginal exceedances require corrective action.
(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) 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
(7) Highlighted control limits (**bold font**) are 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.
(8) 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
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Spike Recovery Control Limits for Analysis of Aqueous Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [9]

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

Extraction Method:	ARI[1] Control Limits	ARI[1,2] ME Limits	DoD[6] Control Limits	DoD[2,6] ME Limits
LCS Spike Recovery [8]				-
Dichlorodifluoromethane	48 - 147	32 - 164	30 - 155	10 - 175
Chloromethane	66 - 130	55 - 141	40 - 125	25 - 140
Vinyl Chloride	73 - 130	64 - 140	50 - 145	35 - 165
Bromomethane	60 - 138	47 - 151	30 - 145	10 - 165
Chloroethane	52 - 151	36 - 168	60 - 135	50 - 145
Trichlorofluoromethane	36 - 175	13 - 198	60 - 145	45 - 160
Acrolein	34 - 164	12 - 186	(4)	(4)
1,1,2-Trichloro-1,2,2-trifluoroethane	69 - 132	59 - 143	(4)	(4)
Acetone	60 - 144	46 - 158	40 - 140	20 - 160
1,1-Dichloroethene	73 - 124	65 - 133	70 - 130	55 - 140
Bromoethane	70 - 133	60 - 144	(4)	(4)
Methyl Iodide	57 - 149	42 - 164	(4)	(4)
Methylene Chloride	74 - 121	66 - 129	55 - 140	40 - 155
Acrylonitrile	75 - 141	64 - 152	(4)	(4)
Methyl tert-Butyl Ether	79 - 127	71 - 135	65 - 125	55 - 135
Carbon Disulfide	67 - 133	56 - 144	35 - 160	15 - 185
trans-1,2-Dichloroethene	80 - **120**	74 - 126	60 - 140	45 - 150
Vinyl Acetate	61 - 145	47 - 159	(4)	(4)
1,1-Dichloroethane	80 - 123	73 - 130	70 - 135	60 - 145
2-Butanone	64 - 149	50 - 163	30 - 150	10 - 170
2,2-Dichloropropane	72 - 136	61 - 147	70 - 135	60 - 150
cis-1,2-Dichloroethene	**80 - 120**	78 - 125	70 - 125	60 - 135
Chloroform	80 - 121	73 - 128	65 - 135	50 - 150
Bromodichloromethane	80 - 122	73 - 129	75 - 120	70 - 130
1,1,1-Trichloroethane	80 - 124	73 - 131	65 - 130	55 - 145
1,1-Dichloropropene	**80** - 123	76 - 130	75 - 130	65 - 140
Carbon Tetrachloride	77 - 123	69 - 131	65 - 140	55 - 150
1,2-Dichloroethane	78 - 121	71 - 128	70 - 130	60 - 140
Benzene	**80 - 120**	80 - 124	80 - 120	75 - 130
Trichloroethene	**80 - 120**	76 - 124	70 - 125	60 - 135
1,2-Dichloropropane	**80** - 120	76 - 126	75 - 125	65 - 135
Bromochloromethane	**80** - 120	77 - 126	65 - 130	55 - 140
Dibromomethane	**80 - 120**	76 - 122	75 - 125	65 - 135
2-Chloroethylvinylether	59 - 136	46 - 149	(4)	(4)
4-Methyl-2-Pentanone	68 - 138	56 - 150	60 - 135	45 - 145
cis-1,3-Dichloropropene	74 - 127	65 - 136	70 - 130	60 - 140

Spike Recovery Control Limits for Analysis of Aqueous Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [9]

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

Extraction Method:	ARI[1] Control Limits	ARI[1,2] ME Limits	DoD[6] Control Limits	DoD[2,6] ME Limits
Toluene	**80 - 120**	78 - 122	75 - 120	70 - 130
trans-1,3-Dichloropropene	68 - 131	58 - 142	55 - 140	40 - 155
2-Hexanone	70 - 136	59 - 147	55 - 130	45 - 140
1,1,2-Trichloroethane	**80 - 120**	79 - 120	75 - 125	65 - 135
1,3-Dichloropropane	**80** - 120	76 - 126	75 - 125	65 - 135
Tetrachloroethene	79 - **120**	73 - 125	45 - 150	25 - 165
Dibromochloromethane	77 - 123	69 - 131	60 - 135	45 - 145
Ethylene Dibromide	**80** - 121	76 - 128	(4)	(4)
Chlorobenzene	**80 - 120**	77 - 121	80 - 120	75 - 130
Ethylbenzene	83 - 122	77 - 129	75 - 125	65 - 135
1,1,2,2-Tetrachloroethane	**80** - 121	74 - 128	65 - 130	55 - 140
m,p-Xylene	**80** - 123	79 - 129	75 - 130	65 - 135
o-Xylene	**80** - 125	75 - 132	80 - 120	75 - 130
Styrene	72 - 130	62 - 140	65 - 135	55 - 145
Isopropylbenzene	**80** - 129	78 - 136	75 - 125	65 - 135
Bromoform	71 - **120**	63 - 126	70 - 130	60 - 140
1,1,1,2-Tetrachloroethane	77 - 122	70 - 130	80 - 130	75 - 135
1,2,3-Trichloropropane	**80** - 120	76 - 126	75 - 125	65 - 130
trans-1,4-Dichloro-2-butene	62 - 146	48 - 160	(4)	(4)
n-Propylbenzene	**80** - 128	78 - 135	70 - 130	65 - 140
Bromobenzene	**80 - 120**	78 - 122	75 - 125	70 - 130
1,3,5-Trimethylbenzene	**80** - 129	77 - 137	75 - 130	65 - 140
2-Chlorotoluene	**80** - 124	75 - 131	75 - 125	65 - 135
4-Chlorotoluene	**80** - 124	75 - 131	75 - 130	65 - 135
tert-Butylbenzene	**80** - 128	76 - 136	70 - 130	60 - 140
1,2,4-Trimethylbenzene	**80** - 130	75 - 138	75 - 130	65 - 140
sec-Butylbenzene	**80** - 129	78 - 136	70 - 125	65 - 135
4-Isopropyltoluene	**80** - 133	75 - 141	75 - 130	65 - 140
1,3-Dichlorobenzene	**80 - 120**	76 - 124	75 - 125	65 - 130
1,4-Dichlorobenzene	**80 - 120**	75 - 122	75 - 125	65 - 130
n-Butylbenzene	78 - 140	68 - 150	70 - 135	55 - 150
1,2-Dichlorobenzene	**80 - 120**	77 - 121	70 - 120	60 - 130
1,2-Dibromo-3-chloropropane	72 - 131	62 - 141	50 - 130	35 - 145
1,2,4-Trichlorobenzene	75 - 130	66 - 139	65 - 135	55 - 145
Hexachloro-1,3-butadiene	73 - 129	64 - 138	50 - 140	35 - 160
Naphthalene	66 - 140	54 - 152	55 - 140	40 - 150
1,2,3-Trichlorobenzene	74 - 130	65 - 139	55 - 140	45 - 155

Spike Recovery Control Limits for Analysis of Aqueous Samples Volatile Organic Compounds (VOA) EPA SW-846 Methods 8260C 5 mL Purge Volume [9]

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

Extraction Method:	ARI[1] Control Limits	ARI[1,2] ME Limits	DoD[6] Control Limits	DoD[2,6] ME Limits
MB/LCS Surrogate Recovery				
Dibromofluoromethane	**80 - 120**	(3)	85 - 115	(3)
d4-1,2-Dichloroethane	83 - 122	(3)	70 - 120	(3)
d8-Toluene	**80 - 120**	(3)	85 - 120	(3)
4-Bromofluorobenzene	**80 - 120**	(3)	75 - 120	(3)
d4-1,2-Dichlorobenzene	**80 - 120**	(3)	(4)	(3)(4)
Sample Surrogate Recovery				
Dibromofluoromethane	30 - 160[7]	(3)	85 - 115	(3)
d4-1,2-Dichloroethane	**80** - 125	(3)	70 - 120	(3)
d8-Toluene	**80 - 120**	(3)	85 - 120	(3)
4-Bromofluorobenzene	**80 - 120**	(3)	75 - 120	(3)
D4-1,2-Dichlorobenzene	**80 - 120**	(3)	(4)	(3)(4)

(1) Control Limits calculated using all data generated 1/1/08 through 12/31/08.
(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 four marginal exceedances are acceptable. Five or more marginal exceedances require corrective action.
(3) Marginal Exceedances not allowed for surrogate standards.
(4) The DoD-QSM[6] does not list recovery limits for these compounds.
(5) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(6) Page 182 of: **Department of Defense Quality Systems Manual for Environmental Laboratories, Version 3 Final, March 2005** Prepared By Environmental Data Quality Workgroup, Department of Navy, Lead Service (Based On National Environmental Laboratory Accreditation Conference (NELAC) Chapter 5 (Quality Systems) NELAC Voted Version – 5 June 2003
(7) 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
(8) 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.
(9) Highlighted control limits (**bold font**) are adjusted from the calculated values as follows:
a) ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
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.

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Spike Recovery Control Limits for Polycyclic Aromatic Hydrocarbons EPA Method SW-846-8270D [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

Sample Matrix	Water		Soil	
Sample Volume / Final Volume	**500 mL to 0.5 mL**		**7.5 g / 0.5 mL**	
LCS Spike Recovery [6]	**Control Limits**	**ME Limits [3]**	**Control Limits**	**ME Limits [3]**
Napthalene	30 - **100**	21 - **100**	37 - **100**	31 - **100**
2-Methylnapthalene	33 - 108	21 - 121	43 - 101	33 - 111
1-Methylnapthalene	34 - **100**	26 - **100**	39 - **100**	32 - **100**
Acenaphthylene	45 - **100**	38 - **100**	44 - **100**	37 - **100**
Acenapthene	40 - **100**	32 - **100**	41 - **100**	35 - **100**
Dibenzofuran	45 - **100**	37 - **100**	44 - **100**	37 - **100**
Fluorene	45 - **100**	37 - 105	49 - **100**	43 - **100**
Phenanthrene	47 - 101	38 - 110	48 - **100**	42 - **100**
Anthracene	47 - **100**	38 - 108	50 - **100**	44 - **100**
Fluoranthene	48 - 110	38 - 120	54 - **100**	47 - 107
Pyrene	48 - 109	38 - 119	41 - 105	30 - 116
Benz(a)anthracene	44 - 105	34 - 115	49 - **100**	42 - 102
Chyrsene	50 - 103	41 - 112	50 - **100**	43 - 101
Benzo(b)fluoranthene	43 - 115	31 - 127	53 - **100**	45 - 107
Benzo(k)fluoranthene	51 - 110	41 - 120	54 - **100**	47 - 104
Benzo(a)pyrene	44 - 107	34 - 118	50 - **100**	42 - 105
Indeno(1,2,3-cd)pyrene	30 - 106	17 - 119	33 - 101	22 - 112
Dibenzo(a,h)anthracene	42 - 103	32 - 113	37 - 104	26 - 115
Benzo(g,h,i)Perylene	42 - 102	32 - 112	33 - 107	21 - 119
MB / LCS Surrogate Recovery		-		
d14-p-Terphenyl	52 - 110	(5)	47 - 112	(5)
2-Fluorobiphenyl	36 - **100**	(5)	40 - **100**	(5)
Sample Surrogate Recovery				
d14-p-Terphenyl	23 - 120	(5)	35 - 112	(5)
2-Fluorobiphenyl	38 - **100**	(5)	34 - **100**	(5)

(1) Control limits calculated using all available spike recovery data from 7/1/07 through 2/27/09.
(2) 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.
(3) **ME** = A marginal exceedance defined in the NELAC Standard (4) 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.
(4) **2003 NELAC Standard (EPA/600/R-04/003), July 2003**, Chapter 5, pages 251-252.
(5) Marginal Exceedances are not allowed for surrogate standards.
(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.

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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
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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: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

VOLATILE ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 14:28

Sample Amount: 4.94 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	104%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB99011110SED**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 14:58

Sample Amount: 5.23 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.5%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	125%
d8-Toluene	104%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-011810	Method Blank	Low	112%	103%	99.4%	100%	0
LCS-011810	Lab Control	Low	102%	105%	104%	99.7%	0
LCSD-011810	Lab Control Dup	Low	102%	104%	104%	101%	0
QF10A	CB31A011110SED	Low	124%	104%	103%	102%	0
QF10AMS	CB31A011110SED	Low	116%	104%	103%	104%	0
QF10AMSD	CB31A011110SED	Low	118%	106%	105%	103%	0
QF10B	CB99011110SED	Low	125%	104%	101%	102%	0

SW8260C	LCS/MB LIMITS Low	LCS/MB LIMITS Med	QC LIMITS Low	QC LIMITS Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 10-690 to 10-691

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
Page 1 of 1 **TB011110**

Lab Sample ID: QF10C
LIMS ID: 10-692
Matrix: Water
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 15:22

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	106%
Bromofluorobenzene	99.0%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
QF10C	Trip Blank	5	115%	106%	99.0%	101%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	83-122	80-125
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120

Prep Method: SW5030B
Log Number Range: 10-692 to 10-692

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst MS: FINN5/PAB
MSD: FINN5/PAB
Date Analyzed MS: 01/18/10 21:11
MSD: 01/18/10 21:38

Sample Amount MS: 5.13 g-dry-wt
MSD: 5.31 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 21.1%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
trans-1,2-Dichloroethene	< 1.0 U	36.6	48.7	75.2%	36.9	47.1	78.3%	0.8%
cis-1,2-Dichloroethene	< 1.0 U	35.5	48.7	72.9%	36.1	47.1	76.6%	1.7%
1,2-Dichloroethane	< 1.0 U	34.4	48.7	70.6%	36.3	47.1	77.1%	5.4%
Trichloroethene	< 1.0 U	29.7	48.7	61.0%	30.4	47.1	64.5%	2.3%
Tetrachloroethene	< 1.0 U	18.4	48.7	37.8%	18.7	47.1	39.7%	1.6%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
MATRIX SPIKE
Page 1 of 1

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 21:11

Sample Amount: 5.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	---	
156-59-2	cis-1,2-Dichloroethene	1.0	---	
107-06-2	1,2-Dichloroethane	1.0	---	
79-01-6	Trichloroethene	1.0	---	
127-18-4	Tetrachloroethene	1.0	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	104%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 21:38

Sample Amount: 5.31 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.9	---	
156-59-2	cis-1,2-Dichloroethene	0.9	---	
107-06-2	1,2-Dichloroethane	0.9	---	
79-01-6	Trichloroethene	0.9	---	
127-18-4	Tetrachloroethene	0.9	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	106%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-011810**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-011810
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/PAB
LCSD: FINN5/PAB
Date Analyzed LCS: 01/18/10 12:01
LCSD: 01/18/10 12:35

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
trans-1,2-Dichloroethene	41.7	50.0	83.4%	46.9	50.0	93.8%	11.7%
cis-1,2-Dichloroethene	41.1	50.0	82.2%	46.8	50.0	93.6%	13.0%
1,2-Dichloroethane	44.0	50.0	88.0%	49.8	50.0	99.6%	12.4%
Trichloroethene	43.2	50.0	86.4%	48.2	50.0	96.4%	10.9%
Tetrachloroethene	42.0	50.0	84.0%	48.3	50.0	96.6%	14.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	102%
d8-Toluene	105%	104%
Bromofluorobenzene	104%	104%
d4-1,2-Dichlorobenzene	99.7%	101%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0118

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD-SNIDER

ARI Job No: QF10

Project: POS-LORA LAKE APTS INTE

Lab File ID: MB0118

Lab Sample ID: MB0118

Date Analyzed: 01/18/10

Time Analyzed: 1302

Instrument ID: FINN5

Heated Purge: (Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0118	LCS0118	LCS0118	1201
02	LCS0118	LCS0118	LCS0118A	1235
03	CB31A011110S	QF10A	QF10A	1428
04	CB99011110SE	QF10B	QF10B	1458
05	TRIP BLANK	QF10C	QF10C	1522
06	CB31A011110S	QF10AMS	QF10AMS	2111
07	CB31A011110S	QF10AMSD	QF10AMSD	2138
08				
09				
10				
11				
12				
13				
14				
15				
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29				
30				

COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-011810**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-011810
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 13:02

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	103%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	100%

SEMIVOLATILE PAH ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
SAMPLE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 18:45
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	**Acenaphthene**	**20**	**13 J**
86-73-7	**Fluorene**	**20**	**16 J**
85-01-8	**Phenanthrene**	**20**	**180**
120-12-7	**Anthracene**	**20**	**34**
206-44-0	**Fluoranthene**	**20**	**340**
129-00-0	**Pyrene**	**20**	**270**
56-55-3	**Benzo(a)anthracene**	**20**	**95**
218-01-9	**Chrysene**	**20**	**150**
205-99-2	**Benzo(b)fluoranthene**	**20**	**140**
207-08-9	**Benzo(k)fluoranthene**	**20**	**140**
50-32-8	**Benzo(a)pyrene**	**20**	**110**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**32**
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	**Benzo(g,h,i)perylene**	**20**	**37**
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	99.2%
2-Fluorobiphenyl	76.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB99011110SED
SAMPLE

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized: BB
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 14:01
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 18.1%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
86-73-7	Fluorene	20	< 20 U
85-01-8	**Phenanthrene**	**20**	**43**
120-12-7	Anthracene	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**130**
129-00-0	**Pyrene**	**20**	**96**
56-55-3	**Benzo(a)anthracene**	**20**	**36**
218-01-9	**Chrysene**	**20**	**85**
205-99-2	**Benzo(b)fluoranthene**	**20**	**48**
207-08-9	**Benzo(k)fluoranthene**	**20**	**48**
50-32-8	**Benzo(a)pyrene**	**20**	**43**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**37**
53-70-3	**Dibenz(a,h)anthracene**	**20**	**19 J**
191-24-2	**Benzo(g,h,i)perylene**	**20**	**54**
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	80.8%
2-Fluorobiphenyl	78.4%

ANALYTICAL RESOURCES INCORPORATED

SW8270 PNA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	TER	FBP	TOT OUT
MB-011410	88.4%	71.6%	0
LCS-011410	67.6%	56.8%	0
CB31A011110SED	99.2%	76.4%	0
CB31A011110SED MS	78.0%	77.2%	0
CB31A011110SED MSD	83.6%	78.4%	0
CB99011110SED	80.8%	78.4%	0

	LCS/MB LIMITS	QC LIMITS
(TER) = d14-p-Terphenyl	(47-112)	(35-112)
(FBP) = 2-Fluorobiphenyl	(40-100)	(34-100)

Prep Method: SW3550B
Log Number Range: 10-690 to 10-691

FORM-II SW8270 PNA

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
MS/MSD

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/14/10

Date Analyzed MS: 01/19/10 12:54
MSD: 01/19/10 13:27
Instrument/Analyst MS: NT4/JZ
MSD: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount MS: 25.6 g-dry-wt
MSD: 25.2 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Alumina Cleanup: No

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	< 19.7	316	488	64.8%	328	496	66.1%	3.7%
2-Methylnaphthalene	< 19.7	347	488	71.1%	357	496	72.0%	2.8%
1-Methylnaphthalene	< 19.7	358	488	73.4%	371	496	74.8%	3.6%
Acenaphthylene	< 19.7	364	488	74.6%	373	496	75.2%	2.4%
Acenaphthene	12.6	352	488	69.5%	354	496	68.8%	0.6%
Fluorene	15.6	380	488	74.7%	384	496	74.3%	1.0%
Phenanthrene	184	493	488	63.3%	437	496	51.0%	12.0%
Anthracene	33.9	391	488	73.2%	388	496	71.4%	0.8%
Fluoranthene	343	623	488	57.4%	614	496	54.6%	1.5%
Pyrene	272	465	488	39.5%	471	496	40.1%	1.3%
Benzo(a)anthracene	95.3	423	488	67.2%	431	496	67.7%	1.9%
Chrysene	148	454	488	62.7%	464	496	63.7%	2.2%
Benzo(b)fluoranthene	136	406	488	55.3%	455	496	64.3%	11.4%
Benzo(k)fluoranthene	136	418	488	57.8%	393	496	51.8%	6.2%
Benzo(a)pyrene	114	389	488	56.4%	400	496	57.7%	2.8%
Indeno(1,2,3-cd)pyrene	31.9	403	488	76.0%	442	496	82.7%	9.2%
Dibenz(a,h)anthracene	< 19.7	372	488	76.2%	408	496	82.3%	9.2%
Benzo(g,h,i)perylene	37.4	378	488	69.8%	434	496	80.0%	13.8%
Dibenzofuran	< 19.7	377	488	77.3%	380	496	76.6%	0.8%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
MATRIX SPIKE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 12:54
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	---
91-57-6	2-Methylnaphthalene	20	---
90-12-0	1-Methylnaphthalene	20	---
208-96-8	Acenaphthylene	20	---
83-32-9	Acenaphthene	20	---
86-73-7	Fluorene	20	---
85-01-8	Phenanthrene	20	---
120-12-7	Anthracene	20	---
206-44-0	Fluoranthene	20	---
129-00-0	Pyrene	20	---
56-55-3	Benzo(a)anthracene	20	---
218-01-9	Chrysene	20	---
205-99-2	Benzo(b)fluoranthene	20	---
207-08-9	Benzo(k)fluoranthene	20	---
50-32-8	Benzo(a)pyrene	20	---
193-39-5	Indeno(1,2,3-cd)pyrene	20	---
53-70-3	Dibenz(a,h)anthracene	20	---
191-24-2	Benzo(g,h,i)perylene	20	---
132-64-9	Dibenzofuran	20	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	78.0%
2-Fluorobiphenyl	77.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: CB31A011110SED
MATRIX SPIKE DUPLICATE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 13:27
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	---
91-57-6	2-Methylnaphthalene	20	---
90-12-0	1-Methylnaphthalene	20	---
208-96-8	Acenaphthylene	20	---
83-32-9	Acenaphthene	20	---
86-73-7	Fluorene	20	---
85-01-8	Phenanthrene	20	---
120-12-7	Anthracene	20	---
206-44-0	Fluoranthene	20	---
129-00-0	Pyrene	20	---
56-55-3	Benzo(a)anthracene	20	---
218-01-9	Chrysene	20	---
205-99-2	Benzo(b)fluoranthene	20	---
207-08-9	Benzo(k)fluoranthene	20	---
50-32-8	Benzo(a)pyrene	20	---
193-39-5	Indeno(1,2,3-cd)pyrene	20	---
53-70-3	Dibenz(a,h)anthracene	20	---
191-24-2	Benzo(g,h,i)perylene	20	---
132-64-9	Dibenzofuran	20	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	83.6%
2-Fluorobiphenyl	78.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: LCS-011410
LAB CONTROL

Lab Sample ID: LCS-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 18:12
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Alumina Cleanup: No

Analyte	Lab Control	Spike Added	Recovery
Naphthalene	255	500	51.0%
2-Methylnaphthalene	257	500	51.4%
1-Methylnaphthalene	272	500	54.4%
Acenaphthylene	269	500	53.8%
Acenaphthene	263	500	52.6%
Fluorene	298	500	59.6%
Phenanthrene	297	500	59.4%
Anthracene	304	500	60.8%
Fluoranthene	373	500	74.6%
Pyrene	268	500	53.6%
Benzo(a)anthracene	308	500	61.6%
Chrysene	314	500	62.8%
Benzo(b)fluoranthene	304	500	60.8%
Benzo(k)fluoranthene	341	500	68.2%
Benzo(a)pyrene	281	500	56.2%
Indeno(1,2,3-cd)pyrene	303	500	60.6%
Dibenz(a,h)anthracene	297	500	59.4%
Benzo(g,h,i)perylene	276	500	55.2%
Dibenzofuran	289	500	57.8%

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	67.6%
2-Fluorobiphenyl	56.8%

Results reported in µg/kg

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS I

Lab File ID: 01181007 Date Extracted: 01/14/10

Instrument ID: NT4 Date Analyzed: 01/18/10

Matrix: SOLID Time Analyzed: 1738

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QF10LCSS1	QF10LCSS1	01181008	01/18/10
02	CB31A011110SED	QF10A	01181009	01/18/10
03	CB31A011110SED M	QF10AMS	01191002	01/19/10
04	CB31A011110SED M	QF10AMSD	01191003	01/19/10
05	CB99011110SED	QF10B	01191004	01/19/10
06				
07				
08				
09				
10				
11				
12				
13				
14				
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COMMENTS:

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: MB-011410
METHOD BLANK

Lab Sample ID: MB-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 17:38
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
86-73-7	Fluorene	20	< 20 U
85-01-8	Phenanthrene	20	< 20 U
120-12-7	Anthracene	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	88.4%
2-Fluorobiphenyl	71.6%

PCP/CHLOROPHENOLS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
SAMPLE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 18:13
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.86 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	**Pentachlorophenol**	8.0	25

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	55.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
DILUTION

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.86 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	80	< 80 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	72.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB99011110SED
SAMPLE

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 06:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 8.26 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 18.1%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	76	84

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	73.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	TBP	TOT OUT
MB-011410	64.0%	0
LCS-011410	57.6%	0
CB31A011110SED	55.2%	0
CB31A011110SED DL	72.8%	0
CB31A011110SED MS	79.8%	0
CB31A011110SED MSD	117%	0
CB99011110SED	73.6%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(50-115)	(10-146)

Prep Method: SW3550B
Log Number Range: 10-690 to 10-691

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
MS/MSD

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/14/10

Sample Amount MS: 7.91 g-dry-wt
MSD: 7.90 g-dry-wt
Date Analyzed MS: 01/20/10 05:25
MSD: 01/20/10 05:45
Final Extract Volume MS: 25 mL
MSD: 25 mL
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR
Dilution Factor MS: 10.0
MSD: 10.0
Percent Moisture: 21.6%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	25.0	169	79.0	182%	133	79.1	137%	23.8%

Results reported in µg/kg
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: CB31A011110SED
MATRIX SPIKE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:25
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.91 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	79	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	79.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A011110SED
MATRIX SPIKE DUP

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:45
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.90 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	79	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	117%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: LCS-011410
LAB CONTROL

Lab Sample ID: LCS-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 04:46
Instrument/Analyst: ECD1/AAR

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	42.7	62.5	68.3%

Chlorophenols Surrogate Recovery	
2,4,6-Tribromophenol	57.6%

Results reported in µg/kg

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD-SNIDER

ARI Job No.: QF10 — Project: POS-LORA LAKE APTS

Lab Sample ID: QF10MBS1 — Lab File ID: 0119A028

Matrix (soil/water) SOLID — Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y — Date Extracted: 01/14/10

Date Analyzed (1): 01/20/10 — Date Analyzed (2): 01/20/10

Time Analyzed (1): 0426 — Time Analyzed (2): 0426

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	QF10LCSS1	QF10LCSS1	01/20/10	01/20/10
02	CB31A011110S	QF10A	01/20/10	01/20/10
03	CB31A011110S	QF10AMS	01/20/10	01/20/10
04	CB31A011110S	QF10AMSD	01/20/10	01/20/10
05	CB99011110SE	QF10B	01/20/10	01/20/10
06	CB31A011110S	QF10A	01/20/10	01/20/10

FORM IV HERB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: MB-011410
METHOD BLANK

Lab Sample ID: MB-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 04:26
Instrument/Analyst: ECD1/AAR

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.2	< 6.2 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	64.0%

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: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Acti
POS-LLA

Data Release Authorized:
Reported: 01/19/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-011210	Method Blank	01/12/10	01/14/10	1.00	Diesel	5.0	< 5.0 U
10-690	HC ID: ---		FID9	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		97.0%
QF10A	CB31A011110SED	01/12/10	01/14/10	1.00	**Diesel**	**6.3**	**54**
10-690	HC ID: **DIESEL/MOTOR OIL**		FID9	1.0	**Motor Oil**	**12**	**270**
					o-Terphenyl		88.4%
QF10B	CB99011110SED	01/12/10	01/15/10	1.00	**Diesel**	**6.0**	**31**
10-691	HC ID: **DIESEL/MOTOR OIL**		FID9	1.0	**Motor Oil**	**12**	**200**
					o-Terphenyl		91.2%

Reported in mg/kg (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.

FORM I

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	OTER	TOT OUT
MB-011210	97.0%	0
LCS-011210	95.4%	0
CB31A011110SED	88.4%	0
CB31A011110SED MS	78.9%	0
CB31A011110SED MSD	86.6%	0
CB99011110SED	91.2%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(63-115)	(49-120)

Prep Method: SW3546
Log Number Range: 10-690 to 10-691

FORM-II TPHD

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: CB31A011110SED**
Page 1 of 1 **MS/MSD**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/12/10

Date Analyzed MS: 01/14/10 23:49
MSD: 01/15/10 00:09
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 8.00 g-dry-wt
MSD: 7.94 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.0
MSD: 1.0
Percent Moisture: 21.6%

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	54.4	158	188	55.1%	185	189	69.1%	15.7%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	78.9%	86.6%

Results reported in mg/kg
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-011210**
Page 1 of 1 **LAB CONTROL**

Lab Sample ID: LCS-011210 QC Report No: QF10-Floyd-Snider
LIMS ID: 10-690 Project: POS-Lora Lake Apts Interim Action
Matrix: Soil POS-LLA
Data Release Authorized: Date Sampled: 01/11/10
Reported: 01/19/10 Date Received: 01/12/10

Date Extracted: 01/12/10 Sample Amount: 10.0 g
Date Analyzed: 01/14/10 23:10 Final Extract Volume: 1.0 mL
Instrument/Analyst: FID/MS Dilution Factor: 1.0

Range	Lab Control	Spike Added	Recovery
Diesel	132	150	88.0%

TPHD Surrogate Recovery

o-Terphenyl	95.4%

Results reported in mg/kg

4

TPH METHOD BLANK SUMMARY

BLANK NO.: QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

SDG No.: QF10 Project No.: POS-LLA

Date Extracted: 01/12/10 Matrix: SOLID

Date Analyzed : 01/14/10 Instrument ID : FID9

Time Analyzed : 2251

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	QF10LCSS1	QF10LCSS1	01/14/10
02	CB31A011110S	QF10A	01/14/10
03	CB31A011110S	QF10AMS	01/14/10
04	CB31A011110S	QF10AMSD	01/15/10
05	CB99011110SE	QF10B	01/15/10

FORM IV TPH

METALS ANALYSIS

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A011110SED
SAMPLE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Percent Total Solids: 78.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	01/12/10	6010B	01/18/10	7440-38-2	Arsenic	6	6	U
3050B	01/12/10	6010B	01/18/10	**7439-92-1**	**Lead**	2	**32**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB99011110SED
SAMPLE

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Percent Total Solids: 78.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	01/12/10	6010B	01/18/10	7440-38-2	Arsenic	6	6	U
3050B	01/12/10	6010B	01/18/10	**7439-92-1**	**Lead**	3	**31**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: CB31A011110SED
MATRIX SPIKE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010B	6 U	235	238	98.7%	
Lead	6010B	32	277	238	103%	

Reported in mg/kg-dry

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
TOTAL METALS
Page 1 of 1

Sample ID: CB31A011110SED
DUPLICATE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010B	6 U	6 U	0.0%	+/- 6	L
Lead	6010B	32	54	51.2%	+/- 20%	*

Reported in mg/kg-dry

*-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: QF10LCS
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010B	195	200	97.5%	
Lead	6010B	196	200	98.0%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: QF10MB
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	01/12/10	6010B	01/18/10	7440-38-2	Arsenic	5	5	U
3050B	01/12/10	6010B	01/18/10	7439-92-1	Lead	2	2	U

U-Analyte undetected at given RL
RL-Reporting Limit

GENERAL CHEMISTRY ANALYSIS

SAMPLE RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Client ID: CB31A011110SED
ARI ID: 10-690 QF10A

Analyte	Date	Method	Units	RL	Sample
Total Solids	01/12/10 011210#1	EPA 160.3	Percent	0.01	83.20
Total Organic Carbon	01/13/10 011310#1	Plumb,1981	Percent	0.020	3.38

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Client ID: CB99011110SED
ARI ID: 10-691 QF10B

Analyte	Date	Method	Units	RL	Sample
Total Solids	01/12/10 011210#1	EPA 160.3	Percent	0.01	84.10
Total Organic Carbon	01/13/10 011310#1	Plumb,1981	Percent	0.020	3.63

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: QF10A Client ID: CB31A011110SED						
Total Organic Carbon	01/13/10	Percent	3.38	6.38	3.20	93.9%

REPLICATE RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: QF10A Client ID: CB31A011110SED					
Total Solids	01/12/10	Percent	83.20	84.30 84.00	0.7%
Total Organic Carbon	01/13/10	Percent	3.38	3.25 3.71	6.9%

LAB CONTROL RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon Plumb,1981	ICVL	01/13/10	Percent	0.099	0.100	99.0%

METHOD BLANK RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	01/12/10	Percent	< 0.01 U
Total Organic Carbon	01/13/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
QF10-Floyd-Snider

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 01/15/10

Project: POS-Lora Lake Apts Interim A
Event: POS-LLA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	01/13/10	Percent	3.50	3.35	104.5%

SUBCONTRACTED ANALYSIS

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **5914**

Received on: **01/13/2010** Project Due: **02/04/2010** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
5914-001-SA	1	QF10	CB31A011110SED	EPA 1613 D/F	Soil	01/11/2010	10:00 am	01/11/2011
5914-002-SA	0	QF10	CB99011110SED	EPA 1613 D/F	Soil	01/11/2010	10:30 am	01/11/2011

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-MB
Client ID: Method Blank
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 0.00

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.155		-	0.0252				
1,2,3,7,8-PeCDD	ND	0.218		-	0.0457				
1,2,3,4,7,8-HxCDD	ND	0.274		-	0.0496				
1,2,3,6,7,8-HxCDD	ND	0.320		-	0.0680	Total TCDD	ND	0.256	
1,2,3,7,8,9-HxCDD	ND	0.294		-	0.0666	Total PeCDD	ND	0.218	
1,2,3,4,6,7,8-HpCDD	ND	0.386		-	0.0927	Total HxCDD	ND	0.320	
OCDD	ND	1.27		-	0.272	Total HpCDD	ND	0.386	
2,3,7,8-TCDF	ND	0.109		-	0.0252				
1,2,3,7,8-PeCDF	ND	0.184		-	0.0365				
2,3,4,7,8-PeCDF	ND	0.210		-	0.0486				
1,2,3,4,7,8-HxCDF	ND	0.174		-	0.0267				
1,2,3,6,7,8-HxCDF	ND	0.179		-	0.0289				
2,3,4,6,7,8-HxCDF	ND	0.190		-	0.0298				
1,2,3,7,8,9-HxCDF	ND	0.221		-	0.0493	Total TCDF	ND	0.109	
1,2,3,4,6,7,8-HpCDF	ND	0.214		-	0.0404	Total PeCDF	ND	0.210	
1,2,3,4,7,8,9-HpCDF	ND	0.238		-	0.0469	Total HxCDF	ND	0.221	
OCDF	ND	0.507		-	0.177	Total HpCDF	ND	0.238	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	86.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	65.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	87.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	86.3	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	79.6	23.0 - 140	
13C-OCDD	68.7	17.0 - 157	
13C-2,3,7,8-TCDF	84.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	71.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	65.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	89.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	88.2	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	85.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	82.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	77.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	82.2	26.0 - 138	
13C-OCDF	68.6	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	90.5	35.0 - 197

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: NA
Amount: 5.00 g

ICal: poddfal3-11-18-09
GC Column: DB5
Units: ng/ml

Acquired: 01-22-2010
2005 WHO TEQ: NA

Compound	Conc	QC Limits	Qual
2,3,7,8-TCDD	9.83	6.70 - 15.8	
1,2,3,7,8-PeCDD	50.2	35.0 - 71.0	
1,2,3,4,7,8-HxCDD	49.0	35.0 - 82.0	
1,2,3,6,7,8-HxCDD	49.1	38.0 - 67.0	
1,2,3,7,8,9-HxCDD	48.4	32.0 - 81.0	
1,2,3,4,6,7,8-HpCDD	52.6	35.0 - 70.0	
OCDD	102	78.0 - 144	
2,3,7,8-TCDF	9.82	7.50 - 15.8	
1,2,3,7,8-PeCDF	49.7	40.0 - 67.0	
2,3,4,7,8-PeCDF	50.5	34.0 - 80.0	
1,2,3,4,7,8-HxCDF	49.9	36.0 - 67.0	
1,2,3,6,7,8-HxCDF	50.3	42.0 - 65.0	
2,3,4,6,7,8-HxCDF	49.9	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	51.1	41.0 - 61.0	
1,2,3,4,7,8,9-HpCDF	51.2	39.0 - 69.0	
OCDF	96.4	63.0 - 170	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.4	20.0 - 175	
13C-1,2,3,7,8-PeCDD	70.8	21.0 - 227	
13C-1,2,3,4,7,8-HxCDD	91.2	21.0 - 193	
13C-1,2,3,6,7,8-HxCDD	87.9	25.0 - 163	
13C-1,2,3,4,6,7,8-HpCDD	79.7	26.0 - 166	
13C-OCDD	67.5	13.0 - 198	
13C-2,3,7,8-TCDF	89.3	22.0 - 152	
13C-1,2,3,7,8-PeCDF	76.6	21.0 - 192	
13C-2,3,4,7,8-PeCDF	71.8	13.0 - 328	
13C-1,2,3,4,7,8-HxCDF	91.2	19.0 - 202	
13C-1,2,3,6,7,8-HxCDF	87.3	21.0 - 159	
13C-2,3,4,6,7,8-HxCDF	86.1	22.0 - 176	
13C-1,2,3,7,8,9-HxCDF	85.8	17.0 - 205	
13C-1,2,3,4,6,7,8-HpCDF	76.9	21.0 - 158	
13C-1,2,3,4,7,8,9-HpCDF	84.4	20.0 - 186	
13C-OCDF	68.4	13.0 - 198	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	96.1	31.0 - 191	

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-001-SA
Client ID: CB31A011110SED
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 5.03 g
% Solids: 73.39

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-25-2010
2005 WHO TEQ: 36.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.632	-	J	0.632	0.0252				
1,2,3,7,8-PeCDD	3.96	-	J	3.96	0.0457				
1,2,3,4,7,8-HxCDD	9.13	-		0.913	0.0496				
1,2,3,6,7,8-HxCDD	32.3	-		3.23	0.0680	Total TCDD	2.23	-	
1,2,3,7,8,9-HxCDD	17.6	-		1.76	0.0666	Total PeCDD	15.4	-	
1,2,3,4,6,7,8-HpCDD	1210	-		12.1	0.0927	Total HxCDD	149	-	
OCDD	11200	-		3.36	0.272	Total HpCDD	1960	-	
2,3,7,8-TCDF	0.332	-	J	0.0332	0.0252				
1,2,3,7,8-PeCDF	1.00	-	J	0.0300	0.0365				
2,3,4,7,8-PeCDF	2.23	-	J	0.669	0.0486				
1,2,3,4,7,8-HxCDF	39.4	-		3.94	0.0267				
1,2,3,6,7,8-HxCDF	8.55	-		0.855	0.0289				
2,3,4,6,7,8-HxCDF	12.4	-		1.24	0.0298				
1,2,3,7,8,9-HxCDF	2.96	-	J	0.296	0.0493	Total TCDF	8.48	-	D,M
1,2,3,4,6,7,8-HpCDF	246	-		2.46	0.0404	Total PeCDF	49.5	-	D,M
1,2,3,4,7,8,9-HpCDF	22.6	-		0.226	0.0469	Total HxCDF	349	-	D,M
OCDF	914	-		0.274	0.177	Total HpCDF	991	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	74.7	25.0 - 164	
13C-1,2,3,7,8-PeCDD	63.2	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	75.2	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	71.0	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	77.8	23.0 - 140	
13C-OCDD	77.7	17.0 - 157	
13C-2,3,7,8-TCDF	76.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	72.1	24.0 - 185	
13C-2,3,4,7,8-PeCDF	67.3	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	74.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	72.7	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	72.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	72.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	64.2	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	70.1	26.0 - 138	
13C-OCDF	66.5	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	80.9	35.0 - 197	

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 5914-002-SA
Client ID: CB99011110SED
Matrix: Soil
Batch No: X1926

Date Extracted: 01-21-2010
Date Received: 01-13-2010
Amount: 5.02 g
% Solids: 72.90

ICal: pcddfal3-11-18-09
GC Column: DB5
Units: pg/g

Acquired: 01-22-2010
2005 WHO TEQ: 35.0

Compound	Conc	DL	Qual	2005 WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	0.636	-	J	0.636	0.0252				
1,2,3,7,8-PeCDD	3.99	-	J	3.99	0.0457				
1,2,3,4,7,8-HxCDD	8.27	-		0.827	0.0496				
1,2,3,6,7,8-HxCDD	28.3	-		2.83	0.0680	Total TCDD	1.26	-	
1,2,3,7,8,9-HxCDD	16.7	-		1.67	0.0666	Total PeCDD	13.0	-	
1,2,3,4,6,7,8-HpCDD	1070	-		10.7	0.0927	Total HxCDD	125	-	
OCDD	11500	-		3.45	0.272	Total HpCDD	1680	-	
2,3,7,8-TCDF	0.405	-	J	0.0405	0.0252				
1,2,3,7,8-PeCDF	0.989	-	J	0.0297	0.0365				
2,3,4,7,8-PeCDF	2.87	-	J	0.861	0.0486				
1,2,3,4,7,8-HxCDF	43.7	-		4.37	0.0267				
1,2,3,6,7,8-HxCDF	9.40	-		0.940	0.0289				
2,3,4,6,7,8-HxCDF	13.8	-		1.38	0.0298				
1,2,3,7,8,9-HxCDF	3.57	-	J	0.357	0.0493	Total TCDF	8.45	-	
1,2,3,4,6,7,8-HpCDF	237	-		2.37	0.0404	Total PeCDF	47.5	-	D,M
1,2,3,4,7,8,9-HpCDF	24.7	-		0.247	0.0469	Total HxCDF	340	-	D,M
OCDF	899	-		0.270	0.177	Total HpCDF	890	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	77.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	60.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	79.0	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	73.5	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	78.8	23.0 - 140	
13C-OCDD	77.3	17.0 - 157	
13C-2,3,7,8-TCDF	79.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	64.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	62.9	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	76.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	71.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	74.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	78.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	69.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	78.0	26.0 - 138	
13C-OCDF	67.4	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	78.6	35.0 - 197

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

Analyst: _____
Date: 1/26/10

Reviewed By: DN
Date: 1/26/10

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TOTAL SOLIDS

Volatiles Total Solids-voats
Data By: Pat Basilio
Created: 1/21/10

Worklist: 1670
Analyst: PAB
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

ARI ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids
1. QF10A 10-690	_____	_____		% 78.91
2. QF10B 10-691	_____	_____		% 78.47

Worklist ID: 1670 Page: 1
* - VOA TS Copied From BETX TS
& - VOA TS Copied From Metals TS
$ - VOA TS Copied From Extraction TS

Extractions Total Solids-extts
Data By: Alex Choeng
Created: 1/12/10

Worklist: 8844
Analyst: RVR
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	QF10A 10-690 CB31A011110SED	1.13	7.00	5.73	78.4	NR
2.	QF10B 10-691 CB99011110SED	1.12	8.12	6.85	81.9	NR

Solids Data Entry Report Checked by: MH Date: 1/14/10
Date: 01/13/10 Data Analyst: DM

Solids Determination performed on 01/12/10 by DM

JOB	SAMPLE	CLIENTID	TAREWEIGHT	SAMPDISH	DRYWEIGHT	SOLIDS
QF10	A	CB31A011110SED	0.966	10.131	8.198	78.91
QF10	B	CB99011110SED	0.967	10.572	8.504	78.47

QF10:00090

Laboratory Data Package

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Volatile Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-011810	Method Blank	Low	112%	103%	99.4%	100%	0
LCS-011810	Lab Control	Low	102%	105%	104%	99.7%	0
LCSD-011810	Lab Control Dup	Low	102%	104%	104%	101%	0
QF10A	CB31A011110SED	Low	124%	104%	103%	102%	0
QF10AMS	CB31A011110SED	Low	116%	104%	103%	104%	0
QF10AMSD	CB31A011110SED	Low	118%	106%	105%	103%	0
QF10B	CB99011110SED	Low	125%	104%	101%	102%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 10-690 to 10-691

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
QF10C	Trip Blank	5	115%	106%	99.0%	101%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	83-122	80-125
(TOL) = d8-Toluene	80-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120

Prep Method: SW5030B
Log Number Range: 10-692 to 10-692

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst MS: FINN5/PAB
MSD: FINN5/PAB
Date Analyzed MS: 01/18/10 21:11
MSD: 01/18/10 21:38

Sample Amount MS: 5.13 g-dry-wt
MSD: 5.31 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 21.1%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
trans-1,2-Dichloroethene	< 1.0 U	36.6	48.7	75.2%	36.9	47.1	78.3%	0.8%
cis-1,2-Dichloroethene	< 1.0 U	35.5	48.7	72.9%	36.1	47.1	76.6%	1.7%
1,2-Dichloroethane	< 1.0 U	34.4	48.7	70.6%	36.3	47.1	77.1%	5.4%
Trichloroethene	< 1.0 U	29.7	48.7	61.0%	30.4	47.1	64.5%	2.3%
Tetrachloroethene	< 1.0 U	18.4	48.7	37.8%	18.7	47.1	39.7%	1.6%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-011810**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-011810
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/PAB
LCSD: FINN5/PAB
Date Analyzed LCS: 01/18/10 12:01
LCSD: 01/18/10 12:35

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
trans-1,2-Dichloroethene	41.7	50.0	83.4%	46.9	50.0	93.8%	11.7%
cis-1,2-Dichloroethene	41.1	50.0	82.2%	46.8	50.0	93.6%	13.0%
1,2-Dichloroethane	44.0	50.0	88.0%	49.8	50.0	99.6%	12.4%
Trichloroethene	43.2	50.0	86.4%	48.2	50.0	96.4%	10.9%
Tetrachloroethene	42.0	50.0	84.0%	48.3	50.0	96.6%	14.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	102%
d8-Toluene	105%	104%
Bromofluorobenzene	104%	104%
d4-1,2-Dichlorobenzene	99.7%	101%

4A

VOLATILE METHOD BLANK SUMMARY

Method Blank ID.

MB0118

Lab Name: ANALYTICAL RESOURCES, INC

Client: FLOYD-SNIDER

ARI Job No: QF10

Project: POS-LORA LAKE APTS INTE

Lab File ID: MB0118

Lab Sample ID: MB0118

Date Analyzed: 01/18/10

Time Analyzed: 1302

Instrument ID: FINN5

Heated Purge: (Y/N) Y

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0118	LCS0118	LCS0118	1201
02	LCS0118	LCS0118	LCS0118A	1235
03	CB31A011110S	QF10A	QF10A	1428
04	CB99011110SE	QF10B	QF10B	1458
05	TRIP BLANK	QF10C	QF10C	1522
06	CB31A011110S	QF10AMS	QF10AMS	2111
07	CB31A011110S	QF10AMSD	QF10AMSD	2138
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ANALYTICAL RESOURCES, INC Contract: FLOYD-SNIDER

Lab Code: ARI Case No.: POS-LORA LAKE APTS INTERIMINALS SDG No.: QF10

Lab File ID: BFB0106 BFB Injection Date: 01/06/10

Instrument ID: FINN5 BFB Injection Time: 0928

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	27.7
75	30.0 - 66.0% of mass 95	52.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 101.0% of mass 95	83.6
175	4.0 - 9.0% of mass 174	6.1 (7.3)1
176	93.0 - 101.0% of mass 174	81.6 (97.6)1
177	5.0 - 9.0% of mass 176	5.9 (7.2)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	VSTD5	IC0106	0050106	01/06/10	1134
02	VSTD10	IC0106	0100106	01/06/10	1201
03	VSTD50	IC0106	0500106	01/06/10	1228
04	VSTD100	IC0106	1000106	01/06/10	1254
05	VSTD150	IC0106	1500106	01/06/10	1321
06	VSTD200	IC0106	2000106	01/06/10	1353
07	VSTD1	IC0106	0010106	01/06/10	1456
08	VSTD2	IC0106	0020106	01/06/10	1531
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.: POS-LORA LAKE APTS INTERIMINALS SDG No.: QF10

Lab File ID: BFB0118 BFB Injection Date: 01/18/10

Instrument ID: FINN5 BFB Injection Time: 1008

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	29.0
75	30.0 - 66.0% of mass 95	53.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 101.0% of mass 95	74.3
175	4.0 - 9.0% of mass 174	5.1 (6.8)1
176	93.0 - 101.0% of mass 174	71.8 (96.6)1
177	5.0 - 9.0% of mass 176	4.9 (6.8)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	VSTD050	CC0118	0500118	01/18/10	1041
02	LCS0118	LCS0118	LCS0118	01/18/10	1201
03	LCS0118	LCS0118	LCS0118A	01/18/10	1235
04	MB0118	MB0118	MB0118	01/18/10	1302
05	CB31A011110SED	QF10A	QF10A	01/18/10	1428
06	CB99011110SED	QF10B	QF10B	01/18/10	1458
07	TRIP BLANK	QF10C	QF10C	01/18/10	1522
08	CB31A011110SED M	QF10AMS	QF10AMS	01/18/10	2111
09	CB31A011110SED M	QF10AMSD	QF10AMSD	01/18/10	2138
10					
11					
12					
13					
14					
15					
16					
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: QF10 Project: POS-LORA LAKE APTS INTERIMIN

Ical Midpoint ID: 0500106 Ical Date: 01/06/10

Instrument ID: FINN5 Project Run Date: 01/18/10

		IS1(PFB) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CLB) AREA #	RT #
	ICAL MIDPT	113395	6.61	160565	7.62	148719	10.76
	UPPER LIMIT	226790	7.11	321130	8.12	297438	11.26
	LOWER LIMIT	56698	6.11	80282	7.12	74360	10.26
	Sample ID						
01	LCS0118	113099	6.65	161272	7.66	151272	10.80
02	LCS0118	114357	6.64	158174	7.65	149003	10.79
03	MB0118	99766	6.66	139354	7.67	132412	10.81
04	CB31A011110S	99113	6.67	142772	7.68	141073	10.82
05	CB99011110SE	101953	6.67	146113	7.68	145130	10.82
06	TRIP BLANK	96718	6.67	138137	7.68	136145	10.82
07	CB31A011110S	105512	6.65	153418	7.66	148831	10.80
08	CB31A011110S	102248	6.67	147551	7.68	148900	10.82
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (PFB) = Pentafluorobenzene
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CLB) = d5-Chlorobenzene

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: QF10 Project: POS-LORA LAKE APTS INTERIMIN

Ical Midpoint ID: 0500106 Ical Date: 01/06/10

Instrument ID: FINN5 Project Run Date: 01/18/10

		IS4(DCB) AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	84322	13.45				
	UPPER LIMIT	168644	13.95				
	LOWER LIMIT	42161	12.95				
	Sample ID						
01	LCS0118	87123	13.49				
02	LCS0118	86693	13.48				
03	MB0118	71238	13.50				
04	CB31A011110S	82539	13.50				
05	CB99011110SE	82602	13.51				
06	TRIP BLANK	75466	13.51				
07	CB31A011110S	84910	13.49				
08	CB31A011110S	86383	13.51				
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (DCB) = d4-1,4-Dichlorobenzene

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.

Volatile Analysis
Sample Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 14:28

Sample Amount: 4.94 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	104%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	102%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/QF10A.d
Lab Smp Id: QF10A Client Smp ID: CB31A011110SED
Inj Date : 18-JAN-2010 14:28
Operator : PB Inst ID: finn5.i
Smp Info : QF10A,5,6.26,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:22 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	6.26000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.734	4.723	(0.709)	29269	64.1934	51.273(Q)
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	5.437	5.427	(0.815)	1781	0.55437	0.4428(Q)
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	6.331	6.321	(0.949)	2427	4.18196	3.340
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.673	6.663	(1.000)	99113	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.884	6.884	(1.032)	60866	53.2678	42.546
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.347	7.347	(1.101)	94245	62.0935	49.595
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.678	7.668	(1.000)	142772	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	8.693	8.683	(1.132)	992	2.56657	2.050(Q)
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.226	9.216	(1.202)	176619	52.2046	41.697
	44 Toluene	92	9.306	9.306	(1.212)	5243	1.98511	1.586
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.824	10.824	(1.000)	141073	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.140	12.140	(1.122)	82462	51.2862	40.963
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	66 N-Propyl Benzene	91	Compound Not Detected.					
	67 Bromobenzene	156	Compound Not Detected.					
	68 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	69 2-Chloro Toluene	91	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	13.276	13.266	(0.984)	15068	3.49151	2.789
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	13.497	13.497	(1.000)	82539	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	13.949	13.939	(1.034)	76937	50.8610	40.624
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	83 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: QF10A.d
Lab Smp Id: QF10A
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: CB31A011110SED
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	99113	-12.59
34 1,4-Difluorobenze	160565	80282	321130	142772	-11.08
52 d5-Chlorobenzene	148719	74360	297438	141073	-5.14
76 d4-1,4-Dichlorobe	84322	42161	168644	82539	-2.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.67	0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.68	0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.82	0.00
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.50	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

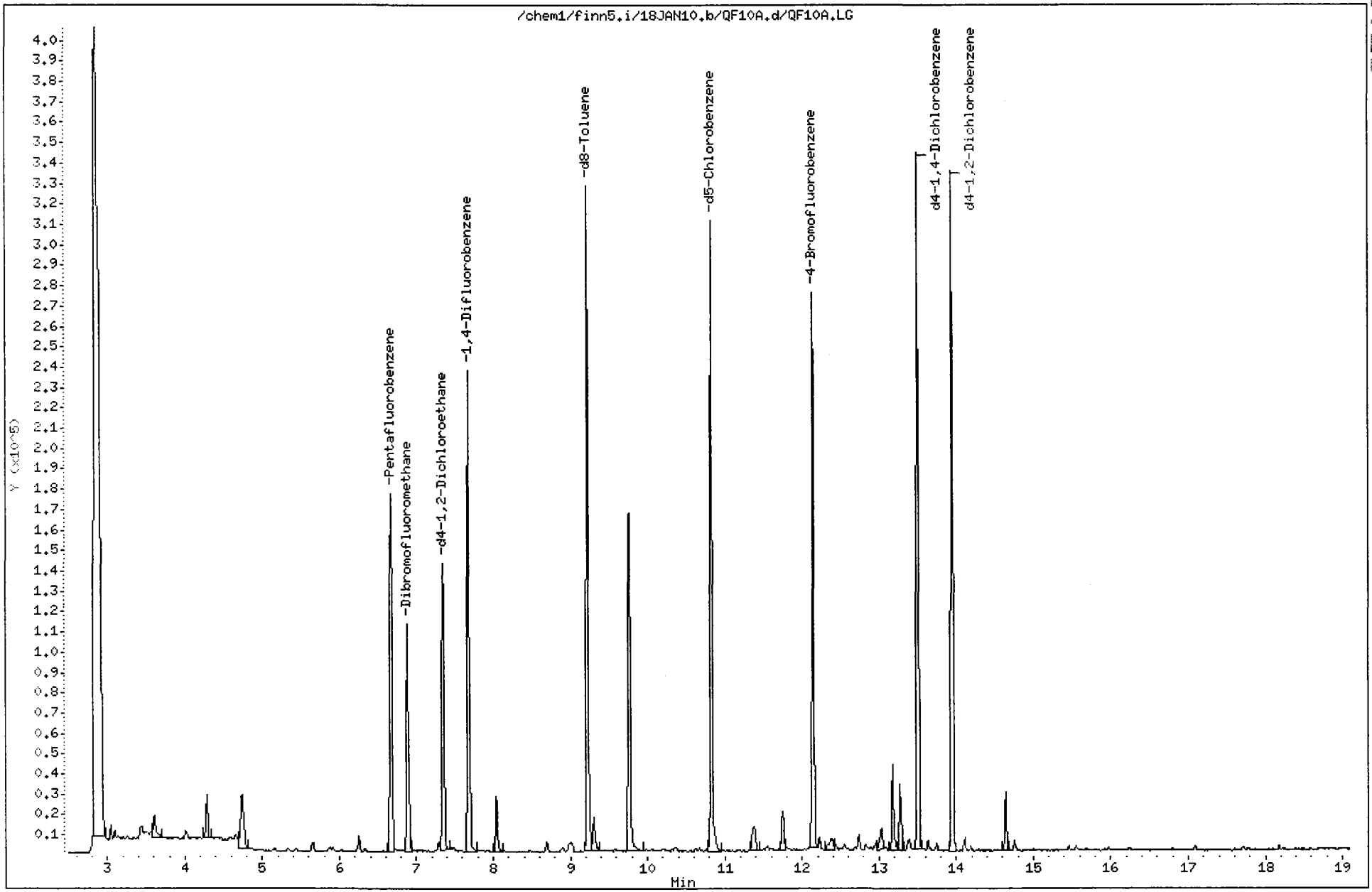
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: QF10A
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: QF10
Fraction: VOA
Client Smp ID: CB31A011110SED
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	53.268	106.54	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.094	124.19	75-152
$ 43 d8-Toluene	50.000	52.204	104.41	82-115
$ 62 4-Bromofluorobenze	50.000	51.286	102.57	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.861	101.72	80-120

Data File: /chem1/finn5.i/18JAN10.b/QF10A.d
Date : 18-JAN-2010 14:28
Client ID: CB31A011110SED
Sample Info: QF10A,5,6.26,0

Instrument: finn5.i
Operator: PB
Column phase: Rtx502.2
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB99011110SED**
Page 1 of 1 **SAMPLE**

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 14:58

Sample Amount: 5.23 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.5%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	125%
d8-Toluene	104%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/QF10B.d
Lab Smp Id: QF10B Client Smp ID: CB99011110SED
Inj Date : 18-JAN-2010 14:58
Operator : PB Inst ID: finn5.i
Smp Info : QF10B,5,6.66,0
Misc Info : 10-691
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:22 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	6.66000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.734	4.723	(0.709)	32617	69.5436	52.210(Q)
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)	
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.						
	15 Carbon Disulfide	76	5.437	5.427	(0.815)	2029	0.61398	0.4609	ug
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.						
	18 Vinyl Acetate	43	Compound Not Detected.						
	19 1,1-Dichloroethane	63	Compound Not Detected.						
	20 2-Butanone	43	6.321	6.321	(0.947)	3244	5.43403	4.080	ug
	21 2,2-Dichloropropane	77	Compound Not Detected.						
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.						
*	23 Pentafluorobenzene	168	6.673	6.663	(1.000)	101953	50.0000		
	24 Chloroform	83	Compound Not Detected.						
	26 Bromochloromethane	128	Compound Not Detected.						
$	25 Dibromofluoromethane	111	6.894	6.884	(1.033)	62716	53.3579	40.058	
	27 1,1,1-Trichloroethane	97	Compound Not Detected.						
	29 1,1-Dichloropropene	75	Compound Not Detected.						
	30 Carbon Tetrachloride	117	Compound Not Detected.						
$	31 d4-1,2-Dichloroethane	65	7.357	7.347	(1.102)	97761	62.6158	47.009	
	32 1,2-Dichloroethane	62	Compound Not Detected.						
	33 Benzene	78	Compound Not Detected.						
*	34 1,4-Difluorobenzene	114	7.678	7.668	(1.000)	146113	50.0000		
	35 Trichloroethene	95	Compound Not Detected.						
	36 1,2-Dichloropropane	63	Compound Not Detected.						
	37 Bromodichloromethane	83	Compound Not Detected.						
	39 Dibromomethane	93	Compound Not Detected.						
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.						
	41 4-Methyl-2-Pentanone	58	8.693	8.683	(1.132)	1281	3.23850	2.431(Q)	ug
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.						
$	43 d8-Toluene	98	9.226	9.216	(1.202)	180764	52.2080	39.195	
	44 Toluene	92	9.306	9.306	(1.212)	6937	2.56644	1.927	ug
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.						
	46 2-Hexanone	43	Compound Not Detected.						
	47 1,1,2-Trichloroethane	97	Compound Not Detected.						
	48 1,3-Dichloropropane	76	Compound Not Detected.						
	49 Tetrachloroethene	166	Compound Not Detected.						
	50 Chlorodibromomethane	129	Compound Not Detected.						
	51 1,2-Dibromoethane	107	Compound Not Detected.						
*	52 d5-Chlorobenzene	117	10.824	10.824	(1.000)	145130	50.0000		
	53 Chlorobenzene	112	Compound Not Detected.						
	54 Ethyl Benzene	91	Compound Not Detected.						
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	56 m,p-xylene	106	Compound Not Detected.						
	57 o-Xylene	106	Compound Not Detected.						
	58 Styrene	104	Compound Not Detected.						
	59 Isopropyl Benzene	105	Compound Not Detected.						
	60 Bromoform	173	Compound Not Detected.						
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
$	62 4-Bromofluorobenzene	95	12.140	12.140	(1.122)	83783	50.6512	38.026	
	63 1,2,3-Trichloropropane	110	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
66	N-Propyl Benzene	91	Compound Not Detected.					
67	Bromobenzene	156	Compound Not Detected.					
68	1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
69	2-Chloro Toluene	91	Compound Not Detected.					
70	4-Chloro Toluene	91	Compound Not Detected.					
71	T-Butyl Benzene	119	Compound Not Detected.					
72	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
73	S-Butyl Benzene	105	Compound Not Detected.					
74	4-Isopropyl Toluene	119	13.276	13.266	(0.983)	24697	5.71834	4.293
75	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 76	d4-1,4-Dichlorobenzene	152	13.507	13.497	(1.000)	82602	50.0000	
77	1,4-Dichlorobenzene	146	Compound Not Detected.					
78	N-Butyl Benzene	91	Compound Not Detected.					
$ 79	d4-1,2-Dichlorobenzene	152	13.949	13.939	(1.033)	77243	51.0244	38.306
80	1,2-Dichlorobenzene	146	Compound Not Detected.					
81	1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
82	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
83	Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
84	Naphthalene	128	Compound Not Detected.					
85	1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: QF10B.d
Lab Smp Id: QF10B
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-691

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: CB99011110SED
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	101953	-10.09
34 1,4-Difluorobenze	160565	80282	321130	146113	-9.00
52 d5-Chlorobenzene	148719	74360	297438	145130	-2.41
76 d4-1,4-Dichlorobe	84322	42161	168644	82602	-2.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.67	0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.68	0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.82	0.00
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.51	0.07

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

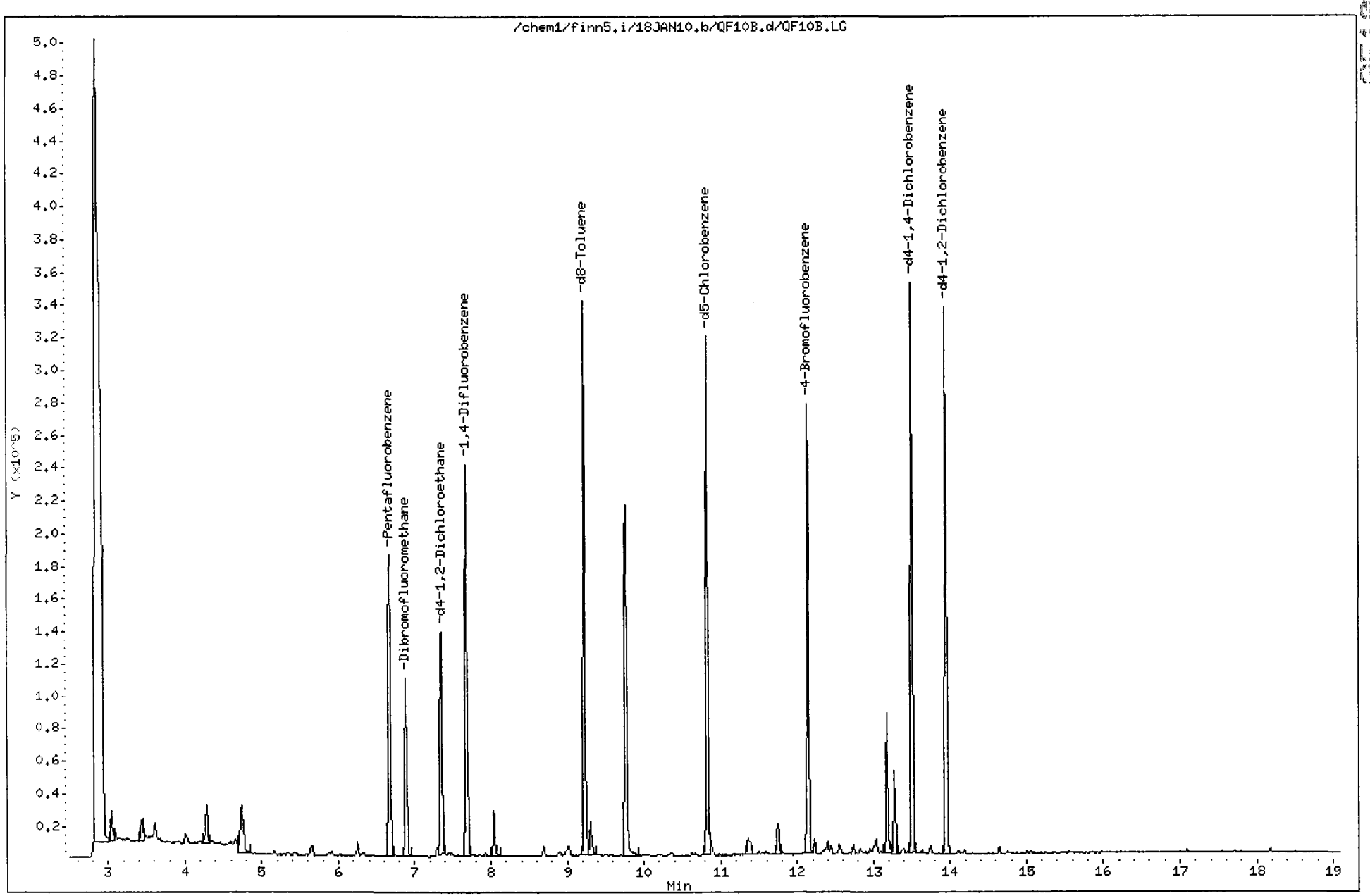
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: QF10B
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-691

Client SDG: QF10
Fraction: VOA
Client Smp ID: CB99011110SED
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	53.358	106.72	30-160
$ 31 d4-1,2-Dichloroeth	50.000	62.616	125.23	75-152
$ 43 d8-Toluene	50.000	52.208	104.42	82-115
$ 62 4-Bromofluorobenze	50.000	50.651	101.30	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.024	102.05	80-120

Data File: /chem1/finn5.i/18JAN10.b/QF10B.d
Date : 18-JAN-2010 14:58
Client ID: CB99011110SED
Sample Info: QF10B,5,6.66,0

Instrument: finn5.i
Operator: PB
Column phase: Rtx502.2
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
Page 1 of 1 **TB011110**

Lab Sample ID: QF10C
LIMS ID: 10-692
Matrix: Water
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 15:22

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	106%
Bromofluorobenzene	99.0%
d4-1,2-Dichlorobenzene	101%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/QF10C.d
Lab Smp Id: QF10C Client Smp ID: Trip Blank
Inj Date : 18-JAN-2010 15:22
Operator : PB Inst ID: finn5.i
Smp Info : QF10C,5,5,0
Misc Info : 10-692
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:22 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv / Sa * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	PurgeVolume (mL)
Sa	0.00000	SampleAmount (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/L)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 Acrolein	56	Compound Not Detected.					
8 112Trichlorol22Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.734	4.723	(0.709)	2158	4.85017	4.850
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					
16 Methyl tert-Butyl Ether	73	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/L)
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.673	6.663	(1.000)	96718	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.894	6.884	(1.033)	57720	51.7654	51.765
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.357	7.347	(1.102)	84923	57.3372	57.337
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.678	7.668	(1.000)	138137	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.226	9.216	(1.202)	172640	52.7407	52.741
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.824	10.824	(1.000)	136145	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.140	12.140	(1.122)	76785	49.4841	49.484
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					
	65 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/L)
	66 N-Propyl Benzene	91	Compound Not Detected.					
	67 Bromobenzene	156	Compound Not Detected.					
	68 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	69 2-Chloro Toluene	91	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	13.507	13.497	(1.000)	75466	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	13.949	13.939	(1.033)	69581	50.3093	50.309
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	83 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	84 Naphthalene	128	Compound Not Detected.					
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: QF10C.d
Lab Smp Id: QF10C
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-692

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: Trip Blank
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	96718	-14.71
34 1,4-Difluorobenze	160565	80282	321130	138137	-13.97
52 d5-Chlorobenzene	148719	74360	297438	136145	-8.45
76 d4-1,4-Dichlorobe	84322	42161	168644	75466	-10.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.67	0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.68	0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.82	0.00
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.51	0.07

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

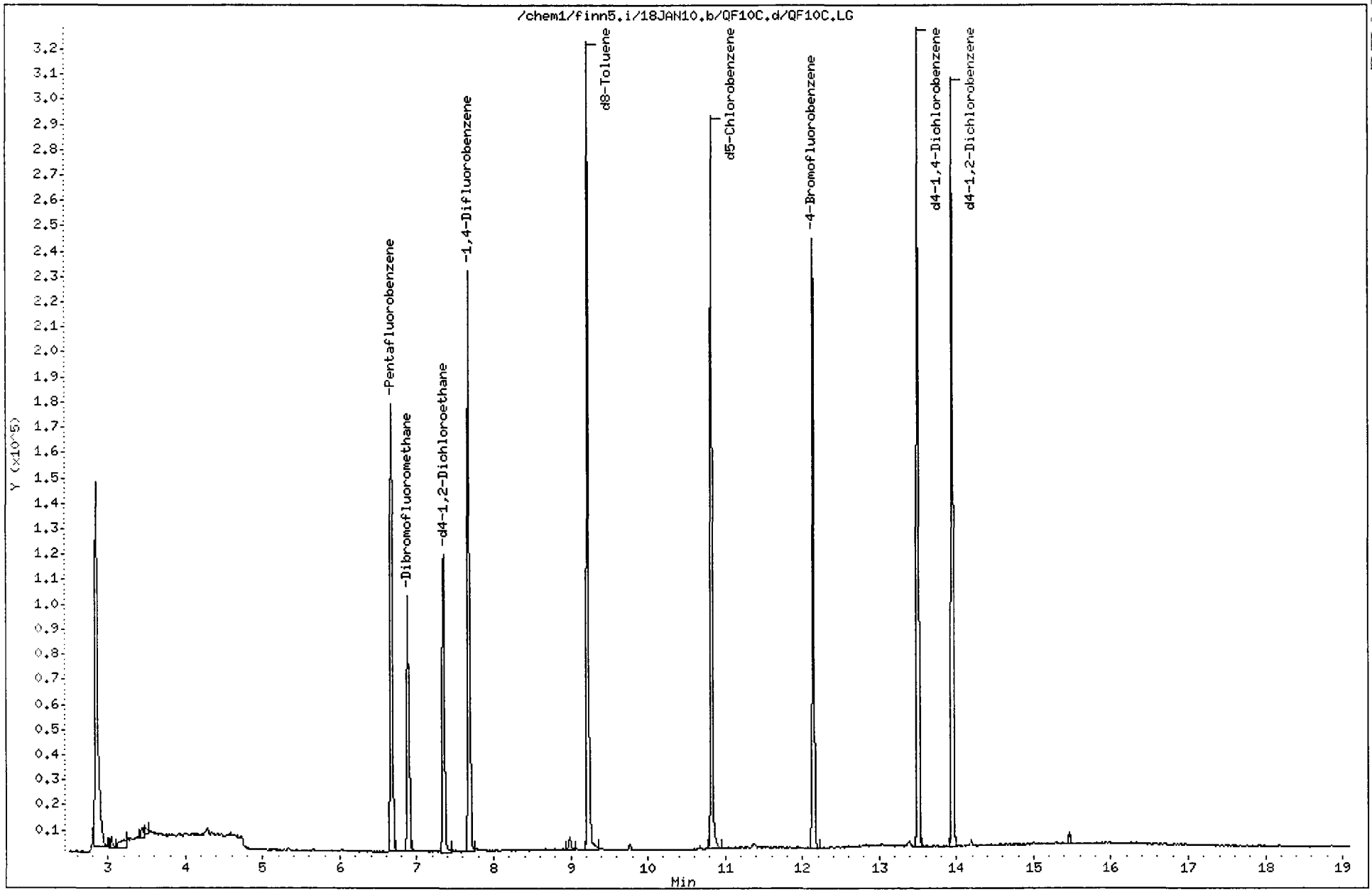
Client Name: Floyd-Snider
Sample Matrix: LIQUID
Lab Smp Id: QF10C
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-692

Client SDG: QF10
Fraction: VOA
Client Smp ID: Trip Blank
Operator: PB
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	51.765	103.53	30-160
$ 31 d4-1,2-Dichloroeth	50.000	57.337	114.67	75-152
$ 43 d8-Toluene	50.000	52.741	105.48	82-115
$ 62 4-Bromofluorobenze	50.000	49.484	98.97	71-120
$ 79 d4-1,2-Dichloroben	50.000	50.309	100.62	80-121

Data File: /chem1/finn5.i/18JAN10.b/QF10C.d
Date : 18-JAN-2010 15:22
Client ID: Trip Blank
Sample Info: QF10C,5,5,0

Instrument: finn5.i
Operator: PB
Column phase: Rtx502.2
Column diameter: 0.18



Data File: /chem1/finn5.i/18JAN10.b/QF10C.d

Date : 18-JAN-2010 15:22

Client ID: Trip Blank

Instrument: finn5.i

Sample Info: QF10C,5,5,0

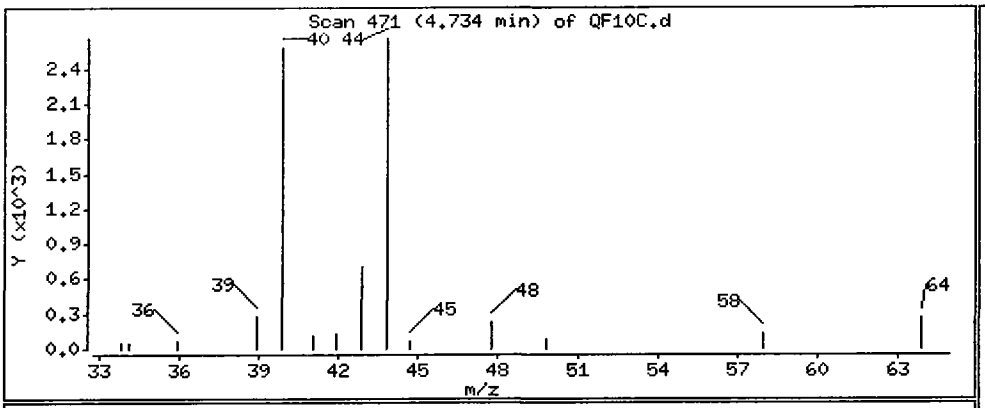
Operator: PB

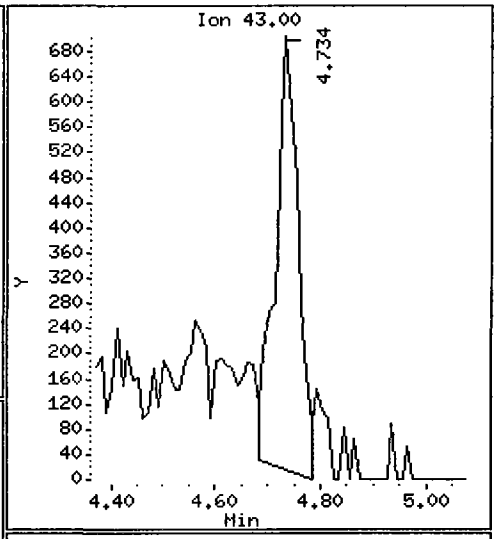
Column phase: Rtx502.2

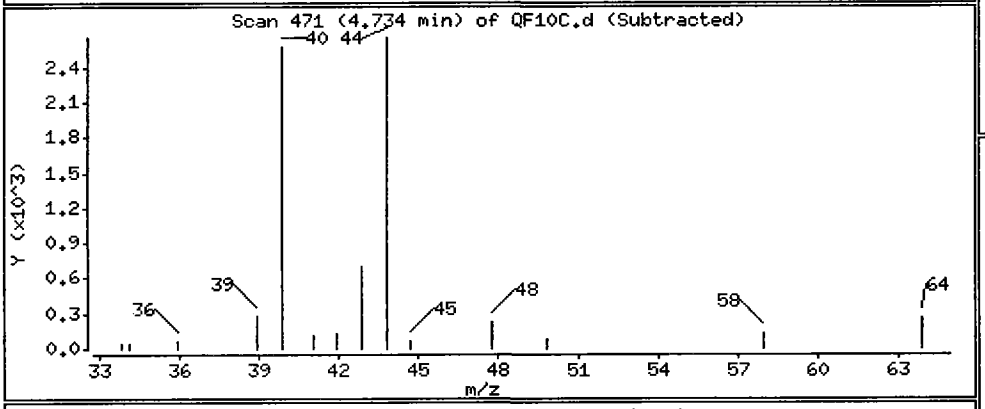
Column diameter: 0.18

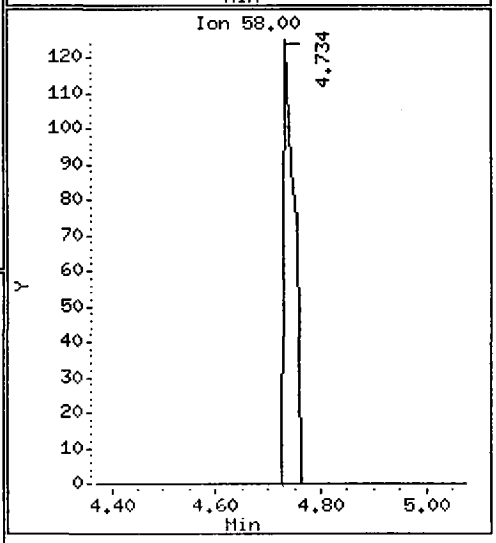
9 Acetone

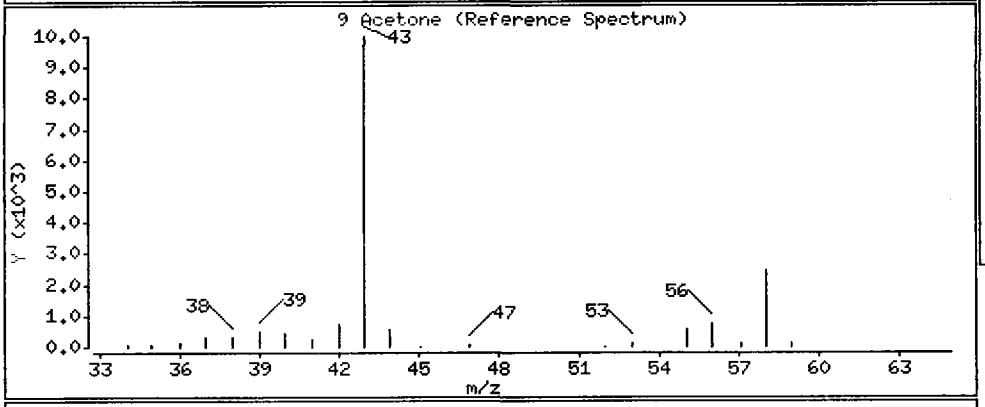
Concentration: 4.850 ug/L

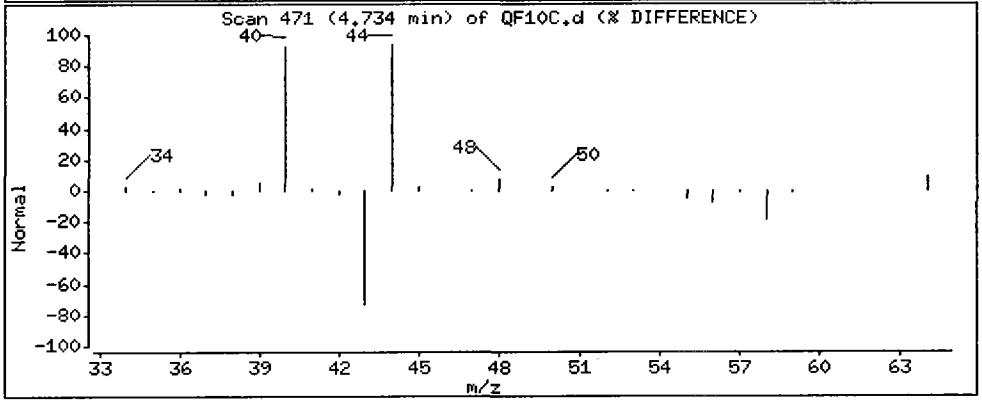












Volatile Analysis
Standard Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF1: 0010106 RF2: 0020106 RF5: 0050106
RF10: 0100106 RF50: 0500106

COMPOUND	RF1	RF2	RF5	RF10	RF50
Chloromethane	1.515	1.067	1.241	1.220	1.264
Vinyl Chloride	1.143	1.014	1.260	1.209	1.367
Bromomethane	0.524	0.349	0.429	0.463	0.552
Chloroethane	0.762	0.583	0.459	0.714	0.758
Trichlorofluoromethane	1.284	1.087	1.240	1.235	1.209
Acrolein		0.124	0.117	0.109	0.107
112Trichloro122Trifluoroetha	0.917	0.722	0.782	0.808	0.758
Acetone	0.279	0.260	0.230	0.224	0.235
1,1-Dichloroethene	0.658	0.577	0.608	0.602	0.589
Bromoethane	0.272	0.253	0.298	0.282	0.350
Iodomethane	0.381	0.345	0.266	0.299	0.371
Methylene Chloride	0.737	0.614	0.884	1.018	0.706
Acrylonitrile		0.169	0.181	0.187	0.186
Carbon Disulfide	1.723	1.454	1.428	1.370	1.463
Trans-1,2-Dichloroethene	0.687	0.539	0.587	0.628	0.607
Vinyl Acetate	1.430	1.246	1.322	1.374	1.396
1,1-Dichloroethane	1.321	1.173	1.270	1.279	1.269
2-Butanone	0.322	0.289	0.290	0.303	0.304
2,2-Dichloropropane	1.101	0.959	1.018	1.085	1.080
Cis-1,2-Dichloroethene	0.682	0.547	0.606	0.625	0.622
Chloroform	1.278	1.051	1.146	1.199	1.183
Bromochloromethane	0.279	0.252	0.266	0.283	0.304
1,1,1-Trichloroethane	1.088	0.917	1.038	1.103	1.099
1,1-Dichloropropene	0.679	0.605	0.646	0.665	0.666
Carbon Tetrachloride	0.736	0.609	0.675	0.710	0.698
1,2-Dichloroethane	0.762	0.653	0.707	0.728	0.694
Benzene	1.711	1.506	1.572	1.646	1.538
Trichloroethene	0.520	0.420	0.466	0.493	0.485
1,2-Dichloropropane	0.513	0.438	0.464	0.495	0.466
Bromodichloromethane	0.634	0.530	0.570	0.595	0.588
Dibromomethane	0.300	0.246	0.279	0.282	0.270
2-Chloroethyl Vinyl Ether		0.145	0.144	0.157	0.159
4-Methyl-2-Pentanone	0.155	0.112	0.131	0.136	0.139
Cis 1,3-dichloropropene	0.643	0.569	0.616	0.672	0.673
Toluene	1.022	0.892	0.949	1.004	0.947
Trans 1,3-Dichloropropene	0.524	0.470	0.541	0.590	0.595
2-Hexanone	0.594	0.360	0.346	0.355	0.359

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF1: 0010106 RF2: 0020106 RF5: 0050106
RF10: 0100106 RF50: 0500106

COMPOUND	RF1	RF2	RF5	RF10	RF50
1,1,2-Trichloroethane	0.326	0.274	0.300	0.322	0.309
1,3-Dichloropropane	0.635	0.593	0.656	0.674	0.647
Tetrachloroethene	0.599	0.495	0.541	0.541	0.531
Chlorodibromomethane	0.403	0.339	0.397	0.434	0.470
1,2-Dibromoethane	0.346	0.291	0.323	0.346	0.360
Chlorobenzene	1.212	1.045	1.100	1.152	1.088
Ethyl Benzene	2.067	1.816	1.969	2.006	1.929
1,1,1,2-Tetrachloroethane	0.377	0.358	0.406	0.418	0.411
m,p-xylene	0.803	0.707	0.744	0.787	0.769
o-Xylene	0.785	0.673	0.720	0.756	0.753
Styrene	1.265	1.036	1.117	1.194	1.195
Bromoform	0.504	0.405	0.480	0.494	0.521
1,1,2,2-Tetrachloroethane	0.870	0.708	0.768	0.824	0.814
1,2,3-Trichloropropane		0.171	0.187	0.209	0.195
Trans-1,4-Dichloro 2-Butene			0.258	0.292	0.289
N-Propyl Benzene	4.740	3.850	4.133	4.325	4.029
Bromobenzene	1.070	0.896	0.943	1.001	0.938
Isopropyl Benzene	3.790	3.204	3.415	3.633	3.480
2-Chloro Toluene	3.227	2.605	2.649	2.852	2.676
4-Chloro Toluene	3.205	2.604	2.730	2.860	2.599
T-Butyl Benzene	2.755	2.322	2.486	2.647	2.573
1,3,5-Trimethyl Benzene	3.307	2.460	2.751	2.907	2.804
1,2,4-Trimethylbenzene	3.242	2.530	2.752	2.893	2.764
S-Butyl Benzene	4.185	3.414	3.633	3.812	3.693
4-Isopropyl Toluene	3.177	2.642	2.739	2.950	2.843
1,3-Dichlorobenzene	2.081	1.623	1.649	1.734	1.641
1,4-Dichlorobenzene	2.001	1.602	1.612	1.666	1.593
N-Butyl Benzene	3.366	2.666	2.684	2.873	2.858
1,2-Dichlorobenzene	1.889	1.450	1.523	1.572	1.488
1,2-Dibromo 3-Chloropropane			0.140	0.147	0.155
1,2,4-Trichlorobenzene		1.091	1.011	1.042	1.052
Hexachloro 1,3-Butadiene		0.657	0.690	0.679	0.665
Naphthalene		2.095	1.655	1.704	1.812
1,2,3-Trichlorobenzene		1.074	0.880	0.925	0.928
Dichlorodifluoromethane	0.596	0.377	0.638	0.593	0.738
Methyl tert-Butyl Ether	1.604	1.367	1.457	1.530	1.453

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF1: 0010106 RF2: 0020106 RF5: 0050106
RF10: 0100106 RF50: 0500106

COMPOUND	RF1	RF2	RF5	RF10	RF50
d4-1,2-Dichloroethane	0.789	0.788	0.774	0.762	0.754
d8-Toluene	1.204	1.208	1.210	1.194	1.192
4-Bromofluorobenzene	0.559	0.557	0.564	0.562	0.570
d4-1,2-Dichlorobenzene	0.909	0.918	0.920	0.905	0.927
Dibromofluoromethane	0.582	0.585	0.574	0.574	0.586

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF100: 1000106 RF150: 1500106 RF200: 2000106

COMPOUND	RF100	RF150	RF200
Chloromethane	1.152	1.103	1.080
Vinyl Chloride	1.177	1.049	0.991
Bromomethane	0.600		
Chloroethane	0.723	0.685	0.659
Trichlorofluoromethane	1.042	0.935	0.962
Acrolein	0.104	0.102	0.105
112Trichloro122Trifluoroetha	0.701	0.662	0.693
Acetone	0.209	0.201	0.202
1,1-Dichloroethene	0.560	0.534	0.517
Bromoethane	0.340	0.342	0.349
Iodomethane	0.385	0.410	0.430
Methylene Chloride	0.645	0.600	0.583
Acrylonitrile	0.182	0.178	0.185
Carbon Disulfide	1.783	1.889	1.856
Trans-1,2-Dichloroethene	0.590	0.573	0.565
Vinyl Acetate	1.378	1.270	1.133
1,1-Dichloroethane	1.224	1.173	1.077
2-Butanone	0.293	0.280	0.261
2,2-Dichloropropane	1.018	0.973	0.949
Cis-1,2-Dichloroethene	0.602	0.592	0.587
Chloroform	1.123	1.094	1.014
Bromochloromethane	0.295	0.296	0.289
1,1,1-Trichloroethane	1.039	0.995	0.959
1,1-Dichloropropene	0.628	0.605	0.596
Carbon Tetrachloride	0.681	0.642	0.633
1,2-Dichloroethane	0.659	0.634	0.614
Benzene	1.446	1.199	1.020
Trichloroethene	0.458	0.443	0.433
1,2-Dichloropropane	0.457	0.443	0.437
Bromodichloromethane	0.573	0.562	0.544
Dibromomethane	0.262	0.260	0.256
2-Chloroethyl Vinyl Ether	0.165	0.168	0.177
4-Methyl-2-Pentanone	0.137	0.136	0.137
Cis 1,3-dichloropropene	0.665	0.658	0.625
Toluene	0.913	0.881	0.792
Trans 1,3-Dichloropropene	0.595	0.589	0.572
2-Hexanone	0.329		

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF100: 1000106 RF150: 1500106 RF200: 2000106

COMPOUND	RF100	RF150	RF200
1,1,2-Trichloroethane	0.307	0.303	0.306
1,3-Dichloropropane	0.638	0.625	0.619
Tetrachloroethene	0.518	0.507	0.504
Chlorodibromomethane	0.473	0.474	0.476
1,2-Dibromoethane	0.361	0.352	0.358
Chlorobenzene	1.063	0.977	0.866
Ethyl Benzene	1.739	1.366	1.171
1,1,1,2-Tetrachloroethane	0.414	0.417	0.425
m,p-xylene	0.770	0.640	0.552
o-Xylene	0.752	0.740	0.720
Styrene	1.183	1.075	0.960
Bromoform	0.560	0.564	0.564
1,1,2,2-Tetrachloroethane	0.826	0.809	0.796
1,2,3-Trichloropropane	0.193	0.187	0.185
Trans-1,4-Dichloro 2-Butene	0.290	0.286	0.285
N-Propyl Benzene	3.357	2.505	
Bromobenzene	0.937	0.916	0.891
Isopropyl Benzene	3.117	2.392	
2-Chloro Toluene	2.436	2.122	1.866
4-Chloro Toluene	2.677	2.060	1.609
T-Butyl Benzene	2.450	2.127	1.732
1,3,5-Trimethyl Benzene	2.691	2.136	1.757
1,2,4-Trimethylbenzene	2.609	2.101	1.685
S-Butyl Benzene	3.209	2.470	
4-Isopropyl Toluene	2.676	2.138	1.748
1,3-Dichlorobenzene	1.602	1.535	1.356
1,4-Dichlorobenzene	1.570	1.478	1.297
N-Butyl Benzene	2.660	2.150	1.704
1,2-Dichlorobenzene	1.472	1.400	1.272
1,2-Dibromo 3-Chloropropane	0.159	0.156	0.157
1,2,4-Trichlorobenzene	1.001	0.939	0.881
Hexachloro 1,3-Butadiene	0.635	0.644	0.614
Naphthalene	1.779	1.568	1.375
1,2,3-Trichlorobenzene	0.893	0.833	0.807
Dichlorodifluoromethane	0.670	0.619	0.622
Methyl tert-Butyl Ether	1.377	1.336	1.255

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

LAB FILE ID: RF100: 1000106 RF150: 1500106 RF200: 2000106

COMPOUND	RF100	RF150	RF200
d4-1,2-Dichloroethane	0.727		
d8-Toluene	1.161	1.163	1.146
4-Bromofluorobenzene	0.571	0.578	0.597
d4-1,2-Dichlorobenzene	0.918	0.924	0.910
Dibromofluoromethane	0.575	0.568	0.568

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
Chloromethane	AVRG	1.205	12.1
Vinyl Chloride	AVRG	1.151	11.2
Bromomethane	AVRG	0.486	18.7
Chloroethane	AVRG	0.668	15.3
Trichlorofluoromethane	AVRG	1.124	12.0
Acrolein	AVRG	0.110	7.5
112Trichloro122Trifluoroetha	AVRG	0.755	10.8
Acetone	AVRG	0.230	12.1
1,1-Dichloroethene	AVRG	0.581	7.7
Bromoethane	AVRG	0.311	12.5
Iodomethane	AVRG	0.361	15.4
Methylene Chloride	LINR		0.9947
Acrylonitrile	AVRG	0.181	3.4
Carbon Disulfide	AVRG	1.621	13.1
Trans-1,2-Dichloroethene	AVRG	0.597	7.6
Vinyl Acetate	AVRG	1.318	7.4
1,1-Dichloroethane	AVRG	1.223	6.4
2-Butanone	AVRG	0.293	6.2
2,2-Dichloropropane	AVRG	1.023	5.9
Cis-1,2-Dichloroethene	AVRG	0.608	6.4
Chloroform	AVRG	1.136	7.5
Bromochloromethane	AVRG	0.283	6.0
1,1,1-Trichloroethane	AVRG	1.030	6.6
1,1-Dichloropropene	AVRG	0.636	5.0
Carbon Tetrachloride	AVRG	0.673	6.3
1,2-Dichloroethane	AVRG	0.681	7.4
Benzene	AVRG	1.454	16.0
Trichloroethene	AVRG	0.465	7.2
1,2-Dichloropropane	AVRG	0.464	5.9
Bromodichloromethane	AVRG	0.575	5.6
Dibromomethane	AVRG	0.269	6.4
2-Chloroethyl Vinyl Ether	AVRG	0.159	7.4
4-Methyl-2-Pentanone	AVRG	0.135	8.7
Cis 1,3-dichloropropene	AVRG	0.640	5.6
Toluene	AVRG	0.925	7.9
Trans 1,3-Dichloropropene	AVRG	0.560	8.0
2-Hexanone	LINR		0.9978

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
1,1,2-Trichloroethane	AVRG	0.306	5.1
1,3-Dichloropropane	AVRG	0.636	3.8
Tetrachloroethene	AVRG	0.530	6.2
Chlorodibromomethane	AVRG	0.433	11.5
1,2-Dibromoethane	AVRG	0.342	7.0
Chlorobenzene	AVRG	1.063	10.0
Ethyl Benzene	AVRG	1.758	18.4
1,1,1,2-Tetrachloroethane	AVRG	0.403	5.7
m,p-xylene	AVRG	0.722	11.9
o-Xylene	AVRG	0.737	4.5
Styrene	AVRG	1.128	8.9
Bromoform	AVRG	0.512	10.6
1,1,2,2-Tetrachloroethane	AVRG	0.802	5.9
1,2,3-Trichloropropane	AVRG	0.190	6.1
Trans-1,4-Dichloro 2-Butene	AVRG	0.284	4.4
N-Propyl Benzene	AVRG	3.849	18.9
Bromobenzene	AVRG	0.949	6.3
Isopropyl Benzene	AVRG	3.290	13.9
2-Chloro Toluene	AVRG	2.554	16.5
4-Chloro Toluene	AVRG	2.543	19.4
T-Butyl Benzene	AVRG	2.386	13.7
1,3,5-Trimethyl Benzene	AVRG	2.602	18.4
1,2,4-Trimethylbenzene	AVRG	2.572	18.8
S-Butyl Benzene	AVRG	3.488	15.6
4-Isopropyl Toluene	AVRG	2.614	17.6
1,3-Dichlorobenzene	AVRG	1.653	12.4
1,4-Dichlorobenzene	AVRG	1.603	12.3
N-Butyl Benzene	AVRG	2.620	19.0
1,2-Dichlorobenzene	AVRG	1.508	11.8
1,2-Dibromo 3-Chloropropane	AVRG	0.152	4.7
1,2,4-Trichlorobenzene	AVRG	1.002	7.1
Hexachloro 1,3-Butadiene	AVRG	0.655	4.0
Naphthalene	AVRG	1.713	13.0
1,2,3-Trichlorobenzene	AVRG	0.906	9.5
Dichlorodifluoromethane	AVRG	0.606	17.1
Methyl tert-Butyl Ether	AVRG	1.422	7.8

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

FORM 6
VOLATILE INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Calibration Date: 01/06/10

COMPOUND	CURVE TYPE	AVE RF	%RSD OR R^2
d4-1,2-Dichloroethane	AVRG	0.766	3.0
d8-Toluene	AVRG	1.185	2.0
4-Bromofluorobenzene	AVRG	0.570	2.2
d4-1,2-Dichlorobenzene	AVRG	0.916	0.8
Dibromofluoromethane	AVRG	0.576	1.2

<- Indicates value outside QC limits:
(%RSD < 20% or R^2 > 0.990)

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Calibration File Names:
Level 1: /chem1/finn5.i/06JAN10.b/0010106.d
Level 2: /chem1/finn5.i/06JAN10.b/0020106.d
Level 3: /chem1/finn5.i/06JAN10.b/0050106.d
Level 4: /chem1/finn5.i/06JAN10.b/0100106.d
Level 5: /chem1/finn5.i/06JAN10.b/0500106.d
Level 6: /chem1/finn5.i/06JAN10.b/1000106.d
Level 7: /chem1/finn5.i/06JAN10.b/1500106.d
Level 8: /chem1/finn5.i/06JAN10.b/2000106.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150 Level 7	200 Level 8									
1 Dichlorodifluoromethane	0.59575	0.37723	0.63793	0.59281	0.73777	0.67003					
	0.61884	0.62216					AVRG		0.60656		17.12399
2 Chloromethane	1.51473	1.06679	1.24108	1.21955	1.26382	1.15239					
	1.10349	1.08027					AVRG		1.20526		12.09015
3 Vinyl Chloride	1.14345	1.01363	1.26041	1.20872	1.36672	1.17689					
	1.04908	0.99071					AVRG		1.15120		11.25492

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
4 Bromomethane	0.52436	0.34888	0.42865	0.46300	0.55212	0.60042						
	+++++	+++++					AVRG		0.48624		18.74950	
181 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
5 Chloroethane	0.76230	0.58301	0.45948	0.71408	0.75831	0.72286						
	0.68468	0.65869					AVRG		0.66793		15.31535	
6 Trichlorofluoromethane	1.28397	1.08673	1.24009	1.23491	1.20893	1.04242						
	0.93499	0.96205					AVRG		1.12426		12.05507	
7 Acrolein	+++++	0.12436	0.11739	0.10890	0.10717	0.10364						
	0.10152	0.10523					AVRG		0.10974		7.48282	
8 112Trichloro122Trifluoroethan	0.91674	0.72190	0.78258	0.80768	0.75753	0.70081						
	0.66225	0.69289					AVRG		0.75530		10.75522	
9 Acetone	0.27879	0.26054	0.23054	0.22361	0.23461	0.20931						
	0.20072	0.20200					AVRG		0.23002		12.12567	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	150 Level 7	200 Level 8									
10 1,1-Dichloroethene	0.65815	0.57703	0.60809	0.60218	0.58914	0.55996					
	0.53391	0.51675					AVRG		0.58065		7.70282
11 Bromoethane	0.27206	0.25296	0.29793	0.28193	0.34967	0.33999					
	0.34167	0.34919					AVRG		0.31067		12.54582
12 Iodomethane	0.38070	0.34467	0.26557	0.29913	0.37134	0.38529					
	0.41027	0.43006					AVRG		0.36088		15.35122
13 Methylene Chloride	1641	2773	9833	23147	80035	158843					
	243924	326945					LINR	0.000e+00	0.60269		0.99474
14 Acrylonitrile	+++++	0.16923	0.18079	0.18737	0.18652	0.18165					
	0.17833	0.18479					AVRG		0.18124		3.42425
16 Methyl tert-Butyl Ether	1.60407	1.36671	1.45684	1.53056	1.45279	1.37738					
	1.33642	1.25507					AVRG		1.42248		7.85218
15 Carbon Disulfide	1.72349	1.45355	1.42825	1.37017	1.46320	1.78263					
	1.88861	1.85565					AVRG		1.62069		13.11622

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
17 Trans-1,2-Dichloroethene	0.68688	0.53915	0.58678	0.62837	0.60705	0.59058						
	0.57305	0.56466					AVRG		0.59707		7.56333	
18 Vinyl Acetate	1.42988	1.24599	1.32199	1.37405	1.39605	1.37753						
	1.26982	1.13307					AVRG		1.31855		7.42057	
19 1,1-Dichloroethane	1.32124	1.17311	1.26985	1.27948	1.26947	1.22368						
	1.17334	1.07737					AVRG		1.22344		6.43259	
179 Hexane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
20 2-Butanone	0.32198	0.28880	0.29027	0.30327	0.30420	0.29275						
	0.27974	0.26115					AVRG		0.29277		6.17189	
21 2,2-Dichloropropane	1.10125	0.95914	1.01803	1.08477	1.07991	1.01837						
	0.97333	0.94945					AVRG		1.02303		5.86241	
22 Cis-1,2-Dichloroethene	0.68239	0.54691	0.60638	0.62542	0.62248	0.60158						
	0.59202	0.58676					AVRG		0.60799		6.37911	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
	150 Level 7	200 Level 8										
24 Chloroform	1.27769	1.05106	1.14632	1.19944	1.18273	1.12303						
	1.09382	1.01384					AVRG		1.13599		7.47507	
26 Bromochloromethane	0.27924	0.25163	0.26638	0.28329	0.30395	0.29500						
	0.29598	0.28877					AVRG		0.28303		6.05935	
27 1,1,1-Trichloroethane	1.08824	0.91749	1.03844	1.10312	1.09867	1.03946						
	0.99506	0.95876					AVRG		1.02991		6.62291	
182 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
29 1,1-Dichloropropene	0.67862	0.60510	0.64630	0.66499	0.66573	0.62811						
	0.60540	0.59595					AVRG		0.63628		5.04169	
30 Carbon Tetrachloride	0.73574	0.60908	0.67461	0.70974	0.69838	0.68069						
	0.64233	0.63299					AVRG		0.67294		6.30918	
32 1,2-Dichloroethane	0.76158	0.65329	0.70698	0.72805	0.69368	0.65878						
	0.63365	0.61378					AVRG		0.68122		7.35333	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
33 Benzene	1.71076	1.50552	1.57188	1.64579	1.53755	1.44574						
	1.19894	1.01972					AVRG		1.45449		16.01798	
180 Isooctane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
35 Trichloroethene	0.51974	0.41952	0.46655	0.49270	0.48542	0.45772						
	0.44322	0.43265					AVRG		0.46469		7.19462	
36 1,2-Dichloropropane	0.51272	0.43812	0.46380	0.49485	0.46617	0.45718						
	0.44336	0.43712					AVRG		0.46416		5.86892	
38 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
37 Bromodichloromethane	0.63460	0.53036	0.57052	0.59496	0.58781	0.57313						
	0.56160	0.54449					AVRG		0.57468		5.59620	
39 Dibromomethane	0.29991	0.24586	0.27901	0.28171	0.26960	0.26242						
	0.26056	0.25556					AVRG		0.26933		6.35027	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
40 2-Chloroethyl Vinyl Ether	+++++	0.14519	0.14431	0.15715	0.15896	0.16540						
	0.16773	0.17672					AVRG		0.15935		7.42612	
41 4-Methyl-2-Pentanone	0.15500	0.11196	0.13069	0.13608	0.13921	0.13699						
	0.13562	0.13733					AVRG		0.13536		8.72854	
42 Cis 1,3-dichloropropene	0.64321	0.56948	0.61596	0.67171	0.67340	0.66548						
	0.65788	0.62478					AVRG		0.64024		5.56384	
28 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
44 Toluene	1.02161	0.89151	0.94938	1.00378	0.94699	0.91346						
	0.88102	0.79193					AVRG		0.92496		7.91432	
45 Trans 1,3-Dichloropropene	0.52452	0.46993	0.54063	0.58976	0.59532	0.59531						
	0.58888	0.57205					AVRG		0.55955		8.02225	
46 2-Hexanone	8654	10483	24368	52252	266907	521093						
	+++++	+++++					LINR	0.000e+00	0.33558		0.99785	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150 Level 7	200 Level 8									
47 1,1,2-Trichloroethane	0.32607	0.27448	0.30053	0.32240	0.30883	0.30719					
	0.30325	0.30582					AVRG		0.30607		5.10990
48 1,3-Dichloropropane	0.63537	0.59306	0.65594	0.67383	0.64725	0.63786					
	0.62529	0.61933					AVRG		0.63599		3.84952
49 Tetrachloroethene	0.59933	0.49539	0.54096	0.54068	0.53081	0.51759					
	0.50733	0.50428					AVRG		0.52955		6.20882
50 Chlorodibromomethane	0.40333	0.33943	0.39698	0.43428	0.46961	0.47282					
	0.47364	0.47595					AVRG		0.43325		11.49305
51 1,2-Dibromoethane	0.34649	0.29086	0.32348	0.34630	0.35964	0.36086					
	0.35172	0.35783					AVRG		0.34215		6.99422
53 Chlorobenzene	1.21170	1.04529	1.10048	1.15179	1.08805	1.06273					
	0.97746	0.86608					AVRG		1.06295		9.95870
55 1,1,1,2-Tetrachloroethane	0.37724	0.35835	0.40558	0.41822	0.41061	0.41373					
	0.41698	0.42528					AVRG		0.40325		5.74766

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	150 Level 7	200 Level 8									
54 Ethyl Benzene	2.06710	1.81615	1.96874	2.00633	1.92934	1.73912					
	1.36565	1.17138					AVRG		1.75798		18.40448
56 m,p-xylene	0.80305	0.70724	0.74379	0.78689	0.76889	0.77003					
	0.64027	0.55220					AVRG		0.72154		11.88625
57 o-Xylene	0.78503	0.67285	0.71979	0.75621	0.75296	0.75233					
	0.74056	0.72002					AVRG		0.73747		4.54871
58 Styrene	1.26525	1.03601	1.11712	1.19452	1.19527	1.18335					
	1.07535	0.96057					AVRG		1.12843		8.87685
59 Isopropyl Benzene	3.78955	3.20384	3.41476	3.63342	3.47954	3.11701					
	2.39243	+++++					AVRG		3.29008		13.93925
60 Bromoform	0.50451	0.40465	0.47980	0.49397	0.52096	0.56037					
	0.56397	0.56396					AVRG		0.51152		10.64666
61 1,1,2,2-Tetrachloroethane	0.87057	0.70829	0.76821	0.82361	0.81361	0.82630					
	0.80868	0.79610					AVRG		0.80192		5.94245

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150 Level 7	200 Level 8									
63 1,2,3-Trichloropropane	+++++	0.17090	0.18683	0.20909	0.19536	0.19342					
	0.18719	0.18521					AVRG		0.18972		6.12448
65 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.25838	0.29154	0.28926	0.29014					
	0.28654	0.28541					AVRG		0.28354		4.42186
66 N-Propyl Benzene	4.74041	3.85025	4.13335	4.32477	4.02933	3.35716					
	2.50525	+++++					AVRG		3.84865		18.92171
67 Bromobenzene	1.06972	0.89651	0.94315	1.00088	0.93762	0.93691					
	0.91656	0.89125					AVRG		0.94908		6.26111
68 1,3,5-Trimethyl Benzene	3.30716	2.46059	2.75126	2.90745	2.80382	2.69073					
	2.13554	1.75666					AVRG		2.60165		18.45444
69 2-Chloro Toluene	3.22687	2.60488	2.64942	2.85165	2.67641	2.43592					
	2.12216	1.86596					AVRG		2.55416		16.49063
70 4-Chloro Toluene	3.20537	2.60360	2.72998	2.86006	2.59882	2.67704					
	2.06000	1.60889					AVRG		2.54297		19.40664

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
71 T-Butyl Benzene	2.75523	2.32208	2.48583	2.64667	2.57348	2.45007						
	2.12692	1.73151					AVRG		2.38647		13.74391	
72 1,2,4-Trimethylbenzene	3.24204	2.53049	2.75178	2.89281	2.76407	2.60913						
	2.10094	1.68465					AVRG		2.57199		18.78191	
73 S-Butyl Benzene	4.18469	3.41354	3.63318	3.81219	3.69267	3.20868						
	2.46991	+++++					AVRG		3.48784		15.58778	
74 4-Isopropyl Toluene	3.17692	2.64240	2.73938	2.95010	2.84318	2.67639						
	2.13814	1.74780					AVRG		2.61429		17.58562	
75 1,3-Dichlorobenzene	2.08065	1.62308	1.64922	1.73371	1.64077	1.60219						
	1.53526	1.35596					AVRG		1.65260		12.42474	
64 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
77 1,4-Dichlorobenzene	2.00099	1.60224	1.61253	1.66596	1.59320	1.57031						
	1.47848	1.29739					AVRG		1.60264		12.31156	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	150 Level 7	200 Level 8										
178 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
78 N-Butyl Benzene	3.36596	2.66580	2.68454	2.87320	2.85814	2.65992						
	2.15029	1.70351					AVRG		2.62017		19.05933	
80 1,2-Dichlorobenzene	1.88908	1.45058	1.52349	1.57206	1.48856	1.47166						
	1.39973	1.27165					AVRG		1.50835		11.81057	
81 1,2-Dibromo 3-Chloropropane	+++++	+++++	0.14022	0.14708	0.15476	0.15935						
	0.15550	0.15678					AVRG		0.15228		4.72903	
82 1,2,4-Trichlorobenzene	+++++	1.09082	1.01144	1.04173	1.05239	1.00122						
	0.93927	0.88111					AVRG		1.00257		7.12824	
83 Hexachloro 1,3-Butadiene	+++++	0.65667	0.69000	0.67884	0.66484	0.63512						
	0.64350	0.61357					AVRG		0.65465		4.01056	
84 Naphthalene	+++++	2.09538	1.65522	1.70407	1.81246	1.77919						
	1.56830	1.37510					AVRG		1.71282		13.03364	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
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Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

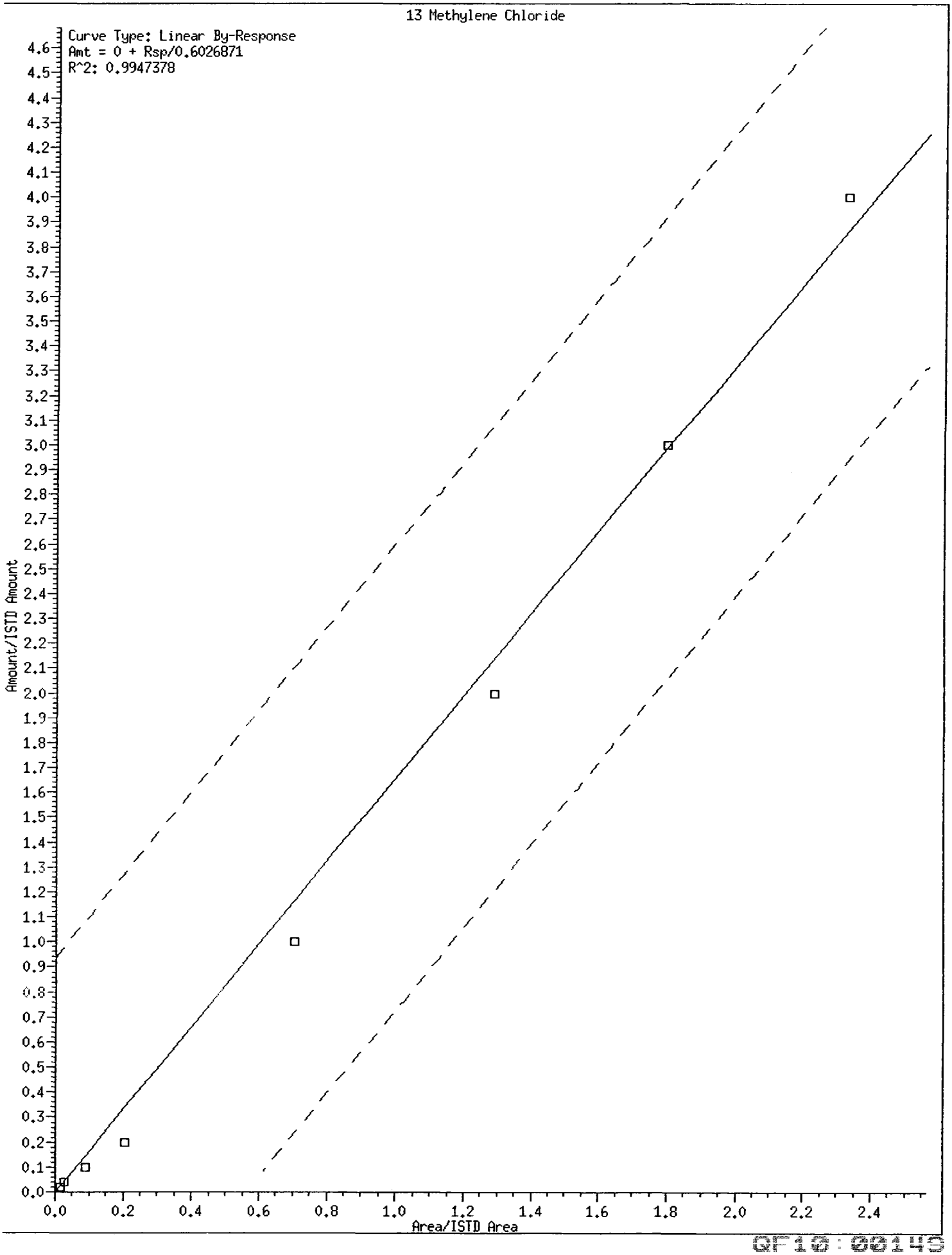
Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	150 Level 7	200 Level 8									
85 1,2,3-Trichlorobenzene	+++++	1.07350	0.88023	0.92510	0.92761	0.89342					
	0.83330	0.80724					AVRG		0.90577		9.53464
$ 25 Dibromofluoromethane	0.58218	0.58494	0.57384	0.57380	0.58555	0.57505					
	0.56757	0.56854					AVRG		0.57643		1.21787
$ 31 d4-1,2-Dichloroethane	0.78873	0.78797	0.77359	0.76251	0.75420	0.72713					
	+++++	+++++					AVRG		0.76569		3.04534
$ 43 d8-Toluene	1.20372	1.20786	1.20994	1.19396	1.19212	1.16149					
	1.16308	1.14648					AVRG		1.18483		2.05322
$ 62 4-Bromofluorobenzene	0.55919	0.55746	0.56458	0.56218	0.56962	0.57078					
	0.57818	0.59699					AVRG		0.56987		2.25963
$ 79 d4-1,2-Dichlorobenzene	0.90876	0.91833	0.91978	0.90463	0.92660	0.91795					
	0.92446	0.91028					AVRG		0.91635		0.84627

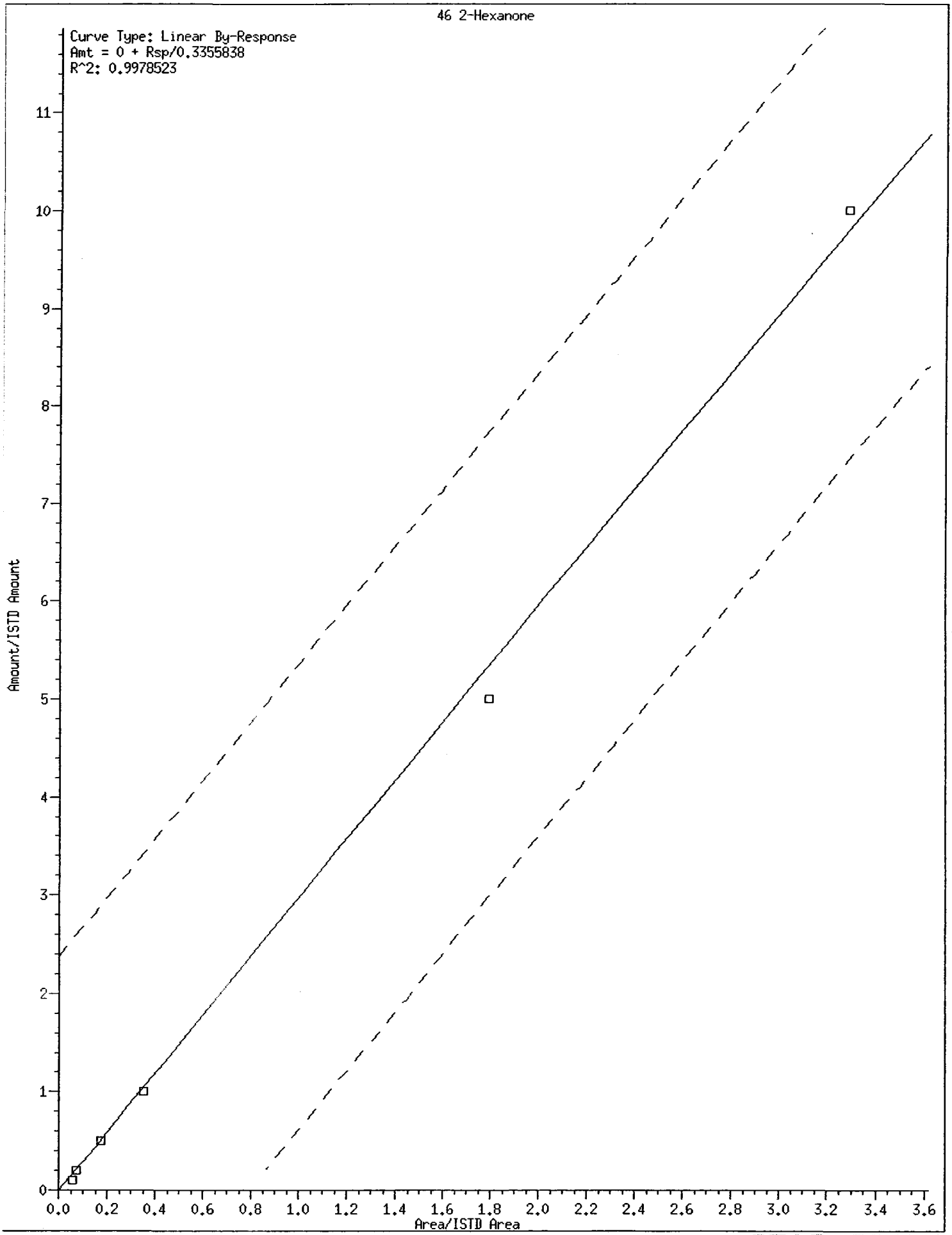
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response


13 Methylene Chloride
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.6026871
R^2: 0.9947378
Amount/ISTD Amount
Area/ISTD Area
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
0.1
0.3
0.5
0.7
0.9
1.1
1.3
1.5
1.7
1.9
2.1
2.3
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1
4.2
4.3
4.4
4.5
4.6


46 2-Hexanone
Curve Type: Linear By-Response
Amt = 0 + Rsp/0.3355838
R^2: 0.9978523
Amount/ISTD Amount
Area/ISTD Area
0
1
2
3
4
5
6
7
8
9
10
11
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

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Calibration File Names:
Level 1: /chem1/finn5.i/06JAN10.b/0010106.d
Level 2: /chem1/finn5.i/06JAN10.b/0020106.d
Level 3: /chem1/finn5.i/06JAN10.b/0050106.d
Level 4: /chem1/finn5.i/06JAN10.b/0100106.d
Level 5: /chem1/finn5.i/06JAN10.b/0500106.d
Level 6: /chem1/finn5.i/06JAN10.b/1000106.d
Level 7: /chem1/finn5.i/06JAN10.b/1500106.d
Level 8: /chem1/finn5.i/06JAN10.b/2000106.d

Compound	1.000 Level 1 / 150.000 Level 7	2.000 Level 2 / 200.000 Level 8	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
1 Dichlorodifluoromethane	0.59575	0.37723	0.63793	0.59281	0.73777	0.67003			
	0.61884	0.62216					0.60656	17.124	
2 Chloromethane	1.51473	1.06679	1.24108	1.21955	1.26382	1.15239			
	1.10349	1.08027					1.20526	12.090	
3 Vinyl Chloride	1.14345	1.01363	1.26041	1.20872	1.36672	1.17689			
	1.04908	0.99071					1.15120	11.255	
4 Bromomethane	0.52436	0.34888	0.42865	0.46300	0.55212	0.60042			
	+++++	+++++					0.48624	18.749	
181 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
5 Chloroethane	0.76230	0.58301	0.45948	0.71408	0.75831	0.72286			
	0.68468	0.65869					0.66793	15.315	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
6 Trichlorofluoromethane	1.28397	1.08673	1.24009	1.23491	1.20893	1.04242			
	0.93499	0.96205					1.12426	12.055	
7 Acrolein	+++++	0.12436	0.11739	0.10890	0.10717	0.10364			
	0.10152	0.10523					0.10974	7.483	
8 112Trichloro122Trifluoroethan	0.91674	0.72190	0.78258	0.80768	0.75753	0.70081			
	0.66225	0.69289					0.75530	10.755	
9 Acetone	0.27879	0.26054	0.23054	0.22361	0.23461	0.20931			
	0.20072	0.20200					0.23002	12.126	
10 1,1-Dichloroethene	0.65815	0.57703	0.60809	0.60218	0.58914	0.55996			
	0.53391	0.51675					0.58065	7.703	
11 Bromoethane	0.27206	0.25296	0.29793	0.28193	0.34967	0.33999			
	0.34167	0.34919					0.31067	12.546	
12 Iodomethane	0.38070	0.34467	0.26557	0.29913	0.37134	0.38529			
	0.41027	0.43006					0.36088	15.351	
13 Methylene Chloride	0.73671	0.61425	0.88399	1.01854	0.70581	0.64467			
	0.59990	0.58280					0.72333	21.323	<-
14 Acrylonitrile	+++++	0.16923	0.18079	0.18737	0.18652	0.18165			
	0.17833	0.18479					0.18124	3.424	

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
16 Methyl tert-Butyl Ether	1.60407	1.36671	1.45684	1.53056	1.45279	1.37738			
	1.33642	1.25507					1.42248	7.852	
15 Carbon Disulfide	1.72349	1.45355	1.42825	1.37017	1.46320	1.78263			
	1.88861	1.85565					1.62069	13.116	
17 Trans-1,2-Dichloroethene	0.68688	0.53915	0.58678	0.62837	0.60705	0.59058			
	0.57305	0.56466					0.59707	7.563	
18 Vinyl Acetate	1.42988	1.24599	1.32199	1.37405	1.39605	1.37753			
	1.26982	1.13307					1.31855	7.421	
19 1,1-Dichloroethane	1.32124	1.17311	1.26985	1.27948	1.26947	1.22368			
	1.17334	1.07737					1.22344	6.433	
179 Hexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
20 2-Butanone	0.32198	0.28880	0.29027	0.30327	0.30420	0.29275			
	0.27974	0.26115					0.29277	6.172	
21 2,2-Dichloropropane	1.10125	0.95914	1.01803	1.08477	1.07991	1.01837			
	0.97333	0.94945					1.02303	5.862	
22 Cis-1,2-Dichloroethene	0.68239	0.54691	0.60638	0.62542	0.62248	0.60158			
	0.59202	0.58676					0.60799	6.379	

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
24 Chloroform	1.27769	1.05106	1.14632	1.19944	1.18273	1.12303			
	1.09382	1.01384					1.13599	7.475	
26 Bromochloromethane	0.27924	0.25163	0.26638	0.28329	0.30395	0.29500			
	0.29598	0.28877					0.28303	6.059	
27 1,1,1-Trichloroethane	1.08824	0.91749	1.03844	1.10312	1.09867	1.03946			
	0.99506	0.95876					1.02991	6.623	
182 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
29 1,1-Dichloropropene	0.67862	0.60510	0.64630	0.66499	0.66573	0.62811			
	0.60540	0.59595					0.63628	5.042	
30 Carbon Tetrachloride	0.73574	0.60908	0.67461	0.70974	0.69838	0.68069			
	0.64233	0.63299					0.67294	6.309	
32 1,2-Dichloroethane	0.76158	0.65329	0.70698	0.72805	0.69368	0.65878			
	0.63365	0.61378					0.68122	7.353	
33 Benzene	1.71076	1.50552	1.57188	1.64579	1.53755	1.44574			
	1.19894	1.01972					1.45449	16.018	
180 Isooctane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-

Analytical Resources, Inc.

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Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
35 Trichloroethene	0.51974	0.41952	0.46655	0.49270	0.48542	0.45772			
	0.44322	0.43265					0.46469	7.195	
36 1,2-Dichloropropane	0.51272	0.43812	0.46380	0.49485	0.46617	0.45718			
	0.44336	0.43712					0.46416	5.869	
38 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
37 Bromodichloromethane	0.63460	0.53036	0.57052	0.59496	0.58781	0.57313			
	0.56160	0.54449					0.57468	5.596	
39 Dibromomethane	0.29991	0.24586	0.27901	0.28171	0.26960	0.26242			
	0.26056	0.25556					0.26933	6.350	
40 2-Chloroethyl Vinyl Ether	+++++	0.14519	0.14431	0.15715	0.15896	0.16540			
	0.16773	0.17672					0.15935	7.426	
41 4-Methyl-2-Pentanone	0.15500	0.11196	0.13069	0.13608	0.13921	0.13699			
	0.13562	0.13733					0.13536	8.729	
42 Cis 1,3-dichloropropene	0.64321	0.56948	0.61596	0.67171	0.67340	0.66548			
	0.65788	0.62478					0.64024	5.564	
28 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
44 Toluene	1.02161	0.89151	0.94938	1.00378	0.94699	0.91346			
	0.88102	0.79193					0.92496	7.914	
45 Trans 1,3-Dichloropropene	0.52452	0.46993	0.54063	0.58976	0.59532	0.59531			
	0.58888	0.57205					0.55955	8.022	
46 2-Hexanone	0.59411	0.36051	0.34654	0.35470	0.35894	0.32892			
	+++++	+++++					0.39062	25.692	<-
47 1,1,2-Trichloroethane	0.32607	0.27448	0.30053	0.32240	0.30883	0.30719			
	0.30325	0.30582					0.30607	5.110	
48 1,3-Dichloropropane	0.63537	0.59306	0.65594	0.67383	0.64725	0.63786			
	0.62529	0.61933					0.63599	3.850	
49 Tetrachloroethene	0.59933	0.49539	0.54096	0.54068	0.53081	0.51759			
	0.50733	0.50428					0.52955	6.209	
50 Chlorodibromomethane	0.40333	0.33943	0.39698	0.43428	0.46961	0.47282			
	0.47364	0.47595					0.43325	11.493	
51 1,2-Dibromoethane	0.34649	0.29086	0.32348	0.34630	0.35964	0.36086			
	0.35172	0.35783					0.34215	6.994	
53 Chlorobenzene	1.21170	1.04529	1.10048	1.15179	1.08805	1.06273			
	0.97746	0.86608					1.06295	9.959	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	150.000 Level 7	200.000 Level 8						
55 1,1,1,2-Tetrachloroethane	0.37724	0.35835	0.40558	0.41822	0.41061	0.41373		
	0.41698	0.42528					0.40325	5.748
54 Ethyl Benzene	2.06710	1.81615	1.96874	2.00633	1.92934	1.73912		
	1.36565	1.17138					1.75798	18.404
56 m,p-xylene	0.80305	0.70724	0.74379	0.78689	0.76889	0.77003		
	0.64027	0.55220					0.72154	11.886
57 o-Xylene	0.78503	0.67285	0.71979	0.75621	0.75296	0.75233		
	0.74056	0.72002					0.73747	4.549
58 Styrene	1.26525	1.03601	1.11712	1.19452	1.19527	1.18335		
	1.07535	0.96057					1.12843	8.877
59 Isopropyl Benzene	3.78955	3.20384	3.41476	3.63342	3.47954	3.11701		
	2.39243	+++++					3.29008	13.939
60 Bromoform	0.50451	0.40465	0.47980	0.49397	0.52096	0.56037		
	0.56397	0.56396					0.51152	10.647
61 1,1,2,2-Tetrachloroethane	0.87057	0.70829	0.76821	0.82361	0.81361	0.82630		
	0.80868	0.79610					0.80192	5.942
63 1,2,3-Trichloropropane	+++++	0.17090	0.18683	0.20909	0.19536	0.19342		
	0.18719	0.18521					0.18972	6.124

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	150.000 Level 7	200.000 Level 8						
65 Trans-1,4-Dichloro 2-Butene	+++++	+++++	0.25838	0.29154	0.28926	0.29014		
	0.28654	0.28541					0.28354	4.422
66 N-Propyl Benzene	4.74041	3.85025	4.13335	4.32477	4.02933	3.35716		
	2.50525	+++++					3.84865	18.922
67 Bromobenzene	1.06972	0.89651	0.94315	1.00088	0.93762	0.93691		
	0.91656	0.89125					0.94908	6.261
68 1,3,5-Trimethyl Benzene	3.30716	2.46059	2.75126	2.90745	2.80382	2.69073		
	2.13554	1.75666					2.60165	18.454
69 2-Chloro Toluene	3.22687	2.60488	2.64942	2.85165	2.67641	2.43592		
	2.12216	1.86596					2.55416	16.491
70 4-Chloro Toluene	3.20537	2.60360	2.72998	2.86006	2.59882	2.67704		
	2.06000	1.60889					2.54297	19.407
71 T-Butyl Benzene	2.75523	2.32208	2.48583	2.64667	2.57348	2.45007		
	2.12692	1.73151					2.38647	13.744
72 1,2,4-Trimethylbenzene	3.24204	2.53049	2.75178	2.89281	2.76407	2.60913		
	2.10094	1.68465					2.57199	18.782
73 S-Butyl Benzene	4.18469	3.41354	3.63318	3.81219	3.69267	3.20868		
	2.46991	+++++					3.48784	15.588

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
	150.000 Level 7	200.000 Level 8							
74 4-Isopropyl Toluene	3.17692	2.64240	2.73938	2.95010	2.84318	2.67639			
	2.13814	1.74780					2.61429	17.586	
75 1,3-Dichlorobenzene	2.08065	1.62308	1.64922	1.73371	1.64077	1.60219			
	1.53526	1.35596					1.65260	12.425	
64 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
77 1,4-Dichlorobenzene	2.00099	1.60224	1.61253	1.66596	1.59320	1.57031			
	1.47848	1.29739					1.60264	12.312	
178 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	<-
78 N-Butyl Benzene	3.36596	2.66580	2.68454	2.87320	2.85814	2.65992			
	2.15029	1.70351					2.62017	19.059	
80 1,2-Dichlorobenzene	1.88908	1.45058	1.52349	1.57206	1.48856	1.47166			
	1.39973	1.27165					1.50835	11.811	
81 1,2-Dibromo 3-Chloropropane	+++++	+++++	0.14022	0.14708	0.15476	0.15935			
	0.15550	0.15678					0.15228	4.729	
82 1,2,4-Trichlorobenzene	+++++	1.09082	1.01144	1.04173	1.05239	1.00122			
	0.93927	0.88111					1.00257	7.128	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 06-JAN-2010 09:59
End Cal Date : 06-JAN-2010 15:31
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem1/finn5.i/06JAN10.b/SampleInfo/s8260b.m
Cal Date : 12-Jan-2010 12:21 patrickb
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD
	150.000 Level 7	200.000 Level 8						
83 Hexachloro 1,3-Butadiene	+++++	0.65667	0.69000	0.67884	0.66484	0.63512		
	0.64350	0.61357					0.65465	4.011
84 Naphthalene	+++++	2.09538	1.65522	1.70407	1.81246	1.77919		
	1.56830	1.37510					1.71282	13.034
85 1,2,3-Trichlorobenzene	+++++	1.07350	0.88023	0.92510	0.92761	0.89342		
	0.83330	0.80724					0.90577	9.535
$ 25 Dibromofluoromethane	0.58218	0.58494	0.57384	0.57380	0.58555	0.57505		
	0.56757	0.56854					0.57643	1.218
$ 31 d4-1,2-Dichloroethane	0.78873	0.78797	0.77359	0.76251	0.75420	0.72713		
	+++++	+++++					0.76569	3.045
$ 43 d8-Toluene	1.20372	1.20786	1.20994	1.19396	1.19212	1.16149		
	1.16308	1.14648					1.18483	2.053
$ 62 4-Bromofluorobenzene	0.55919	0.55746	0.56458	0.56218	0.56962	0.57078		
	0.57818	0.59699					0.56987	2.260
$ 79 d4-1,2-Dichlorobenzene	0.90876	0.91833	0.91978	0.90463	0.92660	0.91795		
	0.92446	0.91028					0.91635	0.846

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Batch File: /chem1/finn5.i/06JAN10.b
Inst ID: finn5.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	0050106	0100106	0500106	1000106	1500106	2000106	0010106	0020106
INJ.DATE:	06-JAN-2010	06-JAN-2010	06-JAN-2010	06-JAN-2010	06-JAN-2010	06-JAN-2010	06-JAN-2010	06-JAN-2010
INJ.TIME:	11:34	12:01	12:28	12:54	13:21	13:53	14:56	15:31

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Dichlorodifluoromethan	3.035	3.025	3.015	3.035	3.025	3.015	3.035	3.025	3.035	2.770-3.299	3.026	0.008
2 Chloromethane	3.327	3.327	3.316	3.327	3.316	3.306	3.327	3.316	3.327	3.062-3.591	3.320	0.007
3 Vinyl Chloride	3.437	3.437	3.427	3.437	3.427	3.417	3.457	3.437	3.437	3.173-3.702	3.435	0.012
4 Bromomethane	3.919	3.919	3.909	3.919	3.909	3.889	3.930	3.919	3.919	3.655-4.184	3.914	0.012
181 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.500	4.220-4.780	+++++	+++++
5 Chloroethane	3.990	3.990	3.980	3.990	3.980	3.960	4.000	3.990	3.990	3.725-4.254	3.985	0.012
6 Trichlorofluoromethane	4.251	4.251	4.241	4.251	4.241	4.221	4.261	4.241	4.251	3.987-4.516	4.245	0.012
7 Acrolein	4.633	4.633	4.623	4.643	4.633	4.623	4.633	4.623	4.633	4.368-4.898	4.631	0.007
8 112Trichloro122Trifluo	4.653	4.643	4.633	4.653	4.643	4.623	4.663	4.643	4.653	4.389-4.918	4.644	0.013
9 Acetone	4.683	4.693	4.673	4.693	4.693	4.673	4.693	4.673	4.683	4.419-4.948	4.685	0.010
10 1,1-Dichloroethene	4.844	4.844	4.834	4.844	4.834	4.824	4.854	4.834	4.844	4.580-5.109	4.839	0.009
11 Bromoethane	5.065	5.065	5.055	5.065	5.055	5.045	5.075	5.055	5.065	4.801-5.330	5.060	0.009
12 Iodomethane	5.166	5.156	5.146	5.166	5.156	5.136	5.176	5.156	5.166	4.901-5.430	5.157	0.013
13 Methylene Chloride	5.276	5.276	5.266	5.276	5.276	5.256	5.286	5.266	5.276	5.012-5.541	5.272	0.009
14 Acrylonitrile	5.367	5.357	5.347	5.367	5.357	5.347	5.367	5.347	5.367	5.102-5.631	5.357	0.009
16 Methyl tert-Butyl Ethe	5.397	5.397	5.387	5.407	5.397	5.387	5.407	5.387	5.397	5.132-5.661	5.396	0.008
15 Carbon Disulfide	5.377	5.377	5.367	5.387	5.377	5.357	5.387	5.367	5.377	5.112-5.641	5.374	0.010

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: _____

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Batch File: /chem1/finn5.i/06JAN10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	17 Trans-1,2-Dichloroethe	5.558	5.558	5.548	5.558	5.558	5.538	5.568	5.548	5.558	5.293-5.822	5.554	0.009
	18 Vinyl Acetate	5.879	5.879	5.869	5.879	5.879	5.859	5.889	5.869	5.879	5.615-6.144	5.875	0.009
	19 1,1-Dichloroethane	5.940	5.940	5.929	5.940	5.929	5.919	5.950	5.929	5.940	5.675-6.204	5.935	0.009
	179 Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.990	5.710-6.270	+++++	+++++
	20 2-Butanone	6.281	6.281	6.261	6.281	6.281	6.261	6.281	6.271	6.281	6.017-6.546	6.275	0.009
	21 2,2-Dichloropropane	6.462	6.462	6.442	6.462	6.452	6.442	6.462	6.452	6.462	6.198-6.727	6.455	0.009
	22 Cis-1,2-Dichloroethene	6.492	6.492	6.482	6.502	6.492	6.472	6.502	6.482	6.492	6.228-6.757	6.490	0.010
*	23 Pentafluorobenzene	6.623	6.623	6.613	6.623	6.613	6.603	6.633	6.613	6.623	6.358-6.888	6.618	0.009
	24 Chloroform	6.643	6.643	6.623	6.643	6.633	6.623	6.643	6.633	6.643	6.378-6.908	6.635	0.009
	26 Bromochloromethane	6.804	6.804	6.794	6.804	6.804	6.784	6.814	6.794	6.804	6.539-7.069	6.800	0.009
$	25 Dibromofluoromethane	6.844	6.844	6.824	6.844	6.834	6.824	6.844	6.834	6.844	6.579-7.109	6.836	0.009
	27 1,1,1-Trichloroethane	7.035	7.025	7.015	7.035	7.025	7.015	7.035	7.025	7.035	6.770-7.300	7.026	0.008
	182 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.030	7.750-8.310	+++++	+++++
	29 1,1-Dichloropropene	7.176	7.176	7.156	7.176	7.166	7.156	7.176	7.166	7.176	6.871-7.480	7.168	0.009
$	31 d4-1,2-Dichloroethane	7.306	7.306	7.286	7.306	7.296	7.286	7.306	7.296	7.306	7.041-7.571	7.299	0.009
	30 Carbon Tetrachloride	7.286	7.286	7.276	7.286	7.286	7.266	7.296	7.276	7.286	6.981-7.591	7.282	0.009
	32 1,2-Dichloroethane	7.387	7.387	7.377	7.397	7.387	7.377	7.397	7.377	7.387	7.082-7.691	7.385	0.008
	33 Benzene	7.437	7.437	7.427	7.437	7.437	7.417	7.447	7.427	7.437	7.132-7.742	7.433	0.009
	180 Isooctane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.687	6.407-6.967	+++++	+++++
*	34 1,4-Difluorobenzene	7.628	7.628	7.618	7.638	7.628	7.608	7.638	7.618	7.628	7.323-7.933	7.625	0.010
	35 Trichloroethene	8.000	8.000	7.990	8.010	8.000	7.980	8.010	7.990	8.000	7.695-8.305	7.997	0.010
	36 1,2-Dichloropropane	8.171	8.161	8.151	8.171	8.161	8.151	8.171	8.151	8.171	7.865-8.476	8.161	0.009

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Batch File: /chem1/finn5.i/06JAN10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	38 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.887	8.607-9.167	+++++	+++++
	37 Bromodichloromethane	8.402	8.402	8.382	8.402	8.392	8.382	8.402	8.392	8.402	8.097-8.707	8.394	0.009
	39 Dibromomethane	8.472	8.462	8.452	8.472	8.462	8.452	8.472	8.452	8.472	8.167-8.777	8.462	0.009
	40 2-Chloroethyl Vinyl Et	8.613	8.613	8.603	8.623	8.613	8.603	8.623	8.603	8.613	8.308-8.918	8.612	0.008
	41 4-Methyl-2-Pentanone	8.653	8.653	8.633	8.653	8.643	8.633	8.653	8.633	8.653	8.348-8.958	8.644	0.010
	42 Cis 1,3-dichloropropen	8.904	8.904	8.884	8.904	8.894	8.884	8.904	8.894	8.904	8.599-9.209	8.897	0.009
	28 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.337	7.057-7.617	+++++	+++++
$	43 d8-Toluene	9.176	9.176	9.166	9.186	9.176	9.166	9.186	9.166	9.176	8.870-9.481	9.174	0.008
	44 Toluene	9.266	9.266	9.246	9.266	9.256	9.246	9.276	9.256	9.266	8.961-9.571	9.260	0.011
	45 Trans 1,3-Dichloroprop	9.397	9.397	9.377	9.397	9.387	9.377	9.397	9.387	9.397	9.092-9.702	9.389	0.009
	46 2-Hexanone	9.527	9.527	9.517	9.527	9.527	9.517	9.537	9.517	9.527	9.096-9.958	9.525	0.007
	47 1,1,2-Trichloroethane	9.578	9.578	9.558	9.578	9.568	9.558	9.588	9.568	9.578	9.273-9.883	9.571	0.011
	48 1,3-Dichloropropane	9.839	9.839	9.819	9.839	9.829	9.819	9.839	9.819	9.839	9.408-10.270	9.830	0.010
	49 Tetrachloroethene	9.949	9.949	9.939	9.960	9.949	9.939	9.960	9.939	9.949	9.518-10.380	9.948	0.008
	50 Chlorodibromomethane	10.161	10.161	10.150	10.161	10.161	10.140	10.171	10.150	10.161	9.729-10.591	10.157	0.009
	51 1,2-Dibromoethane	10.382	10.382	10.372	10.392	10.382	10.372	10.392	10.372	10.382	10.076-10.687	10.380	0.008
*	52 d5-Chlorobenzene	10.784	10.784	10.764	10.784	10.774	10.764	10.794	10.774	10.784	10.352-11.215	10.777	0.011
	53 Chlorobenzene	10.824	10.824	10.814	10.824	10.824	10.804	10.834	10.814	10.824	10.392-11.255	10.820	0.009
	55 1,1,1,2-Tetrachloroeth	10.854	10.844	10.834	10.854	10.844	10.834	10.864	10.834	10.854	10.423-11.285	10.845	0.011
	54 Ethyl Benzene	10.854	10.854	10.844	10.854	10.854	10.844	10.864	10.844	10.854	10.423-11.285	10.851	0.007
	56 m,p-xylene	10.934	10.934	10.924	10.934	10.934	10.924	10.944	10.924	10.934	10.503-11.366	10.932	0.007
	57 o-Xylene	11.427	11.427	11.407	11.427	11.427	11.407	11.437	11.417	11.427	10.995-11.858	11.422	0.011
	58 Styrene	11.457	11.457	11.437	11.457	11.447	11.437	11.467	11.447	11.457	11.026-11.888	11.451	0.011
	59 Isopropyl Benzene	11.809	11.809	11.789	11.809	11.799	11.789	11.819	11.799	11.809	11.271-12.346	11.802	0.011

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Batch File: /chem1/finn5.i/06JAN10.b
Inst ID: finn5.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	60 Bromoform	11.869	11.869	11.849	11.869	11.859	11.849	11.869	11.859	11.869	11.331-12.407	11.861	0.009
	61 1,1,2,2-Tetrachloroeth	11.990	11.980	11.970	11.990	11.980	11.970	11.990	11.970	11.990	11.452-12.527	11.980	0.009
$	62 4-Bromofluorobenzene	12.100	12.100	12.090	12.100	12.100	12.080	12.110	12.090	12.100	11.669-12.531	12.096	0.009
	63 1,2,3-Trichloropropane	12.150	12.150	12.140	12.160	12.150	12.140	12.160	12.140	12.150	11.613-12.688	12.149	0.008
	65 Trans-1,4-Dichloro 2-B	12.201	12.201	12.191	12.211	12.201	12.191	12.211	12.191	12.201	11.663-12.738	12.199	0.008
	66 N-Propyl Benzene	12.261	12.261	12.251	12.261	12.261	12.241	12.271	12.251	12.261	11.723-12.799	12.257	0.009
	67 Bromobenzene	12.351	12.351	12.331	12.351	12.341	12.331	12.361	12.341	12.351	11.814-12.889	12.345	0.011
	68 1,3,5-Trimethyl Benzen	12.432	12.432	12.422	12.432	12.432	12.412	12.442	12.422	12.432	11.894-12.970	12.428	0.009
	69 2-Chloro Toluene	12.492	12.492	12.482	12.492	12.492	12.472	12.502	12.482	12.492	11.954-13.030	12.488	0.009
	70 4-Chloro Toluene	12.532	12.532	12.522	12.542	12.532	12.522	12.542	12.522	12.532	11.994-13.070	12.531	0.008
	71 T-Butyl Benzene	12.844	12.844	12.834	12.844	12.834	12.824	12.854	12.834	12.844	12.306-13.382	12.839	0.009
	72 1,2,4-Trimethylbenzene	12.894	12.894	12.874	12.894	12.884	12.874	12.904	12.884	12.894	12.356-13.432	12.888	0.011
	73 S-Butyl Benzene	13.085	13.085	13.075	13.095	13.085	13.075	13.095	13.075	13.085	12.547-13.623	13.084	0.008
	74 4-Isopropyl Toluene	13.236	13.236	13.226	13.236	13.236	13.216	13.246	13.226	13.236	12.698-13.774	13.232	0.009
	75 1,3-Dichlorobenzene	13.387	13.387	13.366	13.387	13.377	13.366	13.397	13.377	13.387	12.848-13.924	13.380	0.011
	64 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.768	13.320-14.215	+++++	+++++
*	76 d4-1,4-Dichlorobenzene	13.457	13.457	13.447	13.467	13.457	13.447	13.467	13.447	13.457	12.919-13.995	13.456	0.008
	77 1,4-Dichlorobenzene	13.497	13.497	13.487	13.507	13.497	13.487	13.507	13.487	13.497	12.959-14.035	13.496	0.008
	178 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.100	13.545-14.654	+++++	+++++
	78 N-Butyl Benzene	13.708	13.708	13.698	13.718	13.708	13.698	13.718	13.698	13.708	13.170-14.246	13.707	0.008
$	79 d4-1,2-Dichlorobenzene	13.909	13.909	13.899	13.909	13.899	13.889	13.919	13.899	13.909	13.371-14.447	13.904	0.009
	80 1,2-Dichlorobenzene	13.939	13.939	13.929	13.939	13.939	13.929	13.949	13.929	13.939	13.401-14.477	13.937	0.007
	81 1,2-Dibromo 3-Chloropr	14.844	14.844	14.834	14.844	14.844	14.824	14.854	14.834	14.844	14.305-15.382	14.840	0.009

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Batch File: /chem1/finn5.i/06JAN10.b
Inst ID: finn5.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
82 1,2,4-Trichlorobenzene	15.889	15.889	15.879	15.889	15.889	15.869	15.899	15.879	15.889	15.351-16.427	15.885	0.009
83 Hexachloro 1,3-Butadie	16.040	16.050	16.030	16.050	16.040	16.030	16.050	16.030	16.040	15.501-16.578	16.040	0.009
84 Naphthalene	16.211	16.211	16.201	16.221	16.211	16.201	16.221	16.201	16.211	15.672-16.749	16.209	0.008
85 1,2,3-Trichlorobenzene	16.502	16.502	16.492	16.502	16.502	16.482	16.512	16.492	16.502	15.964-17.040	16.498	0.009

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/0010106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD1
Inj Date : 06-JAN-2010 14:56
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:56 Cal File: 0010106.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	3.035	3.035	(0.458)	1327	1.00000	0.9822
2	Chloromethane	50	3.327	3.327	(0.501)	3374	1.00000	1.257
3	Vinyl Chloride	62	3.457	3.457	(0.521)	2547	1.00000	0.9933
4	Bromomethane	94	3.930	3.930	(0.592)	1168	1.00000	1.078
5	Chloroethane	64	4.000	4.000	(0.603)	1698	1.00000	1.141
6	Trichlorofluoromethane	101	4.261	4.261	(0.642)	2860	1.00000	1.142
7	Acrolein	56	4.633	4.633	(0.698)	1634	5.00000	6.684
8	112Trichloro122Trifluoroethane	101	4.663	4.663	(0.703)	2042	1.00000	1.214
9	Acetone	43	4.693	4.693	(0.708)	3105	5.00000	6.060(M)
10	1,1-Dichloroethene	96	4.854	4.854	(0.732)	1466	1.00000	1.133
11	Bromoethane	108	5.075	5.075	(0.765)	606	1.00000	0.8757
12	Iodomethane	142	5.176	5.176	(0.780)	848	1.00000	1.055(M)
13	Methylene Chloride	84	5.286	5.286	(0.797)	1641	1.00000	1.222
14	Acrylonitrile	53	5.367	5.367	(0.809)	294	1.00000	0.7282

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.407	5.407	(0.815)	3573	1.00000	1.128
	15 Carbon Disulfide	76	5.387	5.387	(0.812)	3839	1.00000	1.063
	17 Trans-1,2-Dichloroethene	96	5.568	5.568	(0.839)	1530	1.00000	1.150
	18 Vinyl Acetate	43	5.889	5.889	(0.888)	3185	1.00000	1.084
	19 1,1-Dichloroethane	63	5.950	5.950	(0.897)	2943	1.00000	1.080
	20 2-Butanone	43	6.281	6.281	(0.947)	3586	5.00000	5.499
	21 2,2-Dichloropropane	77	6.462	6.462	(0.974)	2453	1.00000	1.076
	22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.980)	1520	1.00000	1.122
*	23 Pentafluorobenzene	168	6.633	6.633	(1.000)	111373	50.0000	
	24 Chloroform	83	6.643	6.643	(1.002)	2846	1.00000	1.125
	26 Bromochloromethane	128	6.814	6.814	(1.027)	622	1.00000	0.9866
$	25 Dibromofluoromethane	111	6.844	6.844	(1.032)	64839	50.0000	50.498
	27 1,1,1-Trichloroethane	97	7.035	7.035	(1.061)	2424	1.00000	1.057
	29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	2127	1.00000	1.066
	30 Carbon Tetrachloride	117	7.296	7.296	(0.955)	2306	1.00000	1.093
$	31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.101)	87843	50.0000	51.504
	32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	2387	1.00000	1.118
	33 Benzene	78	7.447	7.447	(0.975)	5362	1.00000	1.176
*	34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	156714	50.0000	
	35 Trichloroethene	95	8.010	8.010	(1.049)	1629	1.00000	1.118
	36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	1607	1.00000	1.105
	37 Bromodichloromethane	83	8.402	8.402	(1.100)	1989	1.00000	1.104
	39 Dibromomethane	93	8.472	8.472	(1.109)	940	1.00000	1.114
	40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	411	1.00000	0.8229
	41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.133)	2429	5.00000	5.725
	42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.166)	2016	1.00000	1.005
$	43 d8-Toluene	98	9.186	9.186	(1.203)	188640	50.0000	50.797
	44 Toluene	92	9.276	9.276	(1.214)	3202	1.00000	1.104
	45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.230)	1644	1.00000	0.9374
	46 2-Hexanone	43	9.537	9.537	(0.884)	8654	5.00000	8.852(M)
	47 1,1,2-Trichloroethane	97	9.588	9.588	(1.255)	1022	1.00000	1.065
	48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	1851	1.00000	0.9990
	49 Tetrachloroethene	166	9.960	9.960	(0.923)	1746	1.00000	1.132
	50 Chlorodibromomethane	129	10.171	10.171	(0.942)	1175	1.00000	0.9309
	51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	1086	1.00000	1.013(T)
*	52 d5-Chlorobenzene	117	10.794	10.794	(1.000)	145663	50.0000	
	53 Chlorobenzene	112	10.834	10.834	(1.004)	3530	1.00000	1.140
	54 Ethyl Benzene	91	10.864	10.864	(1.007)	6022	1.00000	1.176
	55 1,1,1,2-Tetrachloroethane	131	10.864	10.864	(1.007)	1099	1.00000	0.9355
	56 m,p-xylene	106	10.944	10.944	(1.014)	4679	2.00000	2.226
	57 o-Xylene	106	11.437	11.437	(1.060)	2287	1.00000	1.064
	58 Styrene	104	11.467	11.467	(1.062)	3686	1.00000	1.121
	59 Isopropyl Benzene	105	11.819	11.819	(0.878)	5994	1.00000	1.152
	60 Bromoform	173	11.869	11.869	(0.881)	798	1.00000	0.9863
	61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	1377	1.00000	1.086
$	62 4-Bromofluorobenzene	95	12.110	12.110	(1.122)	81454	50.0000	49.063
	63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	337	1.00000	1.123(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	608	1.00000	1.356(M)
66 N-Propyl Benzene	91	12.271	12.271	(0.911)	7498	1.00000	1.232
67 Bromobenzene	156	12.361	12.361	(0.918)	1692	1.00000	1.127
68 1,3,5-Trimethyl Benzene	105	12.442	12.442	(0.924)	5231	1.00000	1.271
69 2-Chloro Toluene	91	12.502	12.502	(0.928)	5104	1.00000	1.263
70 4-Chloro Toluene	91	12.542	12.542	(0.931)	5070	1.00000	1.260
71 T-Butyl Benzene	119	12.854	12.854	(0.954)	4358	1.00000	1.154
72 1,2,4-Trimethylbenzene	105	12.904	12.904	(0.958)	5128	1.00000	1.260
73 S-Butyl Benzene	105	13.095	13.095	(0.972)	6619	1.00000	1.200
74 4-Isopropyl Toluene	119	13.246	13.246	(0.984)	5025	1.00000	1.215
75 1,3-Dichlorobenzene	146	13.397	13.397	(0.995)	3291	1.00000	1.259
* 76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	79086	50.0000	
77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	3165	1.00000	1.248
78 N-Butyl Benzene	91	13.718	13.718	(1.019)	5324	1.00000	1.285
; 79 d4-1,2-Dichlorobenzene	152	13.919	13.919	(1.034)	71870	50.0000	49.586
80 1,2-Dichlorobenzene	146	13.949	13.949	(1.036)	2988	1.00000	1.252
81 1,2-Dibromo 3-Chloropropane	75	14.854	14.854	(1.103)	297	1.00000	1.233
82 1,2,4-Trichlorobenzene	180	15.899	15.899	(1.181)	2940	1.00000	1.854
83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	1614	1.00000	1.559
84 Naphthalene	128	16.221	16.221	(1.204)	6575	1.00000	2.427
85 1,2,3-Trichlorobenzene	180	16.512	16.512	(1.226)	3114	1.00000	2.174

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0010106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD1
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	111373	-1.78
34 1,4-Difluorobenze	160565	80282	321130	156714	-2.40
52 d5-Chlorobenzene	148719	74360	297438	145663	-2.05
76 d4-1,4-Dichlorobe	84322	42161	168644	79086	-6.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.63	0.30
34 1,4-Difluorobenze	7.62	7.12	8.12	7.64	0.26
52 d5-Chlorobenzene	10.76	10.26	11.26	10.79	0.28
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.47	0.15

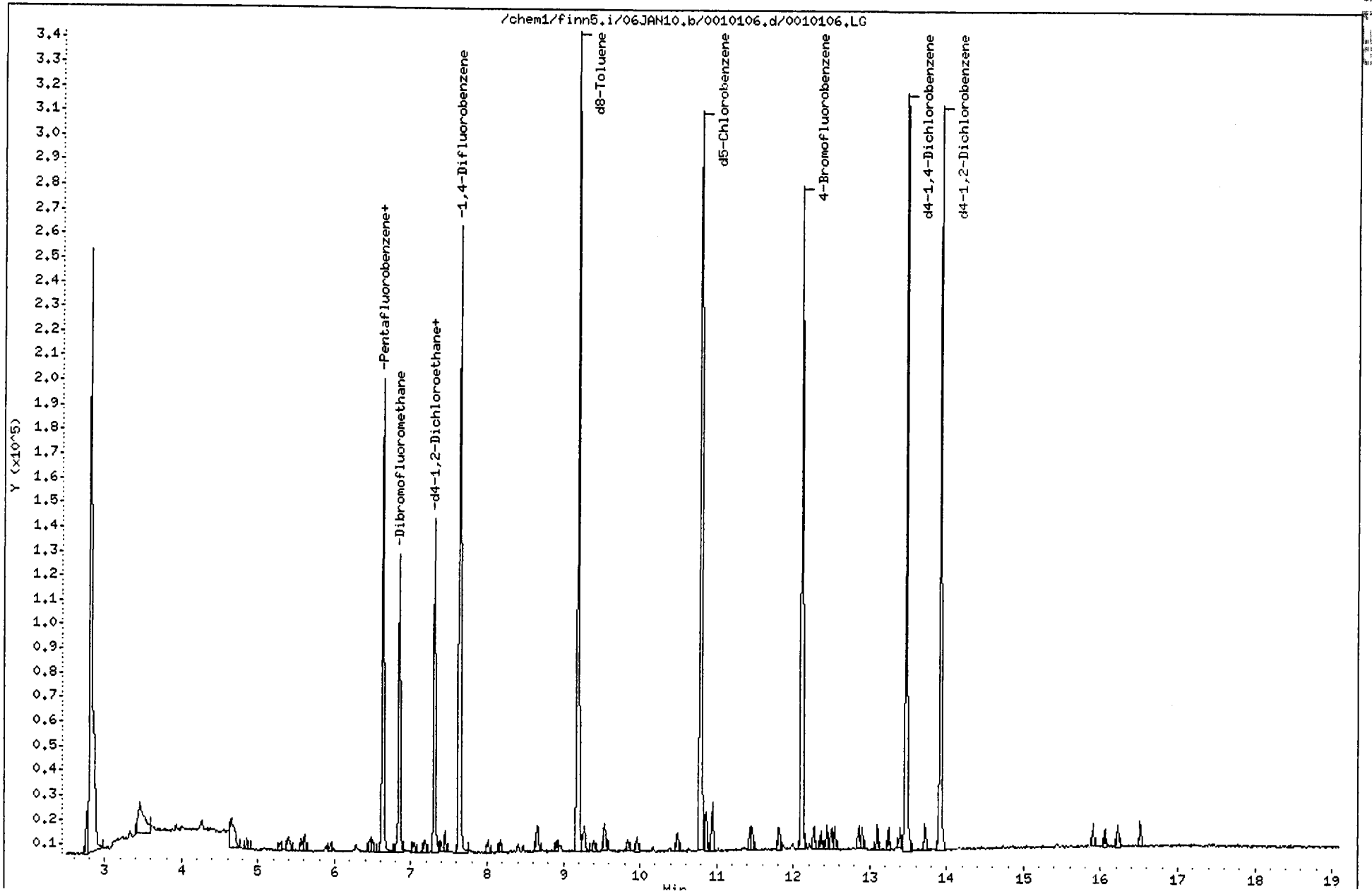
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/0010106.d
Date : 06-JAN-2010 14:56
Client ID: VSTD1
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



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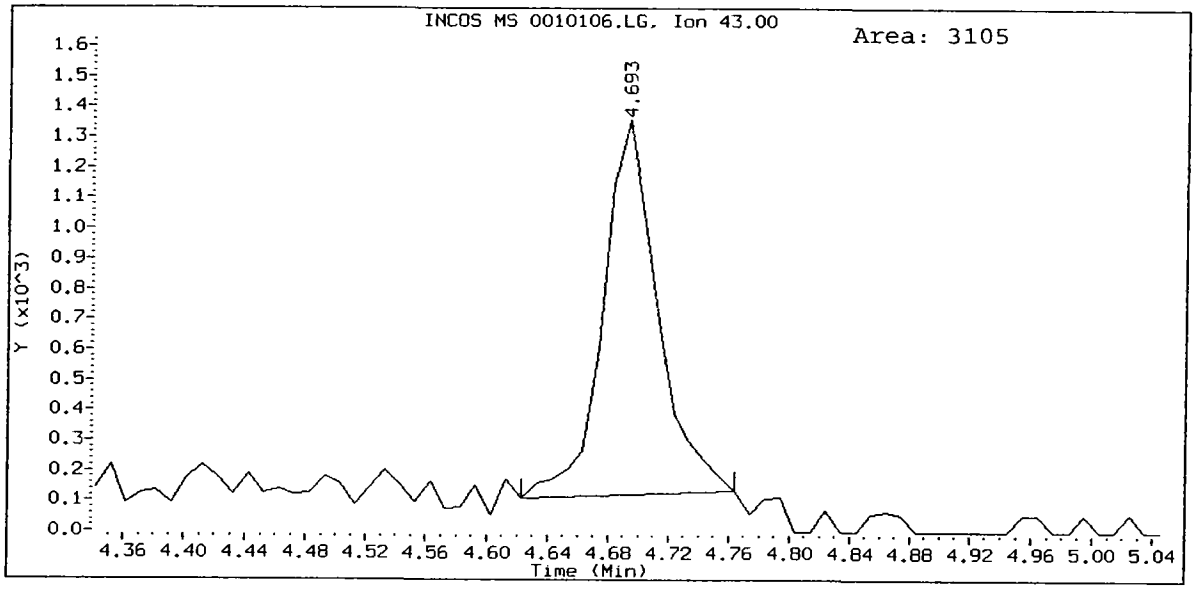
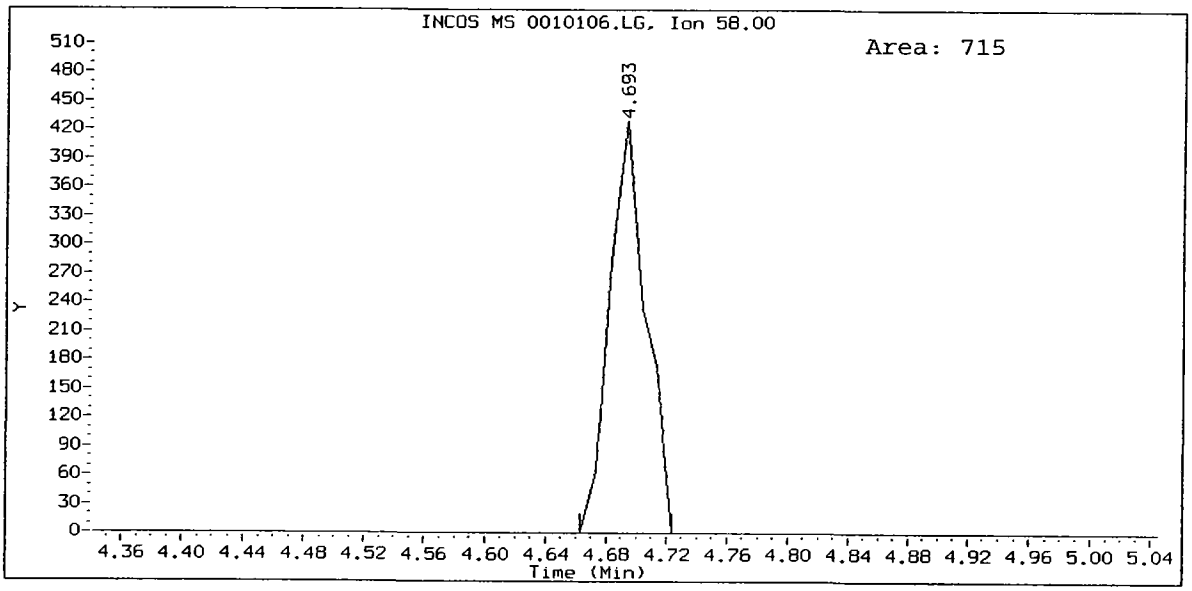
Acetone Amount: 6.06





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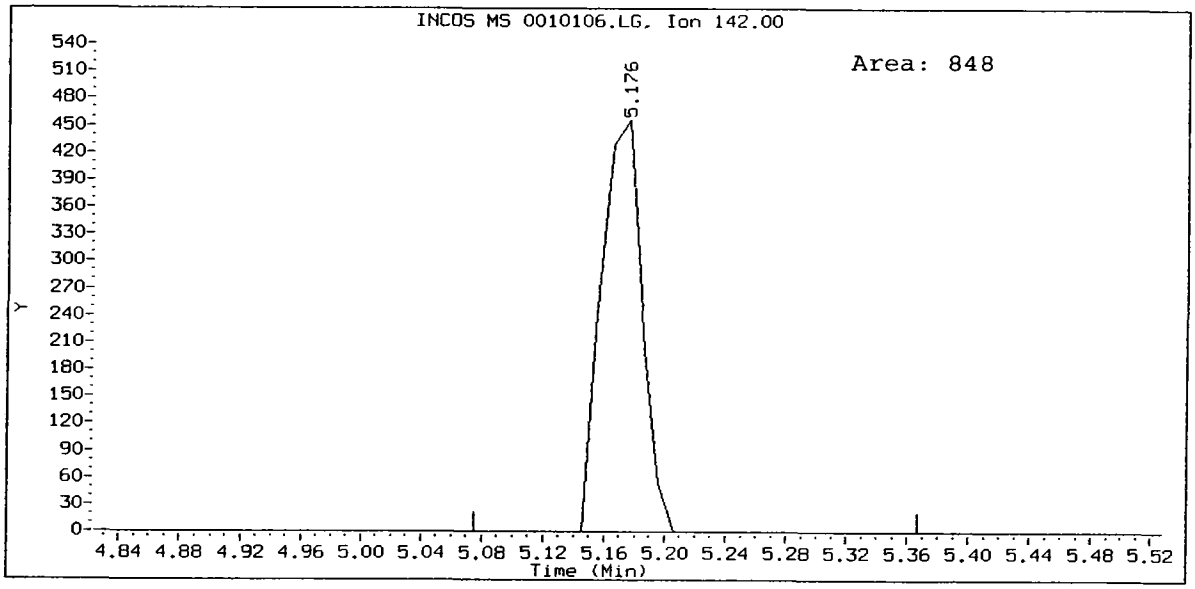
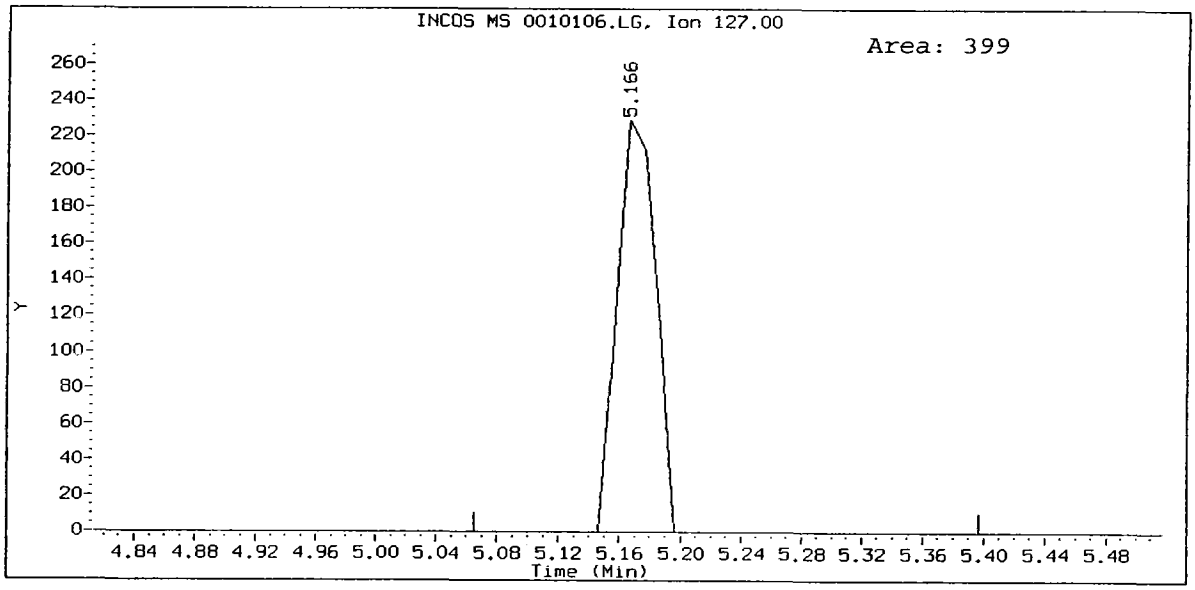
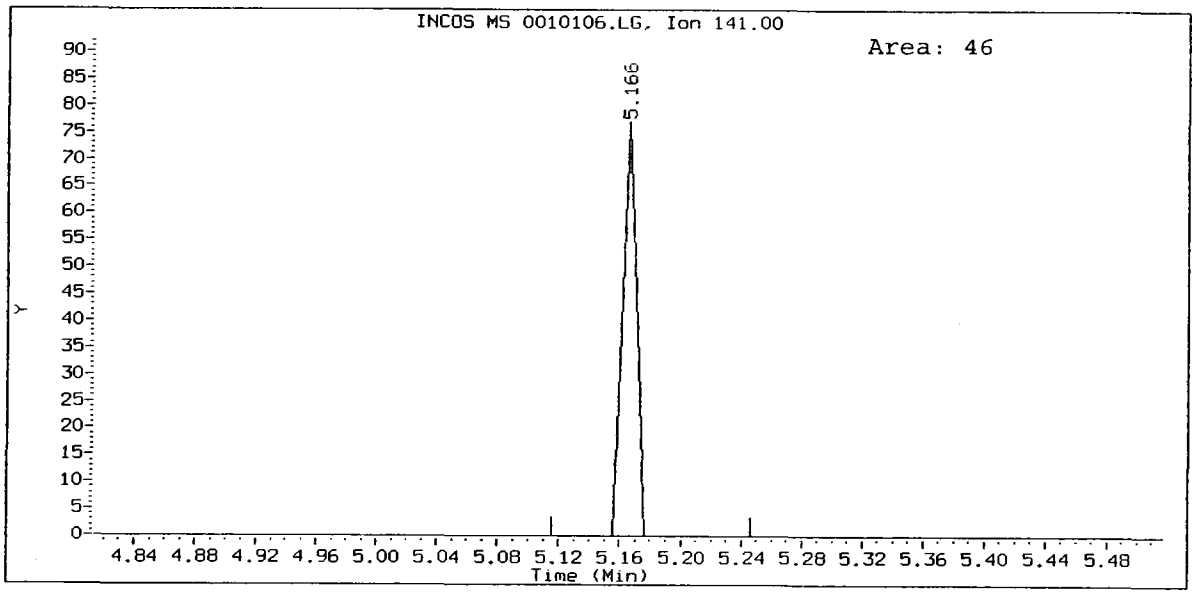
Iodomethane Amount: 1.05







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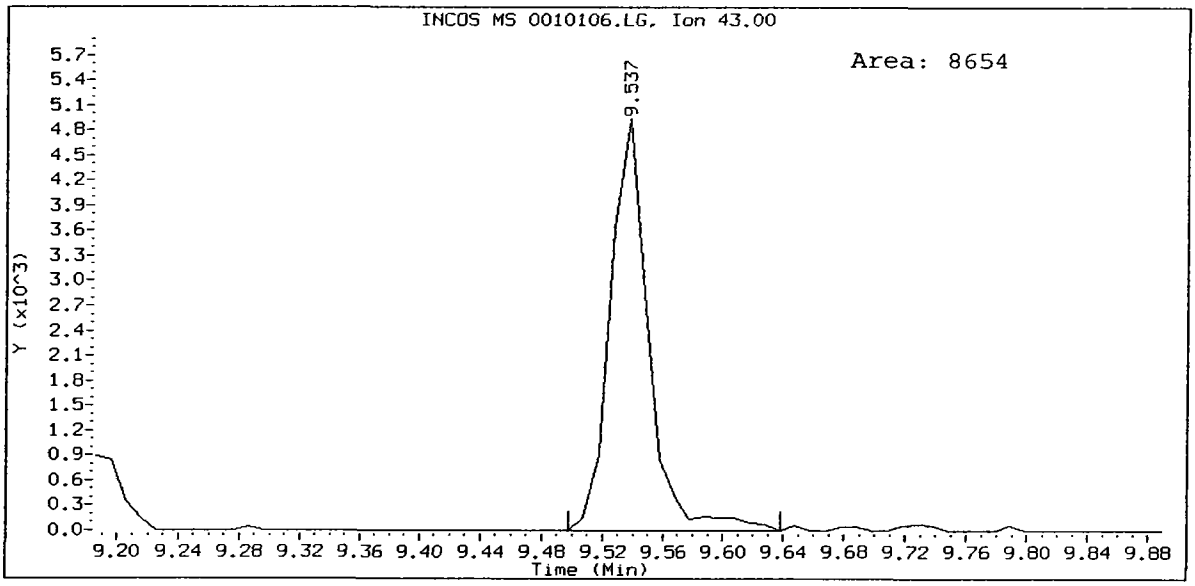
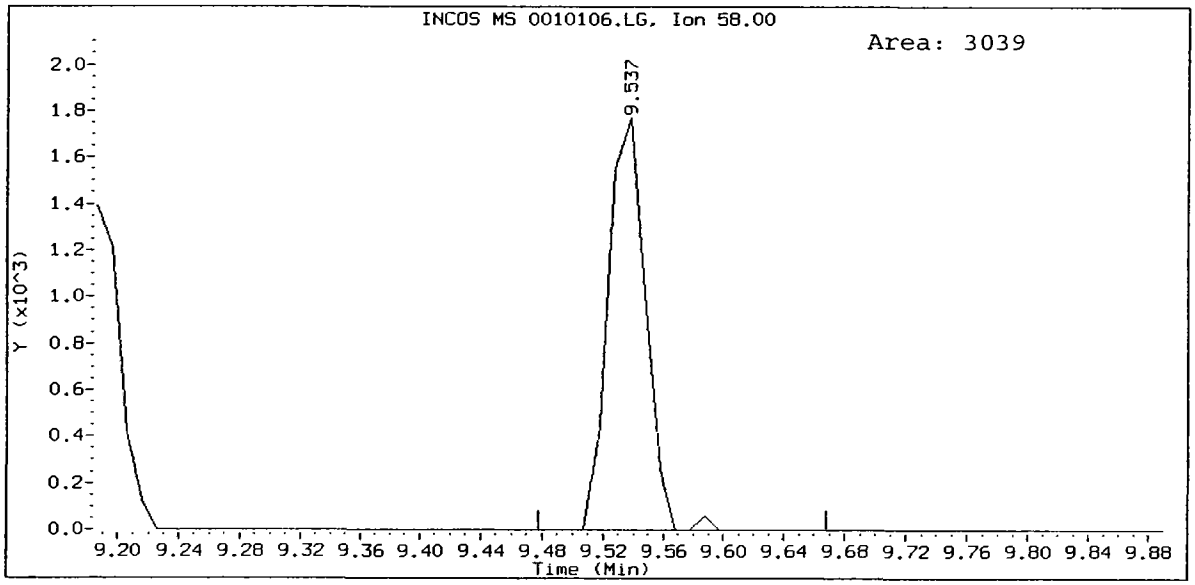
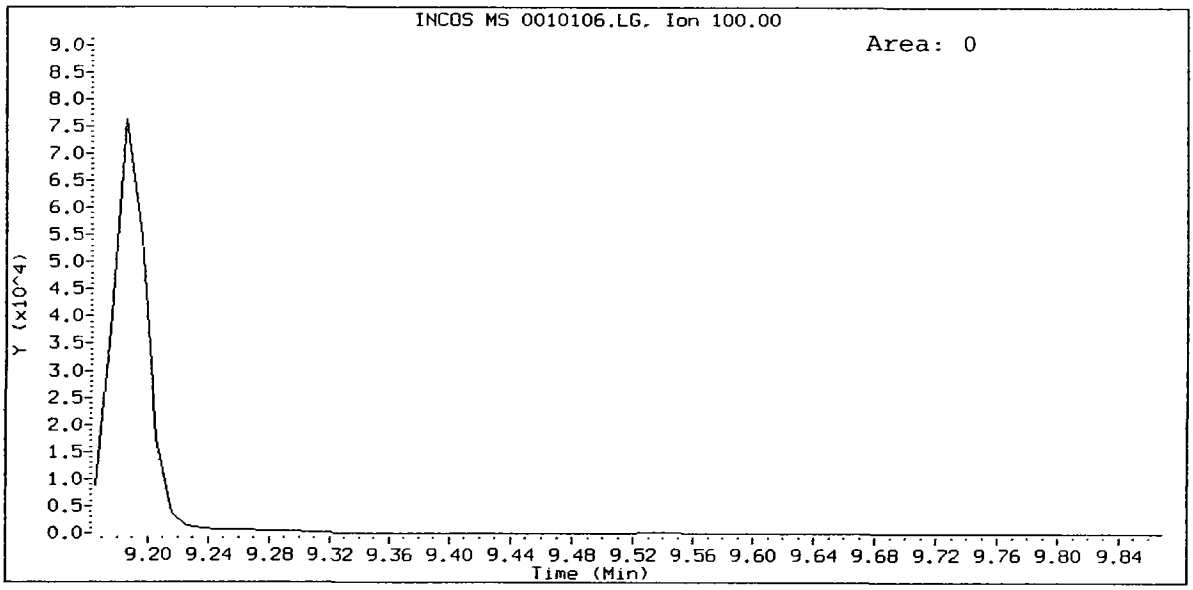
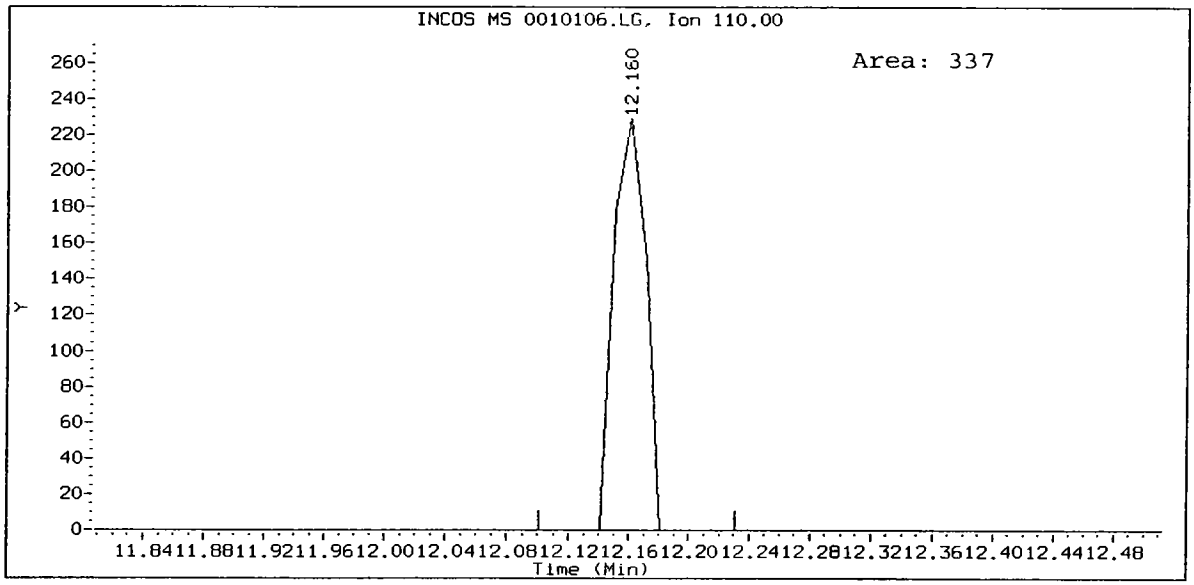
2-Hexanone Amount: 8.85

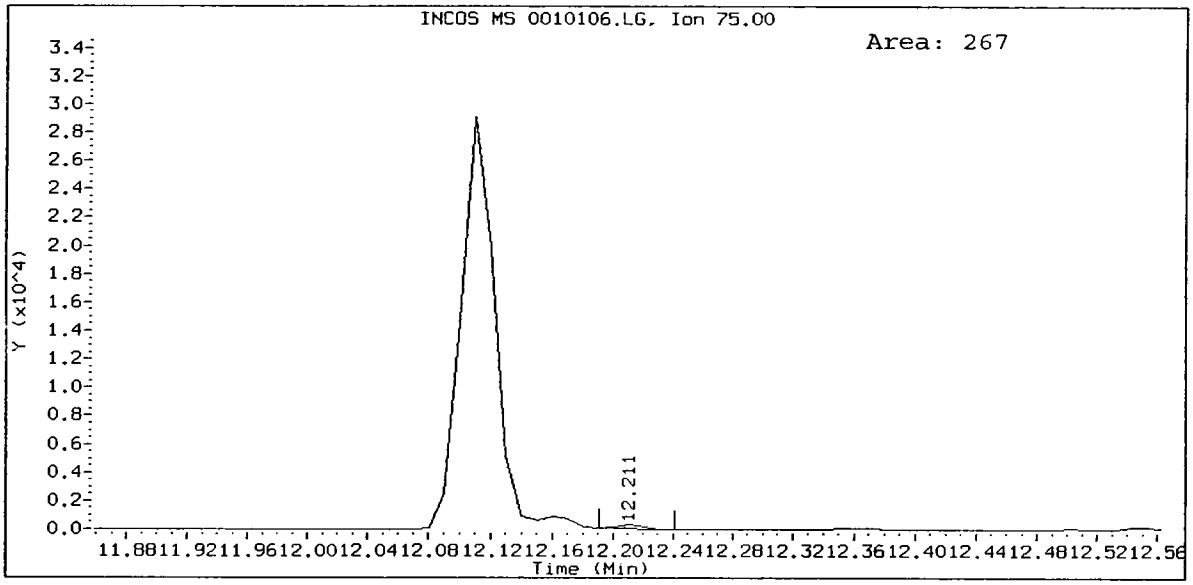


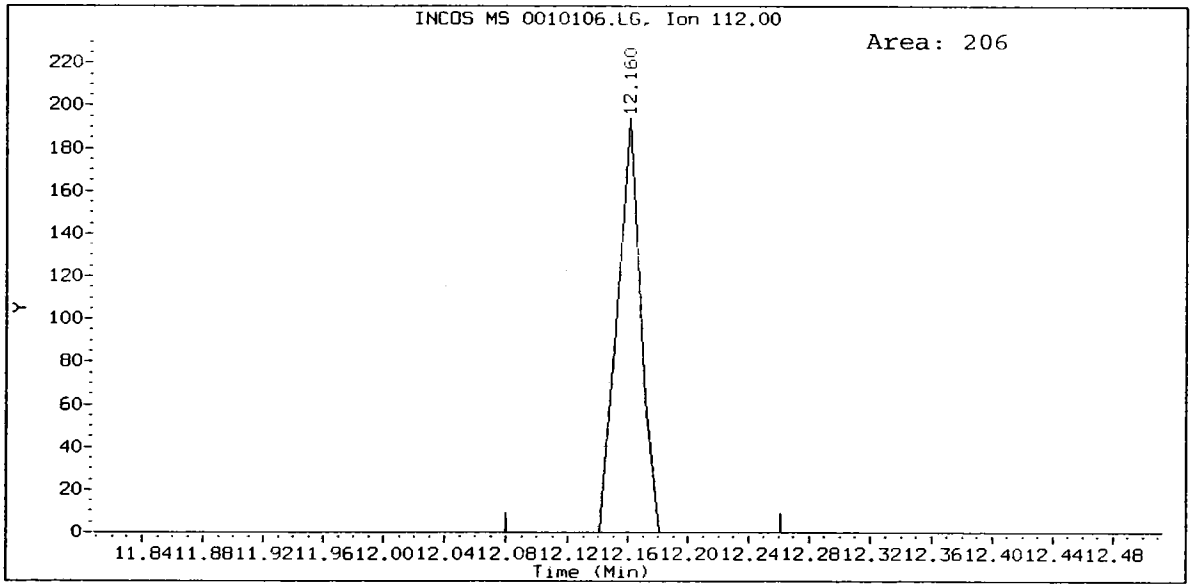




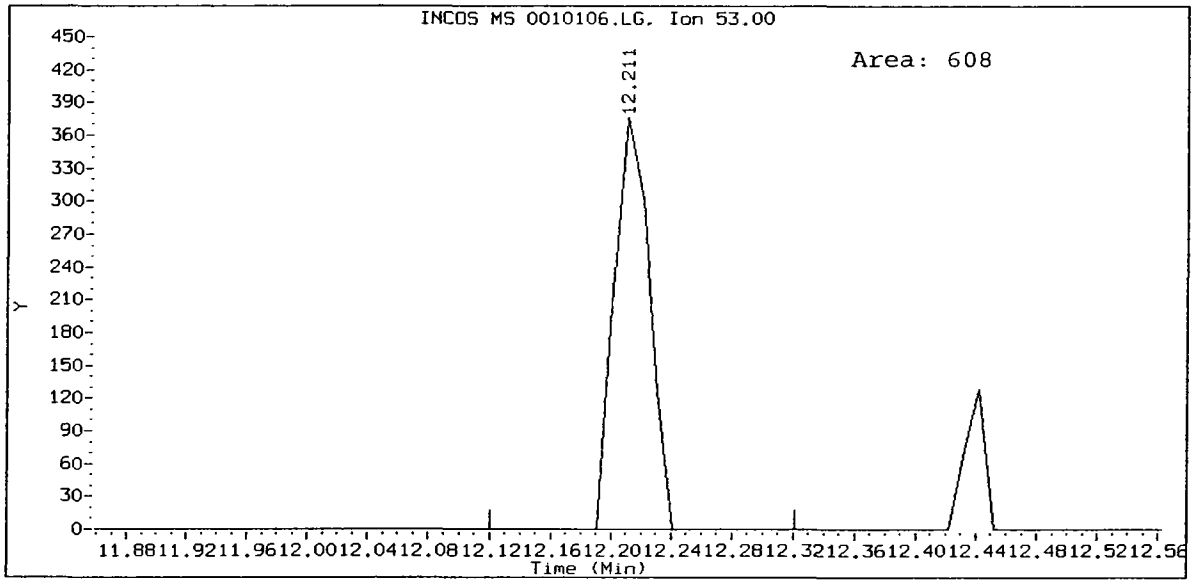
IC0106, /chem1/finn5.i/06JAN10.b/0010106.d
1,2,3-Trichloropropane Amount: 1.12

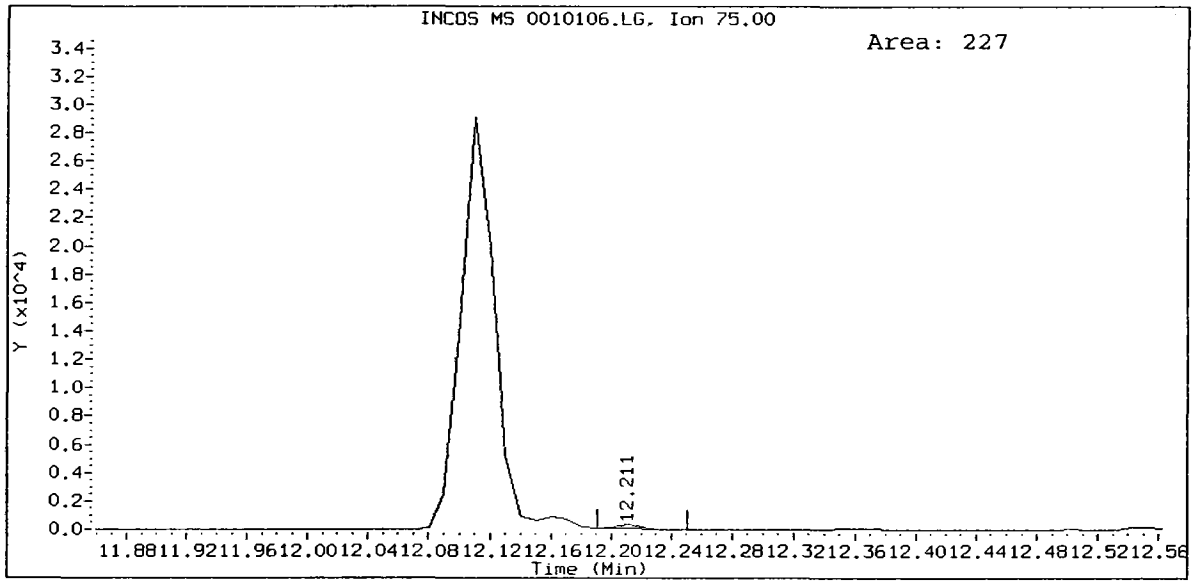


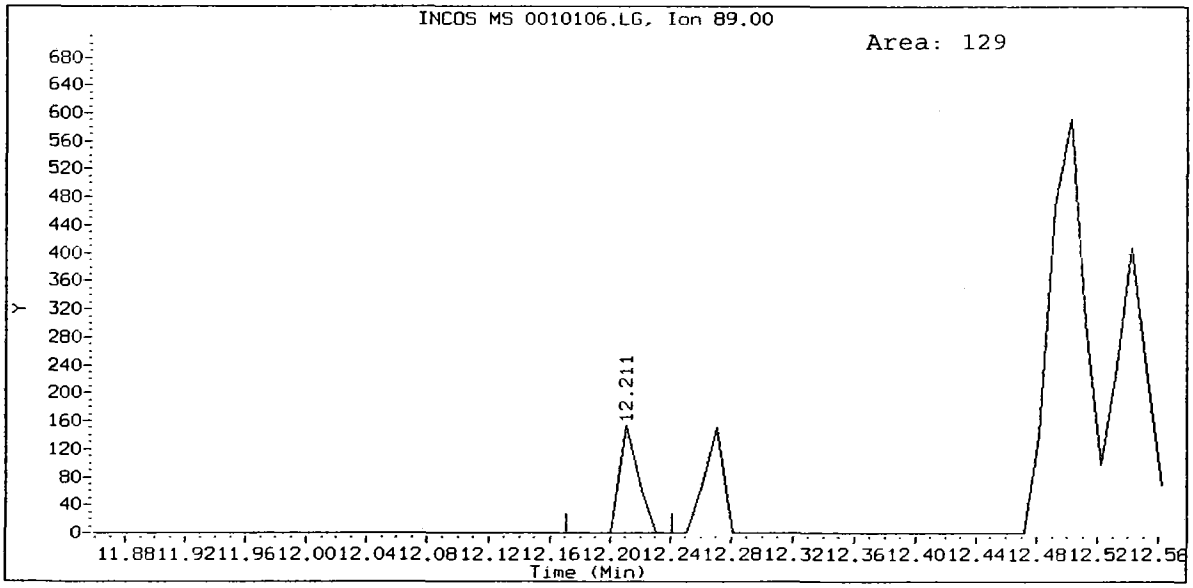




IC0106, /chem1/finn5.i/06JAN10.b/0010106.d
Trans-1,4-Dichloro 2-Butene Amount: 1.36







Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/0020106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD2
Inj Date : 06-JAN-2010 15:31
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 15:31 Cal File: 0020106.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

	ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	3.025	3.025	(0.457)	1703	2.00000	1.244
2	Chloromethane	50	3.316	3.316	(0.502)	4816	2.00000	1.770
3	Vinyl Chloride	62	3.437	3.437	(0.520)	4576	2.00000	1.761
4	Bromomethane	94	3.919	3.919	(0.593)	1575	2.00000	1.435
5	Chloroethane	64	3.990	3.990	(0.603)	2632	2.00000	1.746
6	Trichlorofluoromethane	101	4.241	4.241	(0.641)	4906	2.00000	1.933
7	Acrolein	56	4.623	4.623	(0.699)	2807	10.0000	11.331
8	112Trichloro122Trifluoroethane	101	4.643	4.643	(0.702)	3259	2.00000	1.912
9	Acetone	43	4.673	4.673	(0.707)	5881	10.0000	11.327
10	1,1-Dichloroethene	96	4.834	4.834	(0.731)	2605	2.00000	1.988
11	Bromoethane	108	5.055	5.055	(0.764)	1142	2.00000	1.628
12	Iodomethane	142	5.156	5.156	(0.780)	1556	2.00000	1.910
13	Methylene Chloride	84	5.266	5.266	(0.796)	2773	2.00000	2.038
14	Acrylonitrile	53	5.347	5.347	(0.808)	764	2.00000	1.867

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.815)	6170	2.00000	1.922
	15 Carbon Disulfide	76	5.367	5.367	(0.812)	6562	2.00000	1.794
	17 Trans-1,2-Dichloroethene	96	5.548	5.548	(0.839)	2434	2.00000	1.806
	18 Vinyl Acetate	43	5.869	5.869	(0.888)	5625	2.00000	1.890
	19 1,1-Dichloroethane	63	5.929	5.929	(0.897)	5296	2.00000	1.918
	20 2-Butanone	43	6.271	6.271	(0.948)	6519	10.0000	9.864
	21 2,2-Dichloropropane	77	6.452	6.452	(0.976)	4330	2.00000	1.875
	22 Cis-1,2-Dichloroethene	96	6.482	6.482	(0.980)	2469	2.00000	1.799
*	23 Pentafluorobenzene	168	6.613	6.613	(1.000)	112862	50.0000	
	24 Chloroform	83	6.633	6.633	(1.003)	4745	2.00000	1.850
	26 Bromochloromethane	128	6.794	6.794	(1.027)	1136	2.00000	1.778
$	25 Dibromofluoromethane	111	6.834	6.834	(1.033)	66018	50.0000	50.738
	27 1,1,1-Trichloroethane	97	7.025	7.025	(1.062)	4142	2.00000	1.782
	29 1,1-Dichloropropene	75	7.166	7.166	(0.941)	3805	2.00000	1.902
	30 Carbon Tetrachloride	117	7.276	7.276	(0.955)	3830	2.00000	1.810
$	31 d4-1,2-Dichloroethane	65	7.296	7.296	(1.103)	88932	50.0000	51.455
	32 1,2-Dichloroethane	62	7.377	7.377	(0.968)	4108	2.00000	1.918
	33 Benzene	78	7.427	7.427	(0.975)	9467	2.00000	2.070
*	34 1,4-Difluorobenzene	114	7.618	7.618	(1.000)	157205	50.0000	
	35 Trichloroethene	95	7.990	7.990	(1.049)	2638	2.00000	1.806
	36 1,2-Dichloropropane	63	8.151	8.151	(1.070)	2755	2.00000	1.888
	37 Bromodichloromethane	83	8.392	8.392	(1.102)	3335	2.00000	1.846
	39 Dibromomethane	93	8.452	8.452	(1.109)	1546	2.00000	1.826
	40 2-Chloroethyl Vinyl Ether	63	8.603	8.603	(1.129)	913	2.00000	1.822
	41 4-Methyl-2-Pentanone	58	8.633	8.633	(1.133)	3520	10.0000	8.271
	42 Cis 1,3-dichloropropene	75	8.894	8.894	(1.168)	3581	2.00000	1.779
$	43 d8-Toluene	98	9.166	9.166	(1.203)	189881	50.0000	50.972
	44 Toluene	92	9.256	9.256	(1.215)	5606	2.00000	1.928
	45 Trans 1,3-Dichloropropene	75	9.387	9.387	(1.232)	2955	2.00000	1.680
	46 2-Hexanone	43	9.517	9.517	(0.883)	10483	10.0000	10.743 (M)
	47 1,1,2-Trichloroethane	97	9.568	9.568	(1.256)	1726	2.00000	1.794
	48 1,3-Dichloropropane	76	9.819	9.819	(0.911)	3449	2.00000	1.865
	49 Tetrachloroethene	166	9.939	9.939	(0.923)	2881	2.00000	1.871
	50 Chlorodibromomethane	129	10.150	10.150	(0.942)	1974	2.00000	1.567
	51 1,2-Dibromoethane	107	10.372	10.372	(1.361)	1829	2.00000	1.700 (T)
	52 d5-Chlorobenzene	117	10.774	10.774	(1.000)	145390	50.0000	
	53 Chlorobenzene	112	10.814	10.814	(1.004)	6079	2.00000	1.967
	54 Ethyl Benzene	91	10.844	10.844	(1.007)	10562	2.00000	2.066
	55 1,1,1,2-Tetrachloroethane	131	10.834	10.834	(1.006)	2084	2.00000	1.777
	56 m,p-xylene	106	10.924	10.924	(1.014)	8226	4.00000	3.921
	57 o-Xylene	106	11.417	11.417	(1.060)	3913	2.00000	1.825
	58 Styrene	104	11.447	11.447	(1.062)	6025	2.00000	1.836
	59 Isopropyl Benzene	105	11.799	11.799	(0.877)	9992	2.00000	1.948
	60 Bromoform	173	11.859	11.859	(0.882)	1262	2.00000	1.582
	61 1,1,2,2-Tetrachloroethane	83	11.970	11.970	(0.890)	2209	2.00000	1.766
	62 4-Bromofluorobenzene	95	12.090	12.090	(1.122)	81049	50.0000	48.911
	63 1,2,3-Trichloropropane	110	12.140	12.140	(0.903)	533	2.00000	1.802 (M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.191	12.191	(0.907)	686	2.00000	1.551(M)
66 N-Propyl Benzene	91	12.251	12.251	(0.911)	12008	2.00000	2.001
67 Bromobenzene	156	12.341	12.341	(0.918)	2796	2.00000	1.889
68 1,3,5-Trimethyl Benzene	105	12.422	12.422	(0.924)	7674	2.00000	1.892
69 2-Chloro Toluene	91	12.482	12.482	(0.928)	8124	2.00000	2.040
70 4-Chloro Toluene	91	12.522	12.522	(0.931)	8120	2.00000	2.048
71 T-Butyl Benzene	119	12.834	12.834	(0.954)	7242	2.00000	1.946
72 1,2,4-Trimethylbenzene	105	12.884	12.884	(0.958)	7892	2.00000	1.968
73 S-Butyl Benzene	105	13.075	13.075	(0.972)	10646	2.00000	1.957
74 4-Isopropyl Toluene	119	13.226	13.226	(0.984)	8241	2.00000	2.022
75 1,3-Dichlorobenzene	146	13.377	13.377	(0.995)	5062	2.00000	1.964
* 76 d4-1,4-Dichlorobenzene	152	13.447	13.447	(1.000)	77969	50.0000	
77 1,4-Dichlorobenzene	146	13.487	13.487	(1.003)	4997	2.00000	2.000
78 N-Butyl Benzene	91	13.698	13.698	(1.019)	8314	2.00000	2.035
; 79 d4-1,2-Dichlorobenzene	152	13.899	13.899	(1.034)	71601	50.0000	50.108
80 1,2-Dichlorobenzene	146	13.929	13.929	(1.036)	4524	2.00000	1.923
81 1,2-Dibromo 3-Chloropropane	75	14.834	14.834	(1.103)	341	2.00000	1.436
82 1,2,4-Trichlorobenzene	180	15.879	15.879	(1.181)	3402	2.00000	2.176
83 Hexachloro 1,3-Butadiene	225	16.030	16.030	(1.192)	2048	2.00000	2.006
84 Naphthalene	128	16.201	16.201	(1.205)	6535	2.00000	2.447
85 1,2,3-Trichlorobenzene	180	16.492	16.492	(1.226)	3348	2.00000	2.370

QC Flag Legend

[- Target compound detected outside RT window.
M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0020106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD2
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	112862	-0.47
34 1,4-Difluorobenze	160565	80282	321130	157205	-2.09
52 d5-Chlorobenzene	148719	74360	297438	145390	-2.24
76 d4-1,4-Dichlorobe	84322	42161	168644	77969	-7.53

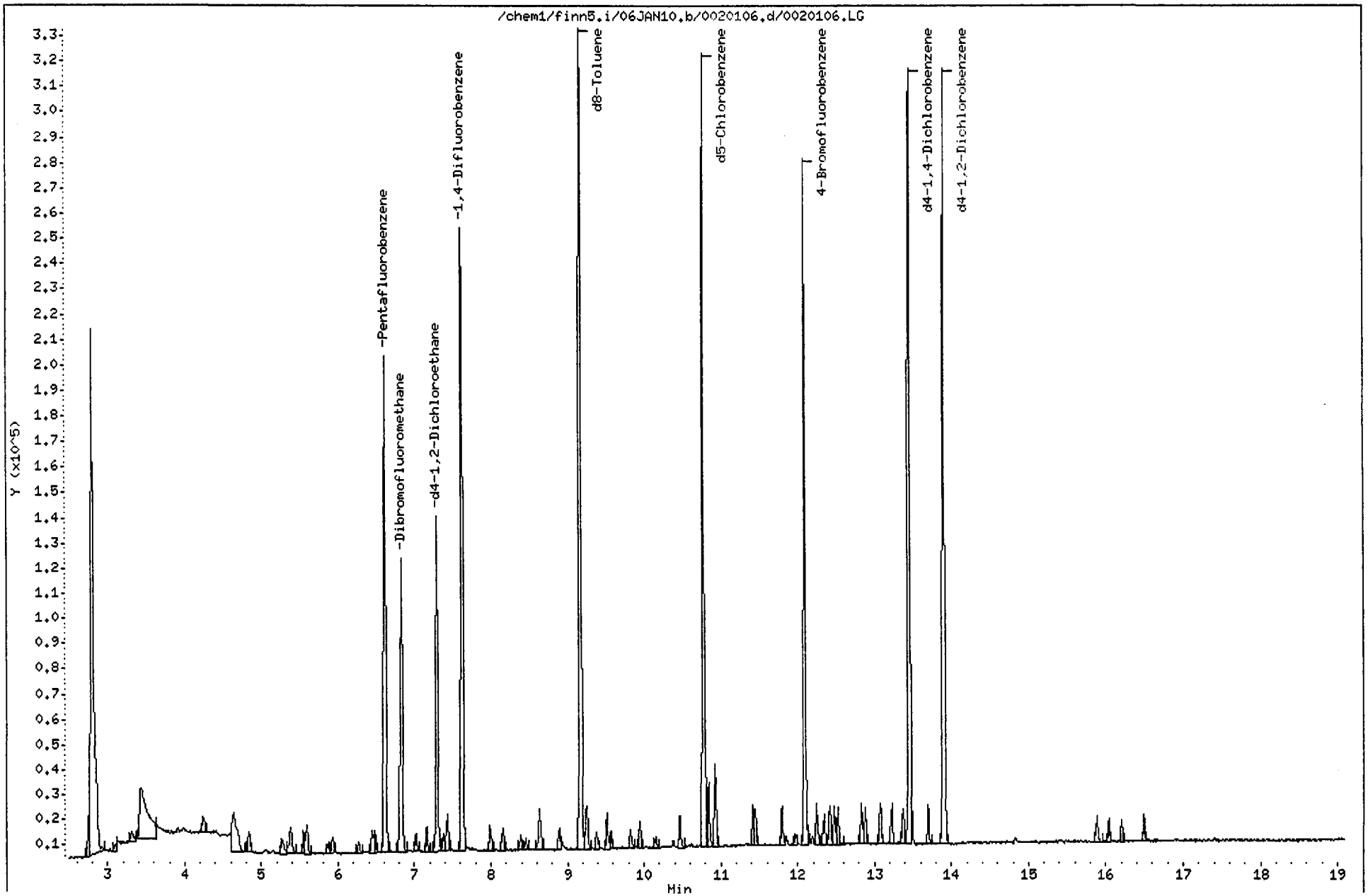
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.61	0.00
34 1,4-Difluorobenze	7.62	7.12	8.12	7.62	0.00
52 d5-Chlorobenzene	10.76	10.26	11.26	10.77	0.09
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.45	0.00

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.

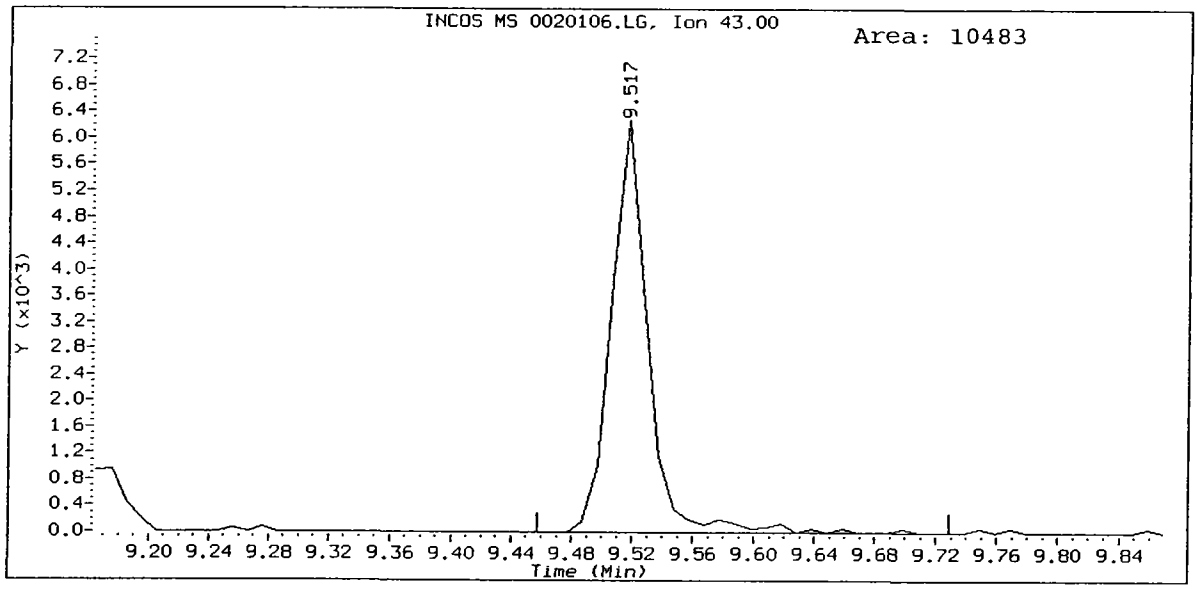
Data File: /chem1/finn5.i/06JAN10.b/0020106.d
Date : 06-JAN-2010 15:31
Client ID: VSTD2
Sample Info: IC0106,5,5,0

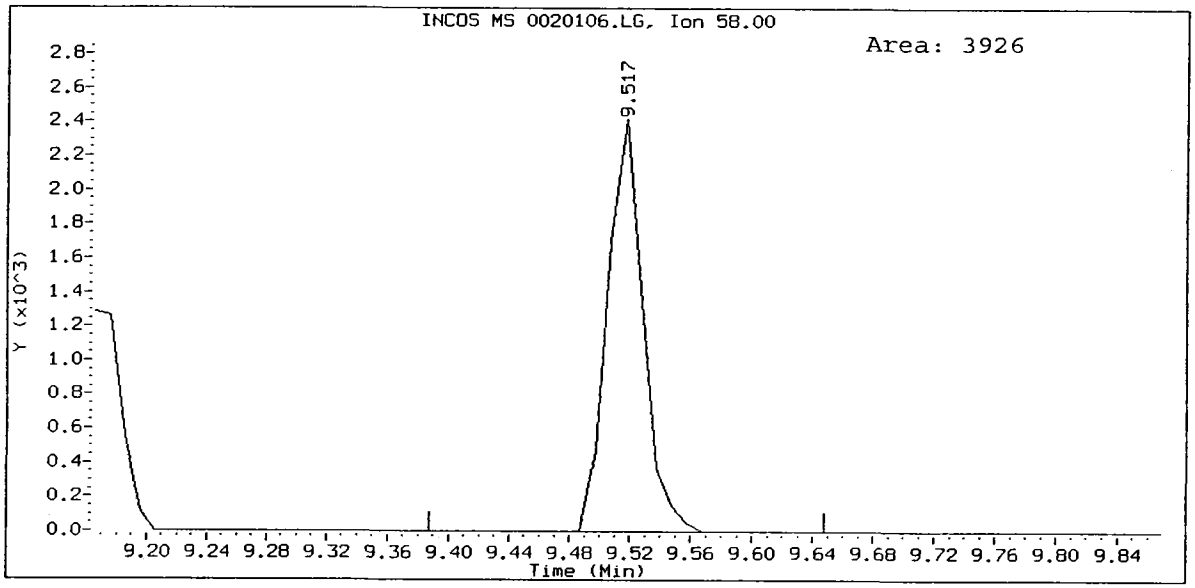
Instrument: finn5.i
Operator: PB
Column diameter: 0.18

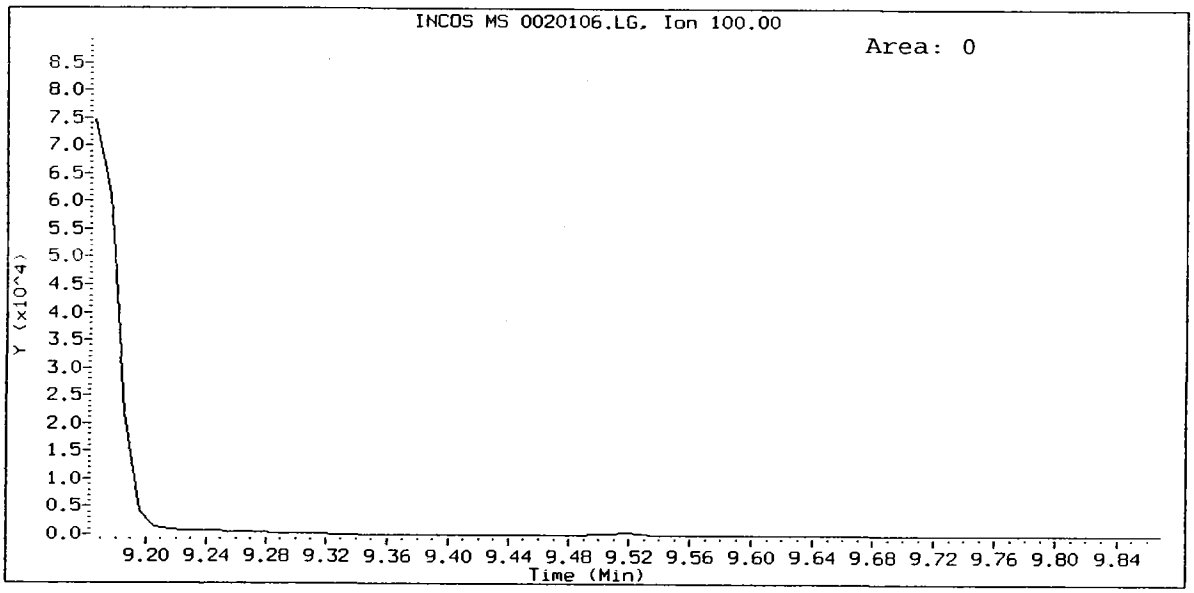
Column phase: Rtx502.2



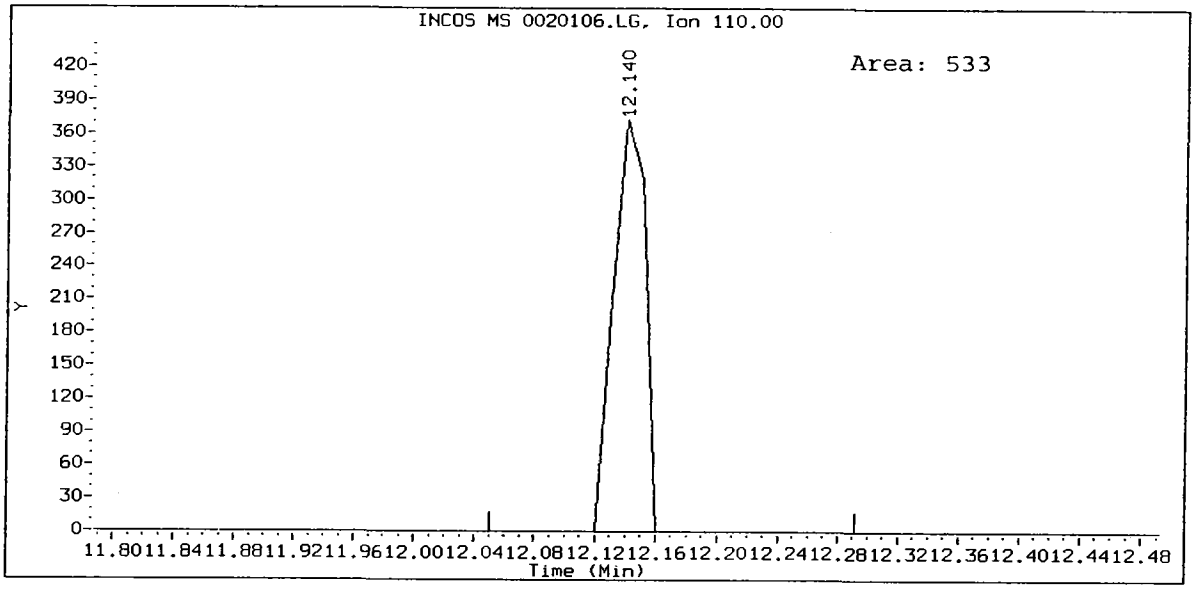
IC0106, /chem1/finn5.i/06JAN10.b/0020106.d
2-Hexanone Amount: 10.74

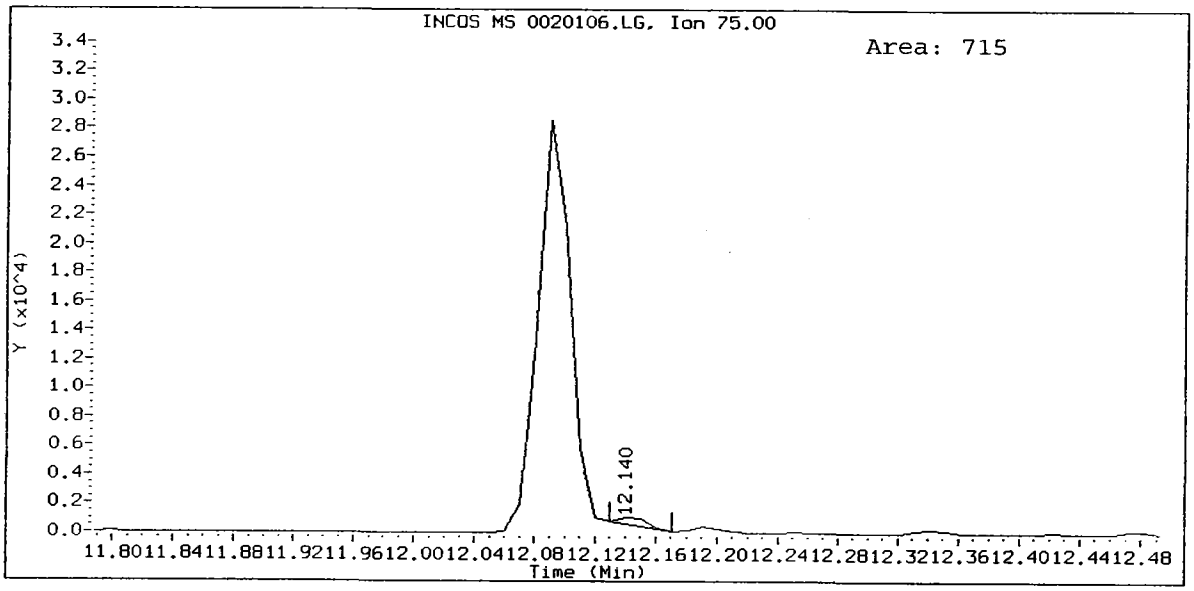


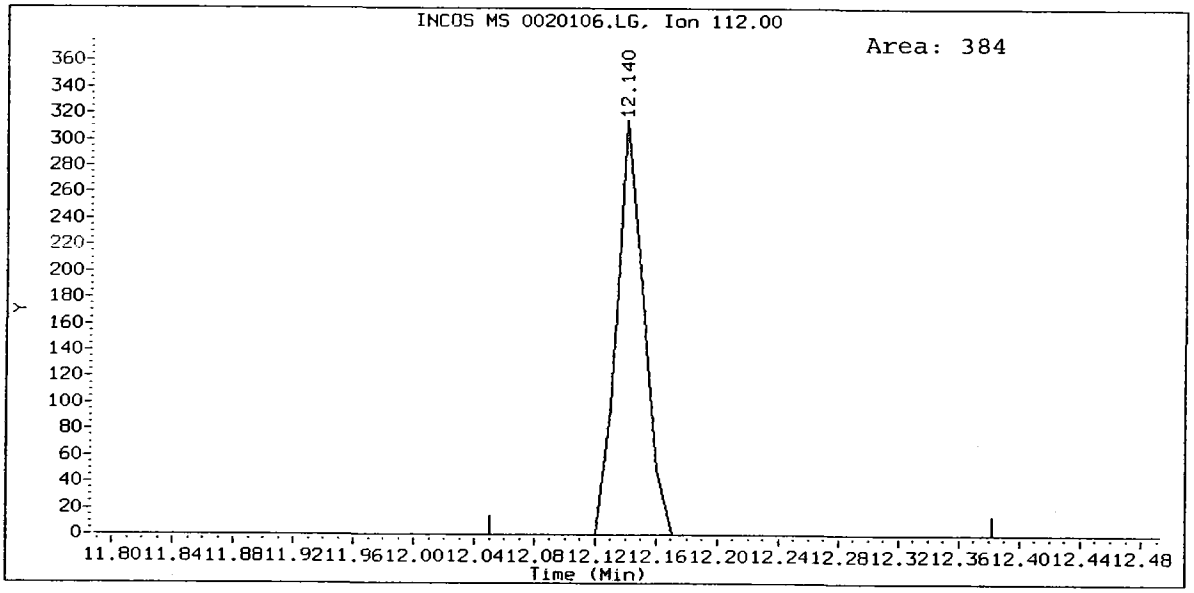




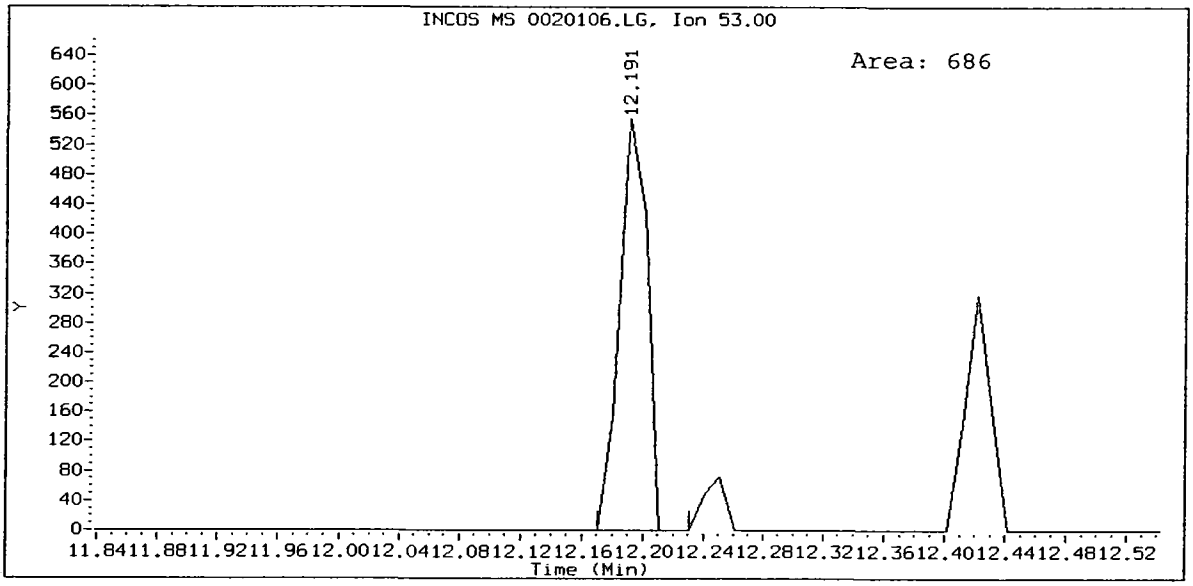
IC0106, /chem1/finn5.i/06JAN10.b/0020106.d
1,2,3-Trichloropropane Amount: 1.80

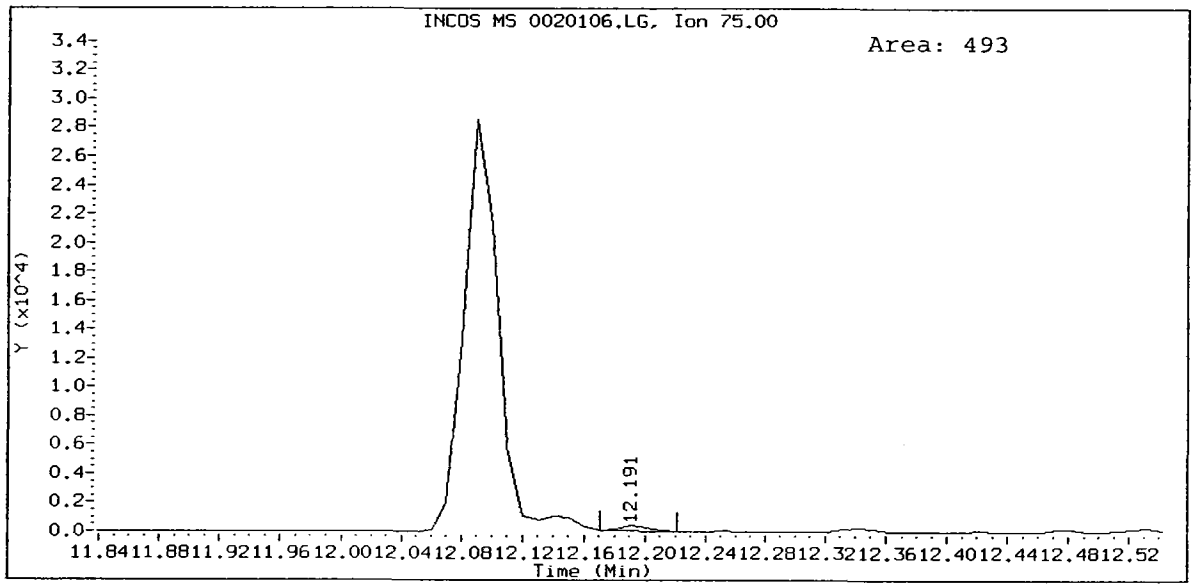


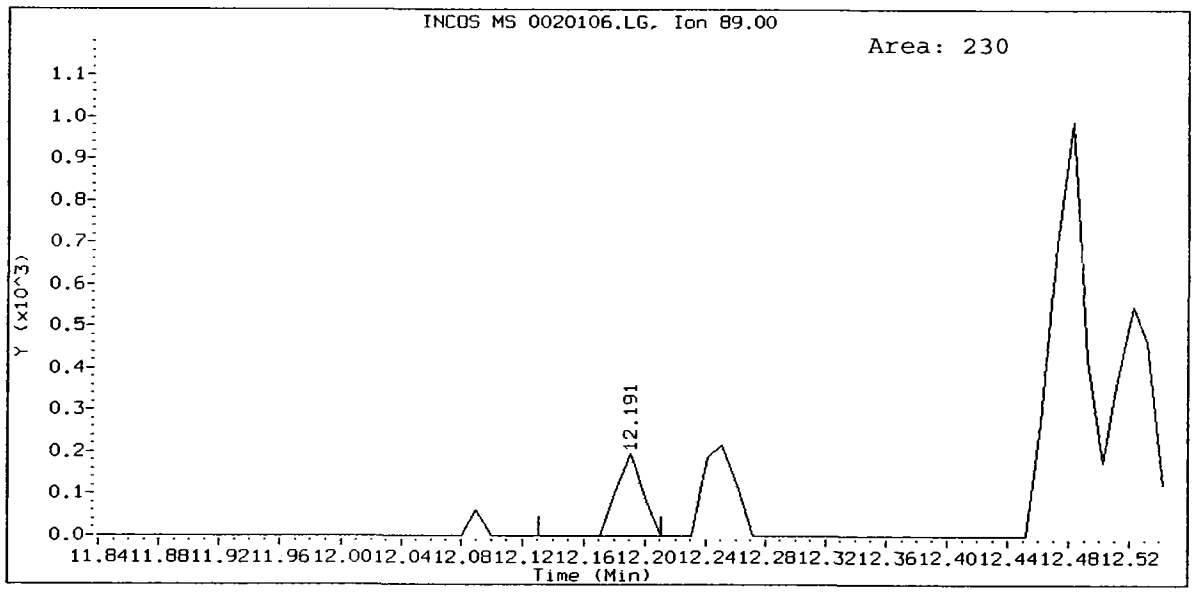




IC0106, /chem1/finn5.i/06JAN10.b/0020106.d
Trans-1,4-Dichloro 2-Butene Amount: 1.55







Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/0050106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD5
Inj Date : 06-JAN-2010 11:34
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 11:34 Cal File: 0050106.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.035	3.035	(0.458)	7096	5.00000	5.258
2 Chloromethane	50	3.327	3.327	(0.502)	13805	5.00000	5.148
3 Vinyl Chloride	62	3.437	3.437	(0.519)	14020	5.00000	5.474
4 Bromomethane	94	3.919	3.919	(0.592)	4768	5.00000	4.408
5 Chloroethane	64	3.990	3.990	(0.602)	5111	5.00000	3.440
6 Trichlorofluoromethane	101	4.251	4.251	(0.642)	13794	5.00000	5.515
7 Acrolein	56	4.633	4.633	(0.700)	6529	25.0000	26.742
8 112Trichloro122Trifluoroethane	101	4.653	4.653	(0.703)	8705	5.00000	5.181
9 Acetone	43	4.683	4.683	(0.707)	12822	25.0000	25.057
10 1,1-Dichloroethene	96	4.844	4.844	(0.731)	6764	5.00000	5.236
11 Bromoethane	108	5.065	5.065	(0.765)	3314	5.00000	4.795
12 Iodomethane	142	5.166	5.166	(0.780)	2954	5.00000	3.679
13 Methylene Chloride	84	5.276	5.276	(0.797)	9833	5.00000	7.334
14 Acrylonitrile	53	5.367	5.367	(0.810)	2011	5.00000	4.988

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	16205	5.00000	5.121
15 Carbon Disulfide	76	5.377	5.377	(0.812)	15887	5.00000	4.406
17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	6527	5.00000	4.914
18 Vinyl Acetate	43	5.879	5.879	(0.888)	14705	5.00000	5.013
19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	14125	5.00000	5.190
20 2-Butanone	43	6.281	6.281	(0.948)	16144	25.0000	24.786
21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	11324	5.00000	4.976
22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	6745	5.00000	4.987
* 23 Pentafluorobenzene	168	6.623	6.623	(1.000)	111234	50.0000	
24 Chloroform	83	6.643	6.643	(1.003)	12751	5.00000	5.045
26 Bromochloromethane	128	6.804	6.804	(1.027)	2963	5.00000	4.706
$ 25 Dibromofluoromethane	111	6.844	6.844	(1.033)	63831	50.0000	49.775
27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	11551	5.00000	5.041
29 1,1-Dichloropropene	75	7.176	7.176	(0.941)	9884	5.00000	5.079
30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	10317	5.00000	5.012
$ 31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	86049	50.0000	50.516
32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	10812	5.00000	5.189
33 Benzene	78	7.437	7.437	(0.975)	24039	5.00000	5.404
* 34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	152932	50.0000	
35 Trichloroethene	95	8.000	8.000	(1.049)	7135	5.00000	5.020
36 1,2-Dichloropropane	63	8.171	8.171	(1.071)	7093	5.00000	4.996
37 Bromodichloromethane	83	8.402	8.402	(1.101)	8725	5.00000	4.964
39 Dibromomethane	93	8.472	8.472	(1.111)	4267	5.00000	5.180
40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	2207	5.00000	4.528
41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.134)	9993	25.0000	24.137
42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	9420	5.00000	4.810
$ 43 d8-Toluene	98	9.176	9.176	(1.203)	185038	50.0000	51.060
44 Toluene	92	9.266	9.266	(1.215)	14519	5.00000	5.132
45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.232)	8268	5.00000	4.831
46 2-Hexanone	43	9.527	9.527	(0.884)	24368	25.0000	25.816 (M)
47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	4596	5.00000	4.909
48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	9225	5.00000	5.157
49 Tetrachloroethene	166	9.949	9.949	(0.923)	7608	5.00000	5.108
50 Chlorodibromomethane	129	10.161	10.161	(0.942)	5583	5.00000	4.581
51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	4947	5.00000	4.727
* 52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	140638	50.0000	
53 Chlorobenzene	112	10.824	10.824	(1.004)	15477	5.00000	5.176
54 Ethyl Benzene	91	10.854	10.854	(1.007)	27688	5.00000	5.599
55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	5704	5.00000	5.029
56 m,p-xylene	106	10.934	10.934	(1.014)	20921	10.0000	10.308
57 o-Xylene	106	11.427	11.427	(1.060)	10123	5.00000	4.880
58 Styrene	104	11.457	11.457	(1.062)	15711	5.00000	4.950
59 Isopropyl Benzene	105	11.809	11.809	(0.878)	26155	5.00000	5.189
60 Bromoform	173	11.869	11.869	(0.882)	3675	5.00000	4.690
61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.891)	5884	5.00000	4.790
* 62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	79402	50.0000	49.536
63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	1431	5.00000	4.924

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.907)	1979	5.00000	4.556(M)
66 N-Propyl Benzene	91	12.261	12.261	(0.911)	31659	5.00000	5.370
67 Bromobenzene	156	12.351	12.351	(0.918)	7224	5.00000	4.969
68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.924)	21073	5.00000	5.288
69 2-Chloro Toluene	91	12.492	12.492	(0.928)	20293	5.00000	5.186
70 4-Chloro Toluene	91	12.532	12.532	(0.931)	20910	5.00000	5.368
71 T-Butyl Benzene	119	12.844	12.844	(0.954)	19040	5.00000	5.208
72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.958)	21077	5.00000	5.350
73 S-Butyl Benzene	105	13.085	13.085	(0.972)	27828	5.00000	5.208
74 4-Isopropyl Toluene	119	13.236	13.236	(0.984)	20982	5.00000	5.239
75 1,3-Dichlorobenzene	146	13.387	13.387	(0.995)	12632	5.00000	4.990
* 76 d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	76594	50.0000	
77 1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	12351	5.00000	5.031
78 N-Butyl Benzene	91	13.708	13.708	(1.019)	20562	5.00000	5.123
$ 79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.034)	70450	50.0000	50.187
80 1,2-Dichlorobenzene	146	13.939	13.939	(1.036)	11669	5.00000	5.050
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.103)	1074	5.00000	4.604
82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	7747	5.00000	5.044
83 Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.192)	5285	5.00000	5.270
84 Naphthalene	128	16.211	16.211	(1.205)	12678	5.00000	4.832
85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.226)	6742	5.00000	4.859

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0050106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD5
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	111234	-1.91
34 1,4-Difluorobenze	160565	80282	321130	152932	-4.75
52 d5-Chlorobenzene	148719	74360	297438	140638	-5.43
76 d4-1,4-Dichlorobe	84322	42161	168644	76594	-9.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.62	0.15
34 1,4-Difluorobenze	7.62	7.12	8.12	7.63	0.13
52 d5-Chlorobenzene	10.76	10.26	11.26	10.78	0.19
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.46	0.07

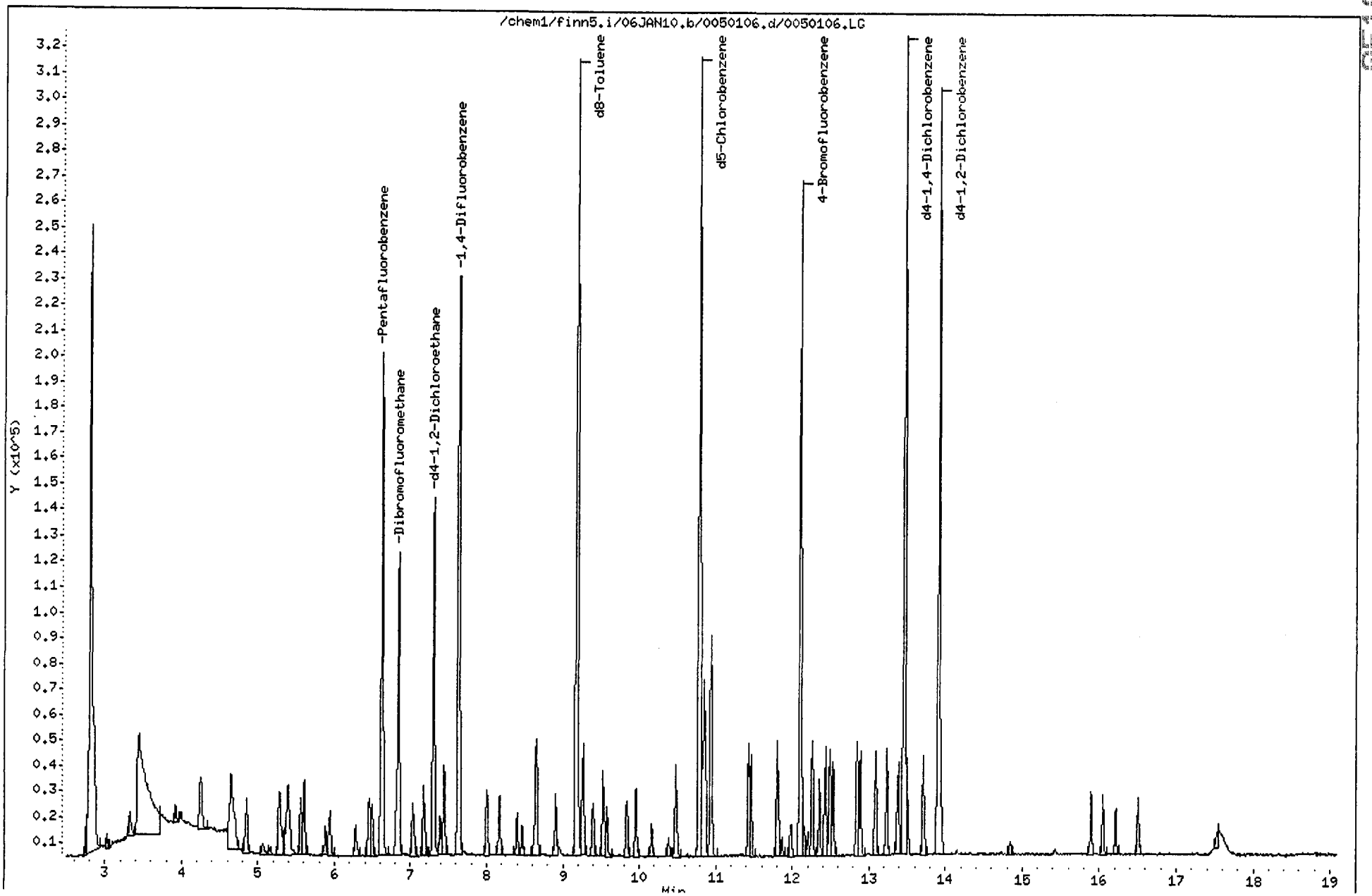
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/0050106.d
Date : 06-JAN-2010 11:34
Client ID: VSTD5
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



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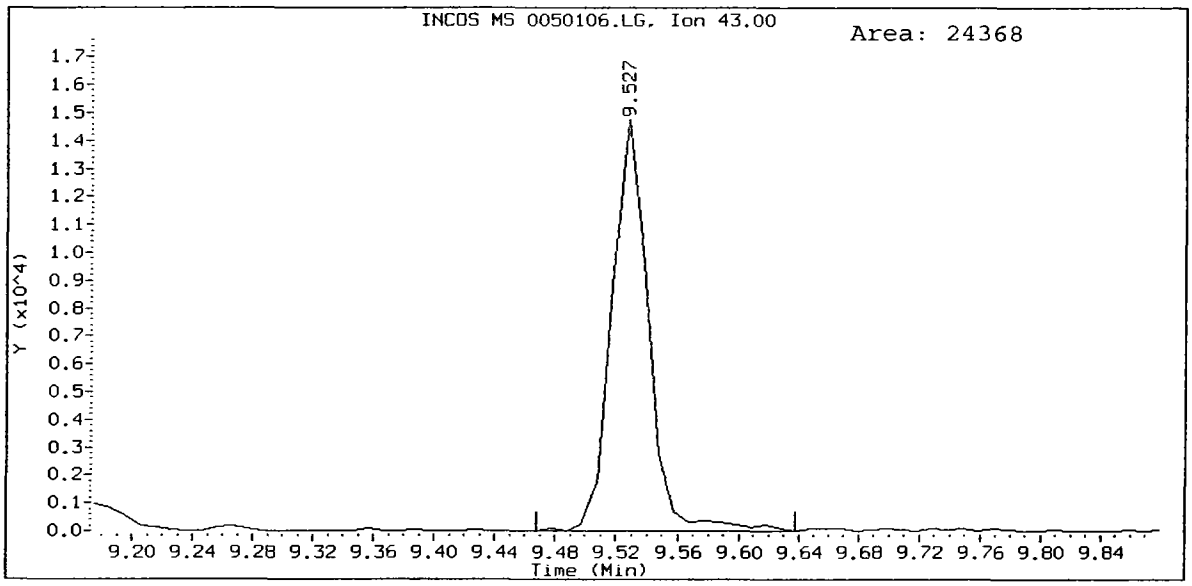
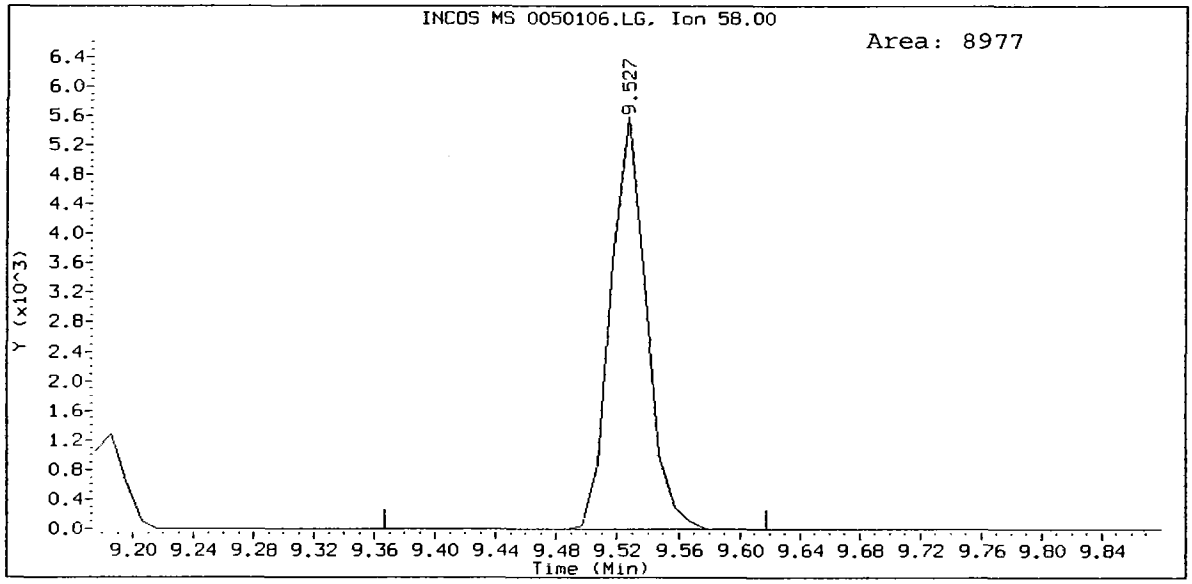
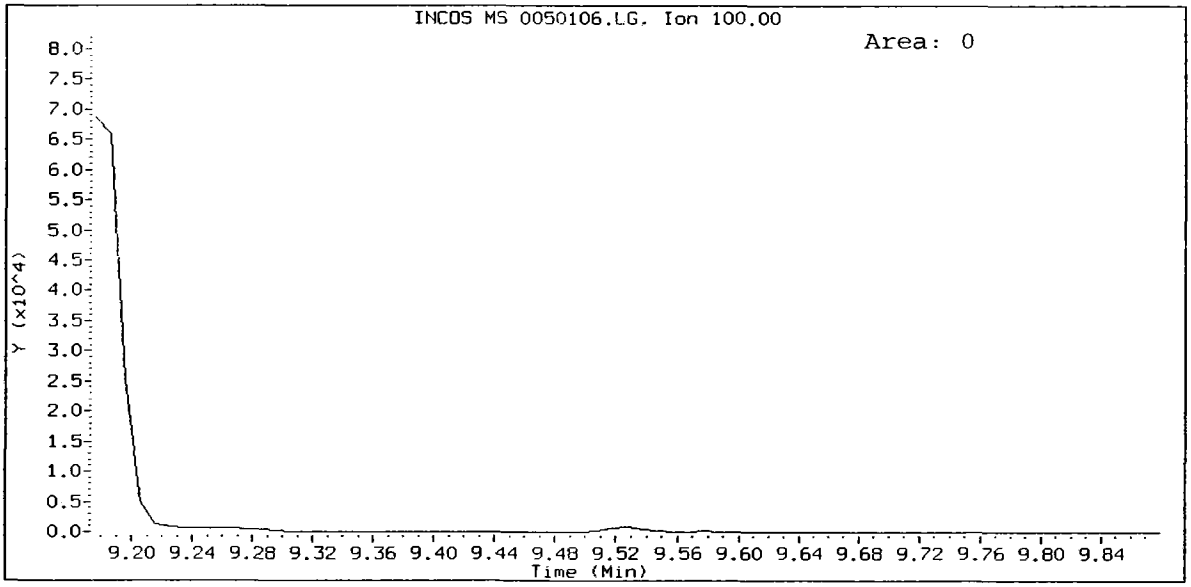
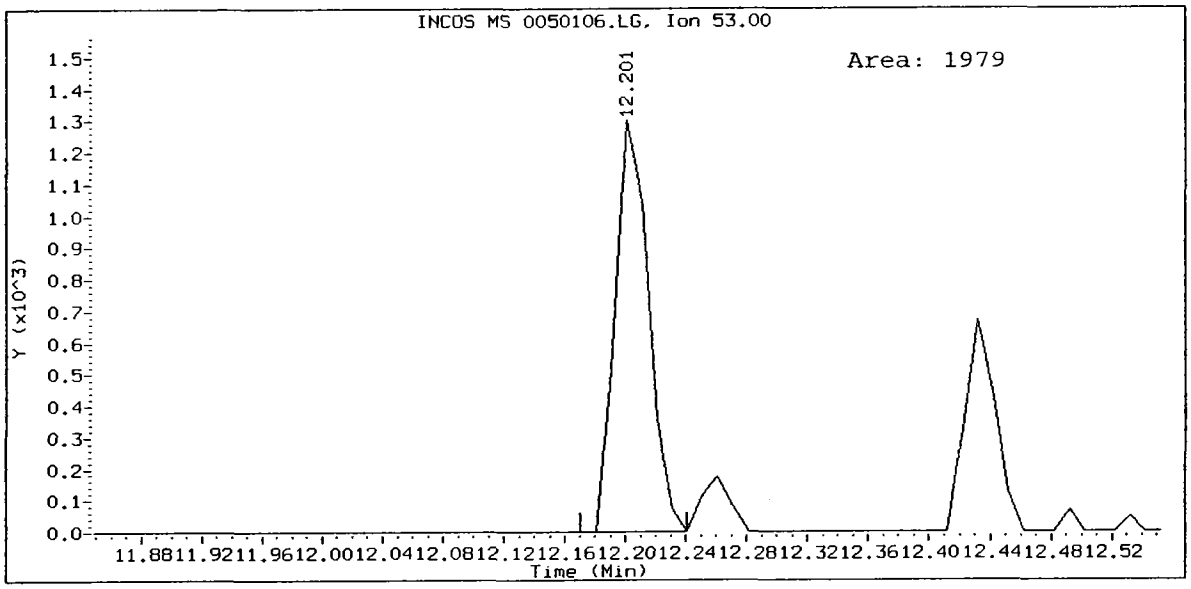
2-Hexanone Amount: 25.82

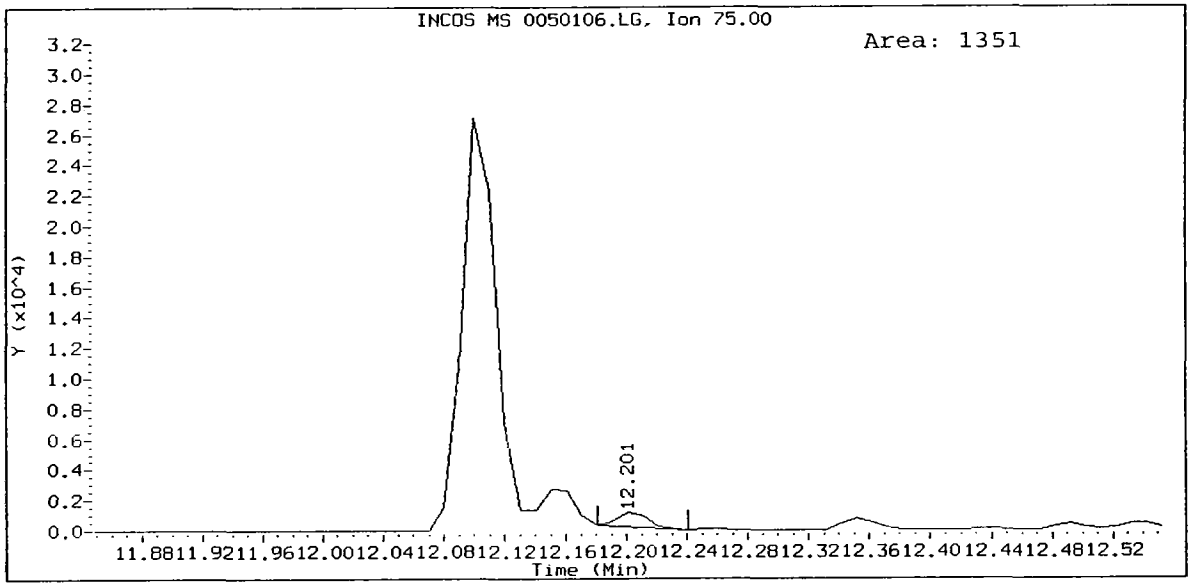


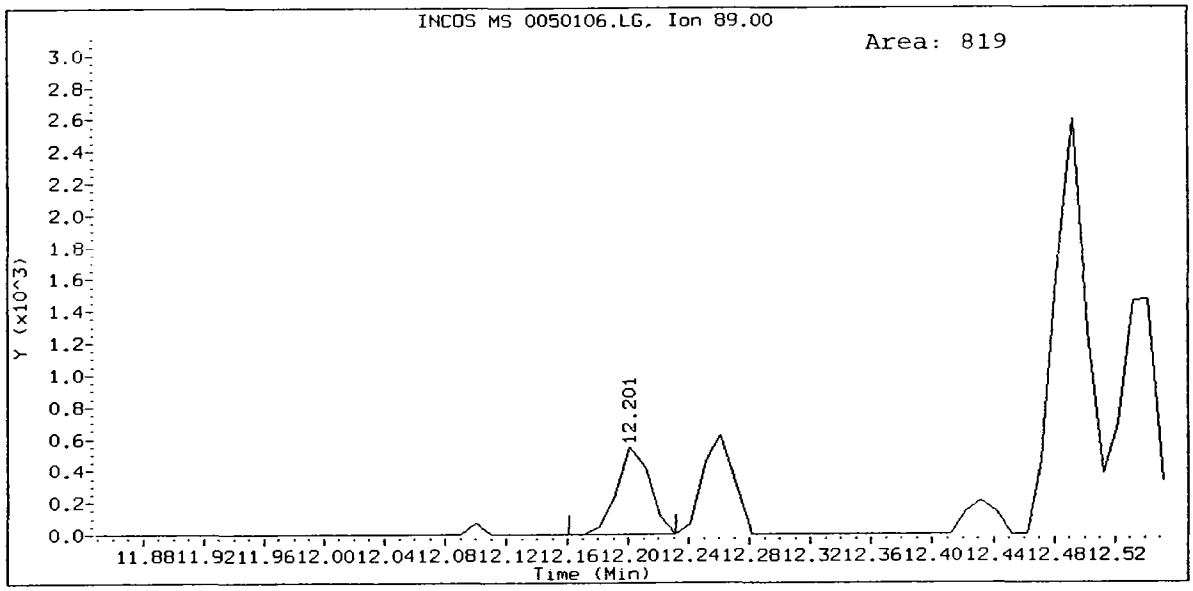




IC0106, /chem1/finn5.i/06JAN10.b/0050106.d
Trans-1,4-Dichloro 2-Butene Amount: 4.56







Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/0100106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD10
Inj Date : 06-JAN-2010 12:01
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 12:01 Cal File: 0100106.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1	Dichlorodifluoromethane	85	3.025	3.025	(0.457)	13472	10.0000	9.773
2	Chloromethane	50	3.327	3.327	(0.502)	27715	10.0000	10.118
3	Vinyl Chloride	62	3.437	3.437	(0.519)	27469	10.0000	10.500
4	Bromomethane	94	3.919	3.919	(0.592)	10522	10.0000	9.522
5	Chloroethane	64	3.990	3.990	(0.602)	16228	10.0000	10.691
6	Trichlorofluoromethane	101	4.251	4.251	(0.642)	28064	10.0000	10.984
7	Acrolein	56	4.633	4.633	(0.700)	12374	50.0000	49.615
8	112Trichloro122Trifluoroethane	101	4.643	4.643	(0.701)	18355	10.0000	10.694
9	Acetone	43	4.693	4.693	(0.709)	25408	50.0000	48.607
10	1,1-Dichloroethene	96	4.844	4.844	(0.731)	13685	10.0000	10.371
11	Bromoethane	108	5.065	5.065	(0.765)	6407	10.0000	9.075
12	Iodomethane	142	5.156	5.156	(0.778)	6798	10.0000	8.289
13	Methylene Chloride	84	5.276	5.276	(0.797)	23147	10.0000	16.900
14	Acrylonitrile	53	5.357	5.357	(0.809)	4258	10.0000	10.338

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.815)	34783	10.0000	10.760
15 Carbon Disulfide	76	5.377	5.377	(0.812)	31138	10.0000	8.454
17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	14280	10.0000	10.524
18 Vinyl Acetate	43	5.879	5.879	(0.888)	31226	10.0000	10.421
19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	29077	10.0000	10.458
20 2-Butanone	43	6.281	6.281	(0.948)	34460	50.0000	51.793
21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	24652	10.0000	10.603
22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.980)	14213	10.0000	10.287
23 Pentafluorobenzene	168	6.623	6.623	(1.000)	113628	50.0000	
24 Chloroform	83	6.643	6.643	(1.003)	27258	10.0000	10.558
26 Bromochloromethane	128	6.804	6.804	(1.027)	6438	10.0000	10.009
25 Dibromofluoromethane	111	6.844	6.844	(1.033)	65200	50.0000	49.772
27 1,1,1-Trichloroethane	97	7.025	7.025	(1.061)	25069	10.0000	10.711
29 1,1-Dichloropropene	75	7.176	7.176	(0.941)	20985	10.0000	10.451
30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	22397	10.0000	10.547
31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	86643	50.0000	49.793
32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	22975	10.0000	10.687
33 Benzene	78	7.437	7.437	(0.975)	51936	10.0000	11.315
34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	157784	50.0000	
35 Trichloroethene	95	8.000	8.000	(1.049)	15548	10.0000	10.603
36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	15616	10.0000	10.661
37 Bromodichloromethane	83	8.402	8.402	(1.101)	18775	10.0000	10.353
39 Dibromomethane	93	8.462	8.462	(1.109)	8890	10.0000	10.460
40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	4959	10.0000	9.862
41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.134)	21472	50.0000	50.268
42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.167)	21197	10.0000	10.492
43 d8-Toluene	98	9.176	9.176	(1.203)	188387	50.0000	50.385
44 Toluene	92	9.266	9.266	(1.215)	31676	10.0000	10.852
45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.232)	18611	10.0000	10.549
46 2-Hexanone	43	9.527	9.527	(0.884)	52252	50.0000	52.848
47 1,1,2-Trichloroethane	97	9.578	9.578	(1.256)	10174	10.0000	10.534
48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	19853	10.0000	10.595
49 Tetrachloroethene	166	9.949	9.949	(0.923)	15930	10.0000	10.210
50 Chlorodibromomethane	129	10.161	10.161	(0.942)	12795	10.0000	10.024
51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	10928	10.0000	10.121
52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	147314	50.0000	
53 Chlorobenzene	112	10.824	10.824	(1.004)	33935	10.0000	10.836
54 Ethyl Benzene	91	10.854	10.854	(1.007)	59112	10.0000	11.413
55 1,1,1,2-Tetrachloroethane	131	10.844	10.844	(1.006)	12322	10.0000	10.371
56 m,p-xylene	106	10.934	10.934	(1.014)	46368	20.0000	21.811
57 o-Xylene	106	11.427	11.427	(1.060)	22280	10.0000	10.254
58 Styrene	104	11.457	11.457	(1.062)	35194	10.0000	10.586
59 Isopropyl Benzene	105	11.809	11.809	(0.878)	58352	10.0000	11.044
60 Bromoform	173	11.869	11.869	(0.882)	7933	10.0000	9.657
61 1,1,2,2-Tetrachloroethane	83	11.980	11.980	(0.890)	13227	10.0000	10.270
62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	82817	50.0000	49.325
63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	3358	10.0000	11.021

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.907)	4682	10.0000	10.282
66 N-Propyl Benzene	91	12.261	12.261	(0.911)	69455	10.0000	11.237
67 Bromobenzene	156	12.351	12.351	(0.918)	16074	10.0000	10.546
68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.924)	46693	10.0000	11.175
69 2-Chloro Toluene	91	12.492	12.492	(0.928)	45797	10.0000	11.165
70 4-Chloro Toluene	91	12.532	12.532	(0.931)	45932	10.0000	11.247
71 T-Butyl Benzene	119	12.844	12.844	(0.954)	42505	10.0000	11.090
72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.958)	46458	10.0000	11.247
73 S-Butyl Benzene	105	13.085	13.085	(0.972)	61223	10.0000	10.930
74 4-Isopropyl Toluene	119	13.236	13.236	(0.984)	47378	10.0000	11.284
75 1,3-Dichlorobenzene	146	13.387	13.387	(0.995)	27843	10.0000	10.491
76 d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	80299	50.0000	
77 1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	26755	10.0000	10.395
78 N-Butyl Benzene	91	13.708	13.708	(1.019)	46143	10.0000	10.966
79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.034)	72641	50.0000	49.361
80 1,2-Dichlorobenzene	146	13.939	13.939	(1.036)	25247	10.0000	10.422
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.103)	2362	10.0000	9.658
82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	16730	10.0000	10.391
83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.193)	10902	10.0000	10.369
84 Naphthalene	128	16.211	16.211	(1.205)	27367	10.0000	9.949
85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.226)	14857	10.0000	10.213

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0100106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	113628	0.21
34 1,4-Difluorobenze	160565	80282	321130	157784	-1.73
52 d5-Chlorobenzene	148719	74360	297438	147314	-0.94
76 d4-1,4-Dichlorobe	84322	42161	168644	80299	-4.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.62	0.15
34 1,4-Difluorobenze	7.62	7.12	8.12	7.63	0.13
52 d5-Chlorobenzene	10.76	10.26	11.26	10.78	0.19
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.46	0.07

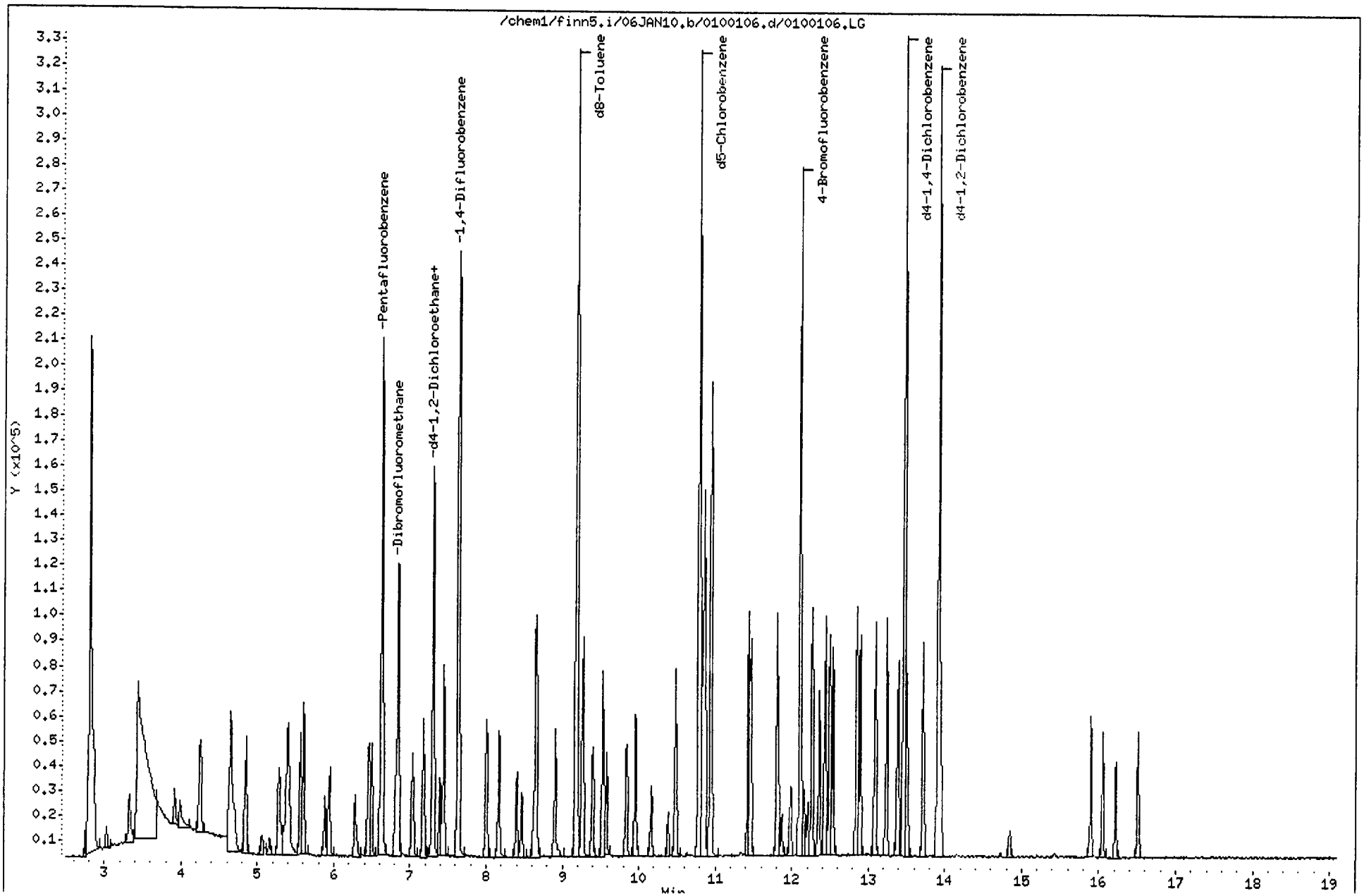
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/0100106.d
Date : 06-JAN-2010 12:01
Client ID: VSTD10
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/0500106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD50
Inj Date : 06-JAN-2010 12:28
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 12:28 Cal File: 0500106.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.015	3.015	(0.456)	83659	50.0000	60.815
2 Chloromethane	50	3.316	3.316	(0.502)	143311	50.0000	52.429
3 Vinyl Chloride	62	3.427	3.427	(0.518)	154979	50.0000	59.360
4 Bromomethane	94	3.909	3.909	(0.591)	62608	50.0000	56.775
5 Chloroethane	64	3.980	3.980	(0.602)	85989	50.0000	56.766
6 Trichlorofluoromethane	101	4.241	4.241	(0.641)	137087	50.0000	53.766
7 Acrolein	56	4.623	4.623	(0.699)	60763	250.000	244.14
8 112Trichloro122Trifluoroethane	101	4.633	4.633	(0.701)	85900	50.0000	50.148
9 Acetone	43	4.673	4.673	(0.707)	133020	250.000	255.00
10 1,1-Dichloroethene	96	4.834	4.834	(0.731)	66805	50.0000	50.730
11 Bromoethane	108	5.055	5.055	(0.764)	39651	50.0000	56.276
12 Iodomethane	142	5.146	5.146	(0.778)	42108	50.0000	51.449
13 Methylene Chloride	84	5.266	5.266	(0.796)	80035	50.0000	58.555
14 Acrylonitrile	53	5.347	5.347	(0.808)	21151	50.0000	51.458

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.815)	164739	50.0000	51.065
	15 Carbon Disulfide	76	5.367	5.367	(0.812)	165920	50.0000	45.141
	17 Trans-1,2-Dichloroethene	96	5.548	5.548	(0.839)	68837	50.0000	50.836
	18 Vinyl Acetate	43	5.869	5.869	(0.888)	158305	50.0000	52.939
	19 1,1-Dichloroethane	63	5.929	5.929	(0.897)	143951	50.0000	51.881
	20 2-Butanone	43	6.261	6.261	(0.947)	172473	250.000	259.76
	21 2,2-Dichloropropane	77	6.442	6.442	(0.974)	122456	50.0000	52.780
	22 Cis-1,2-Dichloroethene	96	6.482	6.482	(0.980)	70586	50.0000	51.191
*	23 Pentafluorobenzene	168	6.613	6.613	(1.000)	113395	50.0000	
	24 Chloroform	83	6.623	6.623	(1.002)	134116	50.0000	52.057
	26 Bromochloromethane	128	6.794	6.794	(1.027)	34466	50.0000	53.695
$	25 Dibromofluoromethane	111	6.824	6.824	(1.032)	66398	50.0000	50.790
	27 1,1,1-Trichloroethane	97	7.015	7.015	(1.061)	124584	50.0000	53.338
	29 1,1-Dichloropropene	75	7.156	7.156	(0.939)	106893	50.0000	52.314
	30 Carbon Tetrachloride	117	7.276	7.276	(0.955)	112135	50.0000	51.890
$	31 d4-1,2-Dichloroethane	65	7.286	7.286	(1.102)	85522	50.0000	49.250
	32 1,2-Dichloroethane	62	7.377	7.377	(0.968)	111380	50.0000	50.914
	33 Benzene	78	7.427	7.427	(0.975)	246877	50.0000	52.855
*	34 1,4-Difluorobenzene	114	7.618	7.618	(1.000)	160565	50.0000	
	35 Trichloroethene	95	7.990	7.990	(1.049)	77941	50.0000	52.230
	36 1,2-Dichloropropane	63	8.151	8.151	(1.070)	74850	50.0000	50.216
	37 Bromodichloromethane	83	8.382	8.382	(1.100)	94381	50.0000	51.142
	39 Dibromomethane	93	8.452	8.452	(1.109)	43288	50.0000	50.050
	40 2-Chloroethyl Vinyl Ether	63	8.603	8.603	(1.129)	25523	50.0000	49.876
	41 4-Methyl-2-Pentanone	58	8.633	8.633	(1.133)	111762	250.000	257.11
	42 Cis 1,3-dichloropropene	75	8.884	8.884	(1.166)	108124	50.0000	52.590
$	43 d8-Toluene	98	9.166	9.166	(1.203)	191413	50.0000	50.308
	44 Toluene	92	9.246	9.246	(1.214)	152053	50.0000	51.191
	45 Trans 1,3-Dichloropropene	75	9.377	9.377	(1.231)	95588	50.0000	53.196
	46 2-Hexanone	43	9.517	9.517	(0.884)	266907	250.000	267.40
	47 1,1,2-Trichloroethane	97	9.558	9.558	(1.255)	49588	50.0000	50.451
	48 1,3-Dichloropropane	76	9.819	9.819	(0.912)	96259	50.0000	50.885
	49 Tetrachloroethene	166	9.939	9.939	(0.923)	78941	50.0000	50.119
	50 Chlorodibromomethane	129	10.150	10.150	(0.943)	69840	50.0000	54.196
	51 1,2-Dibromoethane	107	10.372	10.372	(1.361)	57746	50.0000	52.556
	52 d5-Chlorobenzene	117	10.764	10.764	(1.000)	148719	50.0000	
	53 Chlorobenzene	112	10.814	10.814	(1.005)	161814	50.0000	51.181
	54 Ethyl Benzene	91	10.844	10.844	(1.007)	286930	50.0000	54.874
	55 1,1,1,2-Tetrachloroethane	131	10.834	10.834	(1.007)	61065	50.0000	50.912
	56 m,p-xylene	106	10.924	10.924	(1.015)	228698	100.000	106.56
	57 o-Xylene	106	11.407	11.407	(1.060)	111980	50.0000	51.050
	58 Styrene	104	11.437	11.437	(1.063)	177759	50.0000	52.962
	59 Isopropyl Benzene	105	11.789	11.789	(0.877)	293402	50.0000	52.879
	60 Bromoform	173	11.849	11.849	(0.881)	43928	50.0000	50.922
	61 1,1,2,2-Tetrachloroethane	83	11.970	11.970	(0.890)	68605	50.0000	50.729
	62 4-Bromofluorobenzene	95	12.090	12.090	(1.123)	84713	50.0000	49.978
	63 1,2,3-Trichloropropane	110	12.140	12.140	(0.903)	16473	50.0000	51.487

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.191	12.191	(0.907)	24391	50.0000	51.008
66 N-Propyl Benzene	91	12.251	12.251	(0.911)	339761	50.0000	52.347
67 Bromobenzene	156	12.331	12.331	(0.917)	79062	50.0000	49.396
68 1,3,5-Trimethyl Benzene	105	12.422	12.422	(0.924)	236424	50.0000	53.885
69 2-Chloro Toluene	91	12.482	12.482	(0.928)	225680	50.0000	52.393
70 4-Chloro Toluene	91	12.522	12.522	(0.931)	219138	50.0000	51.098
71 T-Butyl Benzene	119	12.834	12.834	(0.954)	217001	50.0000	53.918
72 1,2,4-Trimethylbenzene	105	12.874	12.874	(0.957)	233072	50.0000	53.734
73 S-Butyl Benzene	105	13.075	13.075	(0.972)	311373	50.0000	52.936
74 4-Isopropyl Toluene	119	13.226	13.226	(0.984)	239743	50.0000	54.378
75 1,3-Dichlorobenzene	146	13.366	13.366	(0.994)	138353	50.0000	49.642
* 76 d4-1,4-Dichlorobenzene	152	13.447	13.447	(1.000)	84322	50.0000	
77 1,4-Dichlorobenzene	146	13.487	13.487	(1.003)	134342	50.0000	49.706
78 N-Butyl Benzene	91	13.698	13.698	(1.019)	241004	50.0000	54.541
; 79 d4-1,2-Dichlorobenzene	152	13.899	13.899	(1.034)	78133	50.0000	50.560
80 1,2-Dichlorobenzene	146	13.929	13.929	(1.036)	125518	50.0000	49.344
81 1,2-Dibromo 3-Chloropropane	75	14.834	14.834	(1.103)	13050	50.0000	50.815
82 1,2,4-Trichlorobenzene	180	15.879	15.879	(1.181)	88740	50.0000	52.485
83 Hexachloro 1,3-Butadiene	225	16.030	16.030	(1.192)	56061	50.0000	50.779
84 Naphthalene	128	16.201	16.201	(1.205)	152830	50.0000	52.909
85 1,2,3-Trichlorobenzene	180	16.492	16.492	(1.226)	78218	50.0000	51.206

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0500106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD50
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	113395	0.00
34 1,4-Difluorobenze	160565	80282	321130	160565	0.00
52 d5-Chlorobenzene	148719	74360	297438	148719	0.00
76 d4-1,4-Dichlorobe	84322	42161	168644	84322	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.61	0.00
34 1,4-Difluorobenze	7.62	7.12	8.12	7.62	0.00
52 d5-Chlorobenzene	10.76	10.26	11.26	10.76	0.00
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.45	0.00

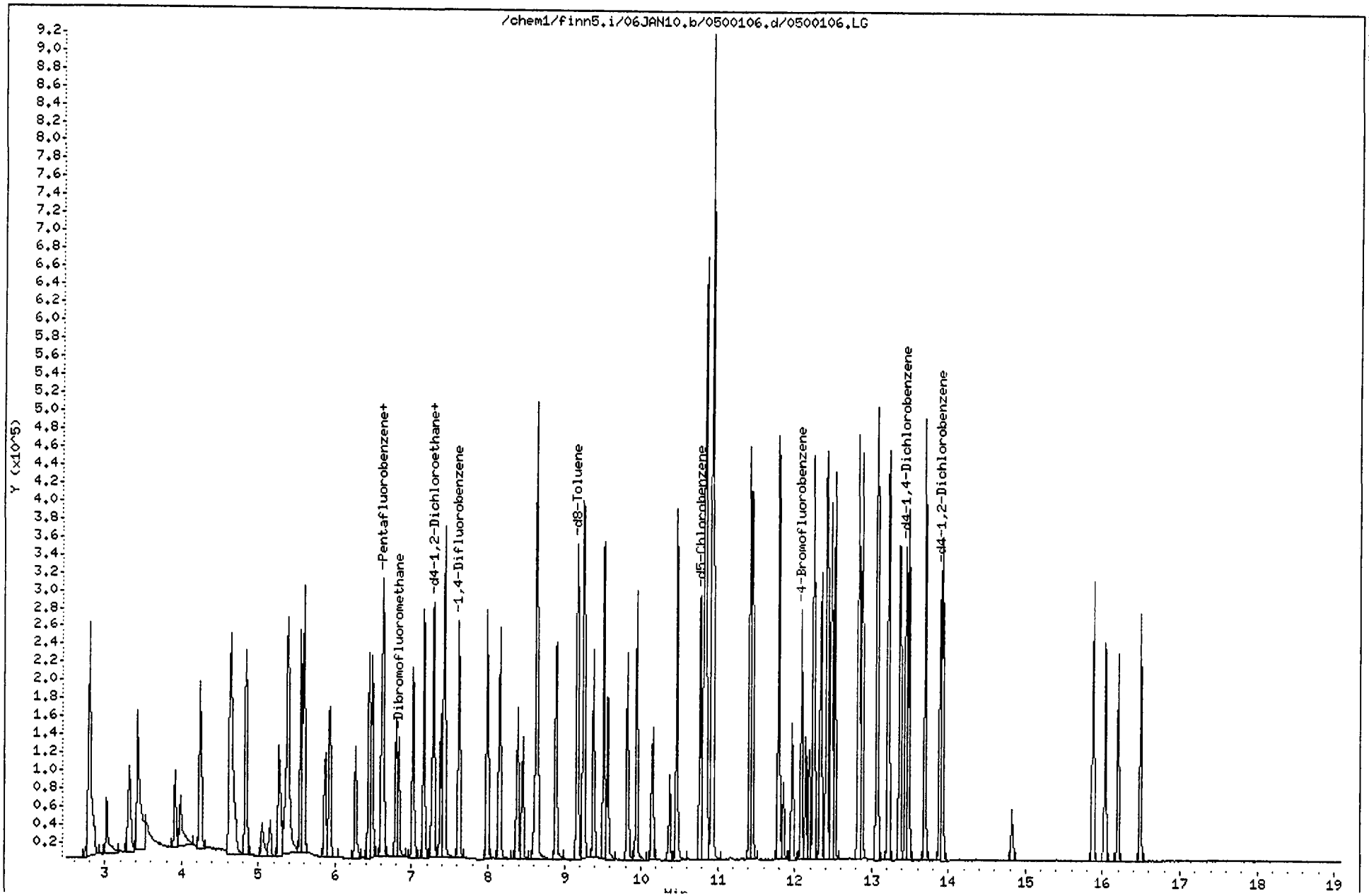
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/0500106.d
Date : 06-JAN-2010 12:28
Client ID: VSTD50
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/1000106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD100
Inj Date : 06-JAN-2010 12:54
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 12:54 Cal File: 1000106.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.035	3.035	(0.458)	165093	100.000	110.46
2 Chloromethane	50	3.327	3.327	(0.502)	283944	100.000	95.613
3 Vinyl Chloride	62	3.437	3.437	(0.519)	289980	100.000	102.23
4 Bromomethane	94	3.919	3.919	(0.592)	147942	100.000	123.48
5 Chloroethane	64	3.990	3.990	(0.602)	178110	100.000	108.22
6 Trichlorofluoromethane	101	4.251	4.251	(0.642)	256847	100.000	92.720
7 Acrolein	56	4.643	4.643	(0.701)	127681	500.000	472.18
8 112Trichloro122Trifluoroethane	101	4.653	4.653	(0.703)	172678	100.000	92.786
9 Acetone	43	4.693	4.693	(0.709)	257869	500.000	455.00
10 1,1-Dichloroethene	96	4.844	4.844	(0.731)	137971	100.000	96.436
11 Bromoethane	108	5.065	5.065	(0.765)	83771	100.000	109.43
12 Iodomethane	142	5.166	5.166	(0.780)	94935	100.000	106.76
13 Methylene Chloride	84	5.276	5.276	(0.797)	158843	100.000	106.96
14 Acrylonitrile	53	5.367	5.367	(0.810)	44759	100.000	100.23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.407	5.407	(0.816)	339380	100.000	96.829
15 Carbon Disulfide	76	5.387	5.387	(0.813)	439234	100.000	109.99
17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.839)	145516	100.000	98.913
18 Vinyl Acetate	43	5.879	5.879	(0.888)	339419	100.000	104.47
19 1,1-Dichloroethane	63	5.940	5.940	(0.897)	301511	100.000	100.02
20 2-Butanone	43	6.281	6.281	(0.948)	360665	500.000	499.97
21 2,2-Dichloropropane	77	6.462	6.462	(0.976)	250922	100.000	99.544
22 Cis-1,2-Dichloroethene	96	6.502	6.502	(0.982)	148227	100.000	98.945
* 23 Pentafluorobenzene	168	6.623	6.623	(1.000)	123198	50.0000	
24 Chloroform	83	6.643	6.643	(1.003)	276711	100.000	98.859
26 Bromochloromethane	128	6.804	6.804	(1.027)	72687	100.000	104.23
$ 25 Dibromofluoromethane	111	6.844	6.844	(1.033)	70845	50.0000	49.880
27 1,1,1-Trichloroethane	97	7.035	7.035	(1.062)	256120	100.000	100.93
29 1,1-Dichloropropene	75	7.176	7.176	(0.939)	219082	100.000	98.717
30 Carbon Tetrachloride	117	7.286	7.286	(0.954)	237419	100.000	101.15
$ 31 d4-1,2-Dichloroethane	65	7.306	7.306	(1.103)	89581	50.0000	47.482
32 1,2-Dichloroethane	62	7.397	7.397	(0.968)	229777	100.000	96.705
33 Benzene	78	7.437	7.437	(0.974)	504267	100.000	99.399
* 34 1,4-Difluorobenzene	114	7.638	7.638	(1.000)	174397	50.0000	
35 Trichloroethene	95	8.010	8.010	(1.049)	159650	100.000	98.500
36 1,2-Dichloropropane	63	8.171	8.171	(1.070)	159461	100.000	98.495
37 Bromodichloromethane	83	8.402	8.402	(1.100)	199904	100.000	99.730
39 Dibromomethane	93	8.472	8.472	(1.109)	91529	100.000	97.433
40 2-Chloroethyl Vinyl Ether	63	8.623	8.623	(1.129)	57691	100.000	103.80
41 4-Methyl-2-Pentanone	58	8.653	8.653	(1.133)	238914	500.000	506.04
42 Cis 1,3-dichloropropene	75	8.904	8.904	(1.166)	232116	100.000	103.94
$ 43 d8-Toluene	98	9.186	9.186	(1.203)	202560	50.0000	49.015
44 Toluene	92	9.266	9.266	(1.213)	318610	100.000	98.757
45 Trans 1,3-Dichloropropene	75	9.397	9.397	(1.230)	207640	100.000	106.39
46 2-Hexanone	43	9.527	9.527	(0.884)	521093	500.000	490.07
47 1,1,2-Trichloroethane	97	9.578	9.578	(1.254)	107147	100.000	100.37
48 1,3-Dichloropropane	76	9.839	9.839	(0.912)	202106	100.000	100.29
49 Tetrachloroethene	166	9.960	9.960	(0.924)	163999	100.000	97.742
50 Chlorodibromomethane	129	10.161	10.161	(0.942)	149815	100.000	109.13
51 1,2-Dibromoethane	107	10.392	10.392	(1.361)	125865	100.000	105.47
52 d5-Chlorobenzene	117	10.784	10.784	(1.000)	158426	50.0000	
53 Chlorobenzene	112	10.824	10.824	(1.004)	336729	100.000	99.980
54 Ethyl Benzene	91	10.854	10.854	(1.007)	551044	100.000	98.927
55 1,1,1,2-Tetrachloroethane	131	10.854	10.854	(1.007)	131090	100.000	102.60
56 m,p-xylene	106	10.934	10.934	(1.014)	487969	200.000	213.44
57 o-Xylene	106	11.427	11.427	(1.060)	238377	100.000	102.02
58 Styrene	104	11.457	11.457	(1.062)	374946	100.000	104.87
59 Isopropyl Benzene	105	11.809	11.809	(0.877)	567688	100.000	94.740
60 Bromoform	173	11.869	11.869	(0.881)	102058	100.000	109.55
61 1,1,2,2-Tetrachloroethane	83	11.990	11.990	(0.890)	150490	100.000	103.04
62 4-Bromofluorobenzene	95	12.100	12.100	(1.122)	90427	50.0000	50.080
63 1,2,3-Trichloropropane	110	12.160	12.160	(0.903)	35227	100.000	101.95

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.211	12.211	(0.907)	52842	100.000	102.32
66 N-Propyl Benzene	91	12.261	12.261	(0.910)	611427	100.000	87.230
67 Bromobenzene	156	12.351	12.351	(0.917)	170636	100.000	98.718
68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.923)	490052	100.000	103.42
69 2-Chloro Toluene	91	12.492	12.492	(0.928)	443645	100.000	95.371
70 4-Chloro Toluene	91	12.542	12.542	(0.931)	487558	100.000	105.27
71 T-Butyl Benzene	119	12.844	12.844	(0.954)	446221	100.000	102.66
72 1,2,4-Trimethylbenzene	105	12.894	12.894	(0.957)	475190	100.000	101.44
73 S-Butyl Benzene	105	13.095	13.095	(0.972)	584384	100.000	91.996
74 4-Isopropyl Toluene	119	13.236	13.236	(0.983)	487440	100.000	102.38
75 1,3-Dichlorobenzene	146	13.387	13.387	(0.994)	291800	100.000	96.949
* 76 d4-1,4-Dichlorobenzene	152	13.467	13.467	(1.000)	91063	50.0000	
77 1,4-Dichlorobenzene	146	13.507	13.507	(1.003)	285995	100.000	97.983
78 N-Butyl Benzene	91	13.718	13.718	(1.019)	484441	100.000	101.52
; 79 d4-1,2-Dichlorobenzene	152	13.909	13.909	(1.033)	83591	50.0000	50.087
80 1,2-Dichlorobenzene	146	13.939	13.939	(1.035)	268027	100.000	97.567
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.102)	29021	100.000	104.64
82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.180)	182349	100.000	99.866
83 Hexachloro 1,3-Butadiene	225	16.050	16.050	(1.192)	115672	100.000	97.017
84 Naphthalene	128	16.221	16.221	(1.204)	324036	100.000	103.87
85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.225)	162715	100.000	98.636

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 1000106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD100
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	123198	8.65
34 1,4-Difluorobenze	160565	80282	321130	174397	8.61
52 d5-Chlorobenzene	148719	74360	297438	158426	6.53
76 d4-1,4-Dichlorobe	84322	42161	168644	91063	7.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.62	0.15
34 1,4-Difluorobenze	7.62	7.12	8.12	7.64	0.26
52 d5-Chlorobenzene	10.76	10.26	11.26	10.78	0.19
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.47	0.15

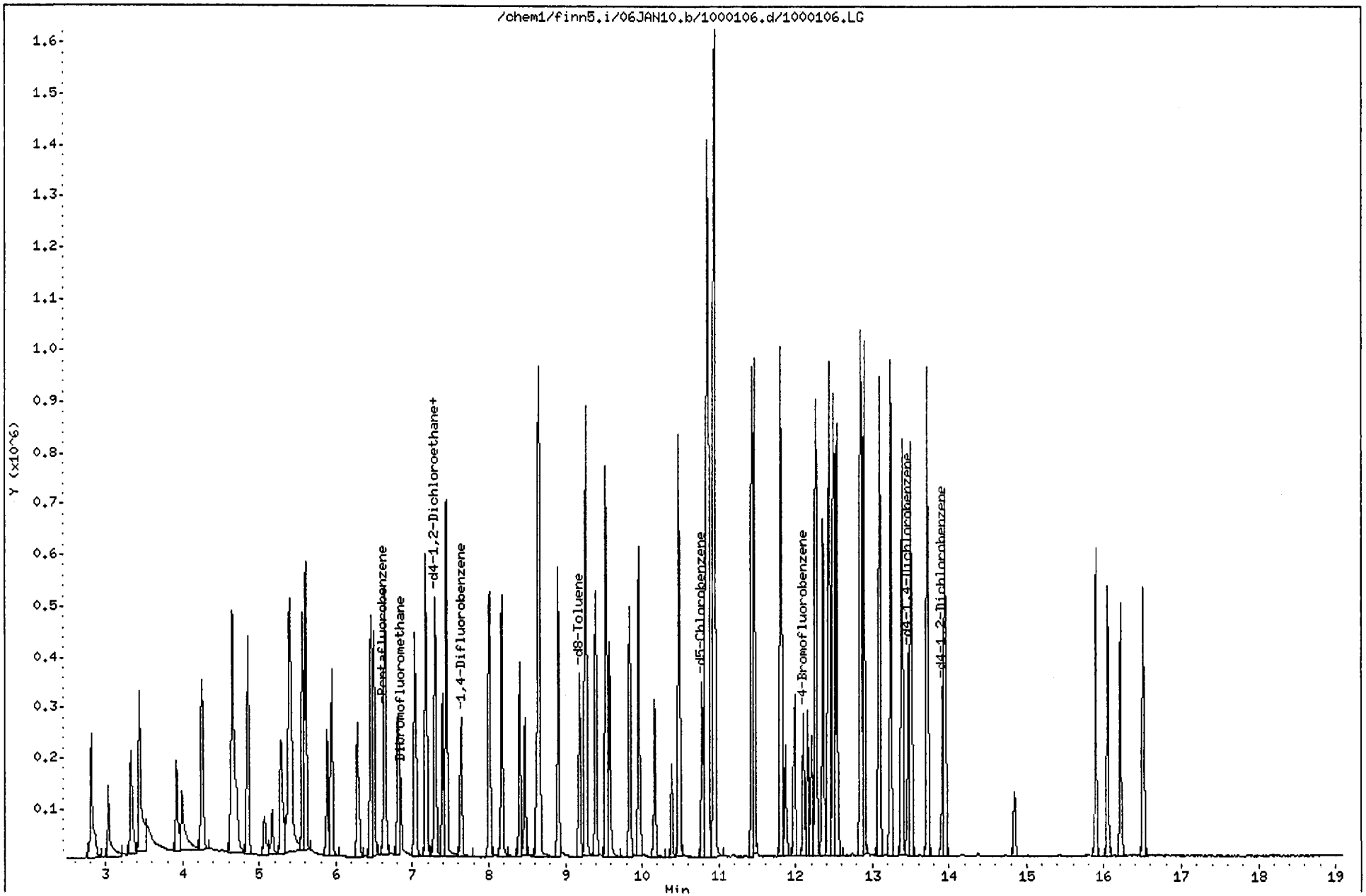
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/1000106.d
Date : 06-JAN-2010 12:54
Client ID: VSTD100
Sample Info: IC0106,5,5,0

Instrument: finn5.i

Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/1500106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD150
Inj Date : 06-JAN-2010 13:21
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:21 Cal File: 1500106.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.025	3.025	(0.457)	251626	150.000	153.04
2 Chloromethane	50	3.316	3.316	(0.502)	448689	150.000	137.33
3 Vinyl Chloride	62	3.427	3.427	(0.518)	426566	150.000	136.69
4 Bromomethane	94	3.909	3.909	(0.591)	264874	150.000	200.96
5 Chloroethane	64	3.980	3.980	(0.602)	278395	150.000	153.76
6 Trichlorofluoromethane	101	4.241	4.241	(0.641)	380173	150.000	124.75
7 Acrolein	56	4.633	4.633	(0.701)	206390	750.000	693.78
8 112Trichloro122Trifluoroethane	101	4.643	4.643	(0.702)	269276	150.000	131.52
9 Acetone	43	4.693	4.693	(0.710)	408075	750.000	654.48
10 1,1-Dichloroethene	96	4.834	4.834	(0.731)	217093	150.000	137.92
11 Bromoethane	108	5.055	5.055	(0.764)	138926	150.000	164.96
12 Iodomethane	142	5.156	5.156	(0.780)	166819	150.000	170.53
13 Methylene Chloride	84	5.276	5.276	(0.798)	243924	150.000	149.31
14 Acrylonitrile	53	5.357	5.357	(0.810)	72510	150.000	147.59

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	ON-COL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.397	5.397	(0.816)	543401	150.000	140.92
15 Carbon Disulfide	76	5.377	5.377	(0.813)	767925	150.000	174.80
17 Trans-1,2-Dichloroethene	96	5.558	5.558	(0.840)	233008	150.000	143.97
18 Vinyl Acetate	43	5.879	5.879	(0.889)	516321	150.000	144.46
19 1,1-Dichloroethane	63	5.929	5.929	(0.897)	477089	150.000	143.86
20 2-Butanone	43	6.281	6.281	(0.950)	568732	750.000	716.63
21 2,2-Dichloropropane	77	6.452	6.452	(0.976)	395764	150.000	142.71
22 Cis-1,2-Dichloroethene	96	6.492	6.492	(0.982)	240722	150.000	146.06
* 23 Pentafluorobenzene	168	6.613	6.613	(1.000)	135536	50.0000	
24 Chloroform	83	6.633	6.633	(1.003)	444757	150.000	144.43
26 Bromochloromethane	128	6.804	6.804	(1.029)	120347	150.000	156.86
; 25 Dibromofluoromethane	111	6.834	6.834	(1.033)	76926	50.0000	49.231
27 1,1,1-Trichloroethane	97	7.025	7.025	(1.062)	404601	150.000	144.92
29 1,1-Dichloropropene	75	7.166	7.166	(0.939)	347348	150.000	142.72
30 Carbon Tetrachloride	117	7.286	7.286	(0.955)	368536	150.000	143.18
; 31 d4-1,2-Dichloroethane	65	7.296	7.296	(1.103)	94821	50.0000	45.684
32 1,2-Dichloroethane	62	7.387	7.387	(0.968)	363555	150.000	139.52
33 Benzene	78	7.437	7.437	(0.975)	687890	150.000	123.64
34 1,4-Difluorobenzene	114	7.628	7.628	(1.000)	191249	50.0000	
35 Trichloroethene	95	8.000	8.000	(1.049)	254298	150.000	143.07
36 1,2-Dichloropropane	63	8.161	8.161	(1.070)	254379	150.000	143.28
37 Bromodichloromethane	83	8.392	8.392	(1.100)	322214	150.000	146.58
39 Dibromomethane	93	8.462	8.462	(1.109)	149495	150.000	145.12
40 2-Chloroethyl Vinyl Ether	63	8.613	8.613	(1.129)	96235	150.000	157.89
41 4-Methyl-2-Pentanone	58	8.643	8.643	(1.133)	389044	750.000	751.42
42 Cis 1,3-dichloropropene	75	8.894	8.894	(1.166)	377458	150.000	154.13
43 d8-Toluene	98	9.176	9.176	(1.203)	222437	50.0000	49.082
44 Toluene	92	9.256	9.256	(1.213)	505481	150.000	142.87
45 Trans 1,3-Dichloropropene	75	9.387	9.387	(1.231)	337871	150.000	157.86
46 2-Hexanone	43	9.527	9.527	(0.884)	666049	750.000	570.38
47 1,1,2-Trichloroethane	97	9.568	9.568	(1.254)	173989	150.000	148.62
48 1,3-Dichloropropane	76	9.829	9.829	(0.912)	326372	150.000	147.48
49 Tetrachloroethene	166	9.949	9.949	(0.924)	264803	150.000	143.71
50 Chlorodibromomethane	129	10.161	10.161	(0.943)	247215	150.000	163.98
51 1,2-Dibromoethane	107	10.382	10.382	(1.361)	201800	150.000	154.20
52 d5-Chlorobenzene	117	10.774	10.774	(1.000)	173984	50.0000	
53 Chlorobenzene	112	10.824	10.824	(1.005)	510186	150.000	137.94
54 Ethyl Benzene	91	10.854	10.854	(1.007)	712803	150.000	116.52
55 1,1,1,2-Tetrachloroethane	131	10.844	10.844	(1.007)	217644	150.000	155.11
56 m,p-xylene	106	10.934	10.934	(1.015)	668382	300.000	266.21
57 o-Xylene	106	11.427	11.427	(1.061)	386538	150.000	150.63
58 Styrene	104	11.447	11.447	(1.062)	561280	150.000	142.94
59 Isopropyl Benzene	105	11.799	11.799	(0.877)	734166	150.000	109.07
60 Bromoform	173	11.859	11.859	(0.881)	173065	150.000	165.38
61 1,1,2,2-Tetrachloroethane	83	11.980	11.980	(0.890)	248159	150.000	151.26
62 4-Bromofluorobenzene	95	12.100	12.100	(1.123)	100594	50.0000	50.729
63 1,2,3-Trichloropropane	110	12.150	12.150	(0.903)	57444	150.000	148.00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.201	12.201	(0.907)	87932	150.000	151.59
66 N-Propyl Benzene	91	12.261	12.261	(0.911)	768786	150.000	97.641
67 Bromobenzene	156	12.341	12.341	(0.917)	281266	150.000	144.86
68 1,3,5-Trimethyl Benzene	105	12.432	12.432	(0.924)	655333	150.000	123.12
69 2-Chloro Toluene	91	12.492	12.492	(0.928)	651227	150.000	124.63
70 4-Chloro Toluene	91	12.532	12.532	(0.931)	632153	150.000	121.51
71 T-Butyl Benzene	119	12.834	12.834	(0.954)	652687	150.000	133.68
72 1,2,4-Trimethylbenzene	105	12.884	12.884	(0.957)	644714	150.000	122.53
73 S-Butyl Benzene	105	13.085	13.085	(0.972)	757942	150.000	106.22
74 4-Isopropyl Toluene	119	13.236	13.236	(0.984)	656132	150.000	122.68
75 1,3-Dichlorobenzene	146	13.377	13.377	(0.994)	471125	150.000	139.35
76 d4-1,4-Dichlorobenzene	152	13.457	13.457	(1.000)	102290	50.0000	
77 1,4-Dichlorobenzene	146	13.497	13.497	(1.003)	453700	150.000	138.38
78 N-Butyl Benzene	91	13.708	13.708	(1.019)	659861	150.000	123.10
79 d4-1,2-Dichlorobenzene	152	13.899	13.899	(1.033)	94563	50.0000	50.442
80 1,2-Dichlorobenzene	146	13.939	13.939	(1.036)	429534	150.000	139.20
81 1,2-Dibromo 3-Chloropropane	75	14.844	14.844	(1.103)	47719	150.000	153.17
82 1,2,4-Trichlorobenzene	180	15.889	15.889	(1.181)	288234	150.000	140.53
83 Hexachloro 1,3-Butadiene	225	16.040	16.040	(1.192)	197472	150.000	147.45
84 Naphthalene	128	16.211	16.211	(1.205)	481263	150.000	137.34
85 1,2,3-Trichlorobenzene	180	16.502	16.502	(1.226)	255716	150.000	138.00

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 1500106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD150
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	135536	19.53
34 1,4-Difluorobenze	160565	80282	321130	191249	19.11
52 d5-Chlorobenzene	148719	74360	297438	173984	16.99
76 d4-1,4-Dichlorobe	84322	42161	168644	102290	21.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.61	0.00
34 1,4-Difluorobenze	7.62	7.12	8.12	7.63	0.13
52 d5-Chlorobenzene	10.76	10.26	11.26	10.77	0.09
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.46	0.07

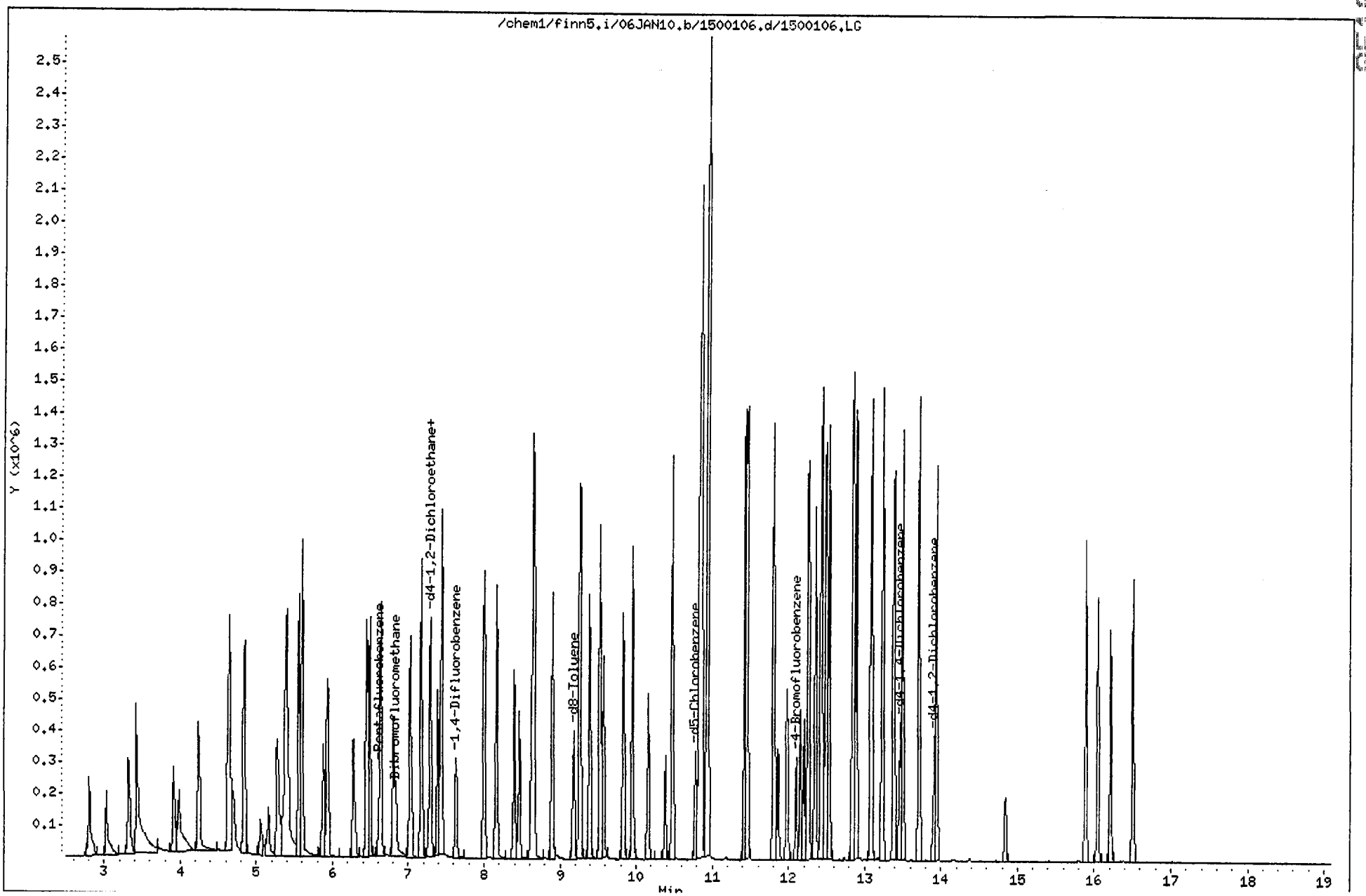
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/1500106.d
Date : 06-JAN-2010 13:21
Client ID: VSTD150
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/2000106.d
Lab Smp Id: IC0106 Client Smp ID: VSTD200
Inj Date : 06-JAN-2010 13:53
Operator : PB Inst ID: finn5.i
Smp Info : IC0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 09:56 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.015	3.015	(0.457)	349024	200.000	205.14
2 Chloromethane	50	3.306	3.306	(0.501)	606022	200.000	179.26
3 Vinyl Chloride	62	3.417	3.417	(0.518)	555782	200.000	172.12
4 Bromomethane	94	3.889	3.889	(0.589)	356608	200.000	261.46
5 Chloroethane	64	3.960	3.960	(0.600)	369519	200.000	197.23
6 Trichlorofluoromethane	101	4.221	4.221	(0.639)	539705	200.000	171.14
7 Acrolein	56	4.623	4.623	(0.700)	295174	1000.00	958.90
8 112Trichloro122Trifluoroethane	101	4.623	4.623	(0.700)	388708	200.000	183.48
9 Acetone	43	4.673	4.673	(0.708)	566588	1000.00	878.18
10 1,1-Dichloroethene	96	4.824	4.824	(0.731)	289894	200.000	177.99
11 Bromoethane	108	5.045	5.045	(0.764)	195891	200.000	224.79
12 Iodomethane	142	5.136	5.136	(0.778)	241260	200.000	238.34
13 Methylene Chloride	84	5.256	5.256	(0.796)	326945	200.000	193.40
14 Acrylonitrile	53	5.347	5.347	(0.810)	103668	200.000	203.92

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.816)	704085	200.000	176.46
15 Carbon Disulfide	76	5.357	5.357	(0.811)	1041005	200.000	228.99
17 Trans-1,2-Dichloroethene	96	5.538	5.538	(0.839)	316769	200.000	189.14
18 Vinyl Acetate	43	5.859	5.859	(0.887)	635642	200.000	171.87
19 1,1-Dichloroethane	63	5.919	5.919	(0.896)	604398	200.000	176.12
20 2-Butanone	43	6.261	6.261	(0.948)	732518	1000.00	892.00
21 2,2-Dichloropropane	77	6.442	6.442	(0.976)	532635	200.000	185.62
22 Cis-1,2-Dichloroethene	96	6.472	6.472	(0.980)	329168	200.000	193.02
23 Pentafluorobenzene	168	6.603	6.603	(1.000)	140248	50.0000	
24 Chloroform	83	6.623	6.623	(1.003)	568756	200.000	178.49
26 Bromochloromethane	128	6.784	6.784	(1.027)	161995	200.000	204.05
25 Dibromofluoromethane	111	6.824	6.824	(1.033)	79736	50.0000	49.315
27 1,1,1-Trichloroethane	97	7.015	7.015	(1.062)	537856	200.000	186.18
29 1,1-Dichloropropene	75	7.156	7.156	(0.941)	471164	200.000	187.32
30 Carbon Tetrachloride	117	7.266	7.266	(0.955)	500445	200.000	188.12
31 d4-1,2-Dichloroethane	65	7.286	7.286	(1.103)	100577	50.0000	46.830
32 1,2-Dichloroethane	62	7.377	7.377	(0.970)	485255	200.000	180.20
33 Benzene	78	7.417	7.417	(0.975)	806197	200.000	140.22
34 1,4-Difluorobenzene	114	7.608	7.608	(1.000)	197651	50.0000	
35 Trichloroethene	95	7.980	7.980	(1.049)	342057	200.000	186.21
36 1,2-Dichloropropane	63	8.151	8.151	(1.071)	345585	200.000	188.34
37 Bromodichloromethane	83	8.382	8.382	(1.102)	430478	200.000	189.49
39 Dibromomethane	93	8.452	8.452	(1.111)	202047	200.000	189.78
40 2-Chloroethyl Vinyl Ether	63	8.603	8.603	(1.131)	139717	200.000	221.80
41 4-Methyl-2-Pentanone	58	8.633	8.633	(1.135)	542857	1000.00	1014.5
42 Cis 1,3-dichloropropene	75	8.884	8.884	(1.168)	493957	200.000	195.17
43 d8-Toluene	98	9.166	9.166	(1.205)	226603	50.0000	48.382
44 Toluene	92	9.246	9.246	(1.215)	626106	200.000	171.24
45 Trans 1,3-Dichloropropene	75	9.377	9.377	(1.232)	452268	200.000	204.47
46 2-Hexanone	43	9.517	9.517	(0.884)	800716	1000.00	665.55
47 1,1,2-Trichloroethane	97	9.558	9.558	(1.256)	241779	200.000	199.83
48 1,3-Dichloropropane	76	9.819	9.819	(0.912)	444067	200.000	194.76
49 Tetrachloroethene	166	9.939	9.939	(0.923)	361573	200.000	190.46
50 Chlorodibromomethane	129	10.140	10.140	(0.942)	341260	200.000	219.71
51 1,2-Dibromoethane	107	10.372	10.372	(1.363)	282904	200.000	209.17
52 d5-Chlorobenzene	117	10.764	10.764	(1.000)	179253	50.0000	
53 Chlorobenzene	112	10.804	10.804	(1.004)	620988	200.000	162.96
54 Ethyl Benzene	91	10.844	10.844	(1.007)	839896	200.000	133.26
55 1,1,1,2-Tetrachloroethane	131	10.834	10.834	(1.007)	304934	200.000	210.93
56 m,p-xylene	106	10.924	10.924	(1.015)	791866	400.000	306.12
57 o-Xylene	106	11.407	11.407	(1.060)	516262	200.000	195.27
58 Styrene	104	11.437	11.437	(1.063)	688738	200.000	170.25
59 Isopropyl Benzene	105	11.789	11.789	(0.877)	831715	200.000	112.57
60 Bromoform	173	11.849	11.849	(0.881)	253294	200.000	220.50
61 1,1,2,2-Tetrachloroethane	83	11.970	11.970	(0.890)	357554	200.000	198.55
62 4-Bromofluorobenzene	95	12.080	12.080	(1.122)	107013	50.0000	52.379
63 1,2,3-Trichloropropane	110	12.140	12.140	(0.903)	83185	200.000	195.25

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.191	12.191	(0.907)	128188	200.000	201.32
66 N-Propyl Benzene	91	12.241	12.241	(0.910)	866158	200.000	100.22
67 Bromobenzene	156	12.331	12.331	(0.917)	400290	200.000	187.81
68 1,3,5-Trimethyl Benzene	105	12.412	12.412	(0.923)	788973	200.000	135.04
69 2-Chloro Toluene	91	12.472	12.472	(0.928)	838064	200.000	146.11
70 4-Chloro Toluene	91	12.522	12.522	(0.931)	722603	200.000	126.54
71 T-Butyl Benzene	119	12.824	12.824	(0.954)	777677	200.000	145.11
72 1,2,4-Trimethylbenzene	105	12.874	12.874	(0.957)	756629	200.000	131.00
73 S-Butyl Benzene	105	13.075	13.075	(0.972)	899549	200.000	114.85
74 4-Isopropyl Toluene	119	13.216	13.216	(0.983)	784995	200.000	133.71
75 1,3-Dichlorobenzene	146	13.366	13.366	(0.994)	609007	200.000	164.10
76 d4-1,4-Dichlorobenzene	152	13.447	13.447	(1.000)	112283	50.0000	
77 1,4-Dichlorobenzene	146	13.487	13.487	(1.003)	582698	200.000	161.91
78 N-Butyl Benzene	91	13.698	13.698	(1.019)	765099	200.000	130.03
79 d4-1,2-Dichlorobenzene	152	13.889	13.889	(1.033)	102209	50.0000	49.669
80 1,2-Dichlorobenzene	146	13.929	13.929	(1.036)	571138	200.000	168.61
81 1,2-Dibromo 3-Chloropropane	75	14.824	14.824	(1.102)	70417	200.000	205.91
82 1,2,4-Trichlorobenzene	180	15.869	15.869	(1.180)	395734	200.000	175.77
83 Hexachloro 1,3-Butadiene	225	16.030	16.030	(1.192)	275574	200.000	187.45
84 Naphthalene	128	16.201	16.201	(1.205)	617602	200.000	160.57
85 1,2,3-Trichlorobenzene	180	16.482	16.482	(1.226)	362556	200.000	178.24

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 2000106.d
Lab Smp Id: IC0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: VSTD200
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	140248	23.68
34 1,4-Difluorobenze	160565	80282	321130	197651	23.10
52 d5-Chlorobenzene	148719	74360	297438	179253	20.53
76 d4-1,4-Dichlorobe	84322	42161	168644	112283	33.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.60	-0.15
34 1,4-Difluorobenze	7.62	7.12	8.12	7.61	-0.13
52 d5-Chlorobenzene	10.76	10.26	11.26	10.76	0.00
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.45	0.00

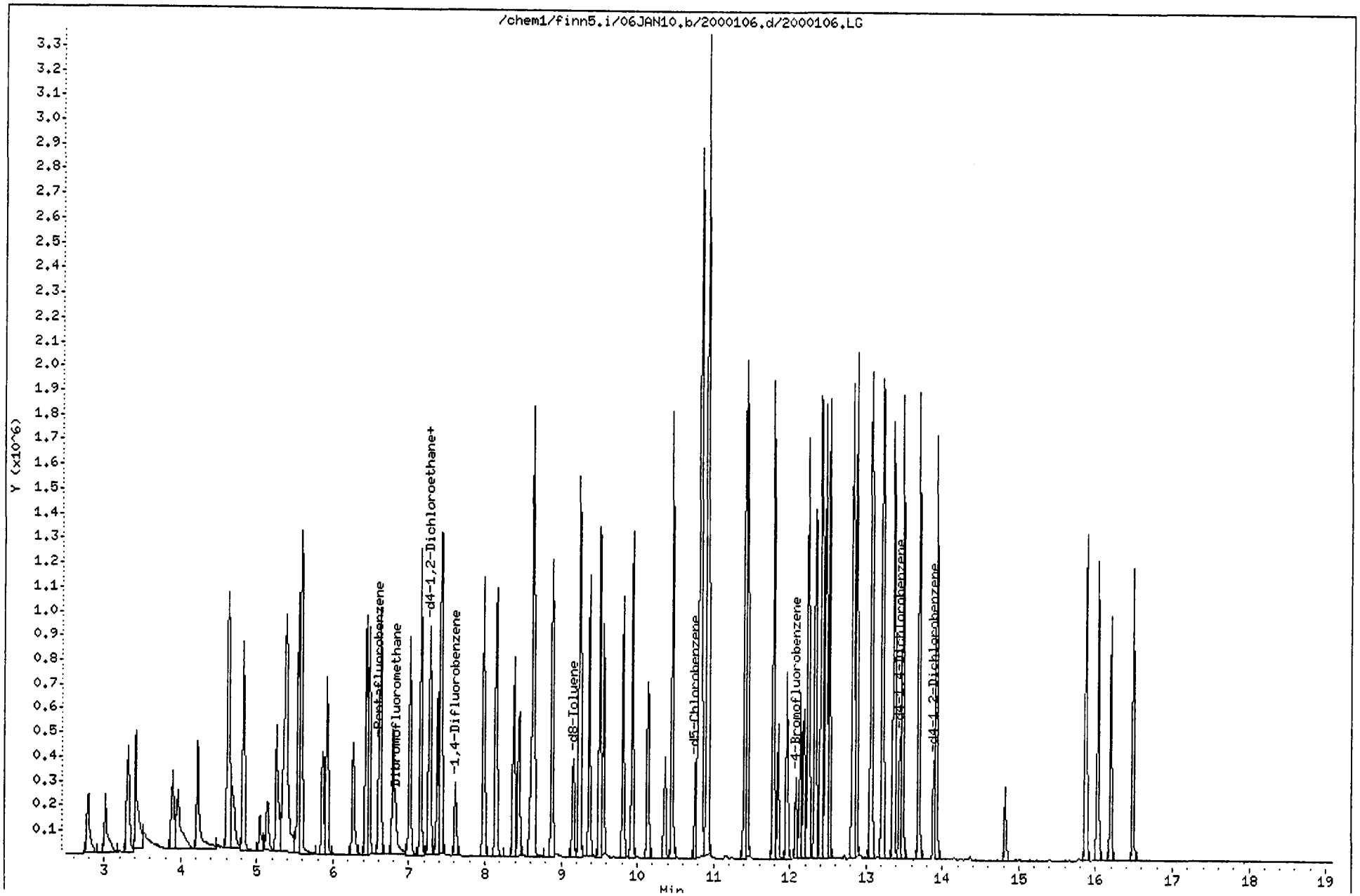
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/finn5.i/06JAN10.b/2000106.d
Date : 06-JAN-2010 13:53
Client ID: VSTD200
Sample Info: IC0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/06JAN10.b/ICV0106.d
Lab Smp Id: ICV0106 Client Smp ID: ICV0106
Inj Date : 06-JAN-2010 16:18
Operator : PB Inst ID: finn5.i
Smp Info : ICV0106,5,5,0
Misc Info : 09-
Comment :
Method : /chem1/finn5.i/06JAN10.b/s8260b.m
Meth Date : 13-Jan-2010 10:08 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.015	3.015	(0.456)	88039	65.0722	65.072
2 Chloromethane	50	3.306	3.306	(0.500)	143438	53.3550	53.355
3 Vinyl Chloride	62	3.427	3.417	(0.518)	163340	63.6114	63.611
4 Bromomethane	94	3.909	3.889	(0.591)	68810	63.4453	63.445
5 Chloroethane	64	3.980	3.960	(0.602)	90675	60.8631	60.863
6 Trichlorofluoromethane	101	4.241	4.221	(0.641)	139774	55.7383	55.738
7 Acrolein	56	4.623	4.623	(0.699)	66575	271.974	271.97
8 112Trichloro122Trifluoroethane	101	4.633	4.623	(0.701)	88050	52.2642	52.264
9 Acetone	43	4.673	4.673	(0.707)	128844	251.132	251.13
10 1,1-Dichloroethene	96	4.834	4.824	(0.731)	66935	51.6814	51.681
11 Bromoethane	108	5.045	5.045	(0.763)	39869	57.5349	57.535
12 Iodomethane	142	5.146	5.136	(0.778)	49450	61.4335	61.433
13 Methylene Chloride	84	5.266	5.256	(0.796)	84833	63.1055	63.105(R)
14 Acrylonitrile	53	5.347	5.347	(0.808)	21946	54.2868	54.287(Q)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
16 Methyl tert-Butyl Ether	73	5.387	5.387	(0.815)	160533	50.5957	50.596(Q)
15 Carbon Disulfide	76	5.367	5.357	(0.812)	208758	57.7480	57.748
17 Trans-1,2-Dichloroethene	96	5.548	5.538	(0.839)	68991	51.8041	51.804
18 Vinyl Acetate	43	5.869	5.859	(0.888)	155161	52.7572	52.757
19 1,1-Dichloroethane	63	5.929	5.919	(0.897)	145958	53.4859	53.486
20 2-Butanone	43	6.261	6.261	(0.947)	165103	252.826	252.83
21 2,2-Dichloropropane	77	6.442	6.442	(0.974)	117630	51.5497	51.550
22 Cis-1,2-Dichloroethene	96	6.482	6.472	(0.980)	66903	49.3337	49.334
23 Pentafluorobenzene	168	6.613	6.603	(1.000)	111526	50.0000	
24 Chloroform	83	6.623	6.623	(1.002)	131842	52.0323	52.032
26 Bromochloromethane	128	6.794	6.784	(1.027)	34000	53.8571	53.857
25 Dibromofluoromethane	111	6.824	6.824	(1.032)	65061	50.6019	50.602(Q)
27 1,1,1-Trichloroethane	97	7.015	7.015	(1.061)	121455	52.8703	52.870
29 1,1-Dichloropropene	75	7.156	7.156	(0.939)	103014	50.7258	50.726
30 Carbon Tetrachloride	117	7.276	7.266	(0.955)	108365	50.4530	50.453
31 d4-1,2-Dichloroethane	65	7.286	7.286	(1.102)	83343	48.7991	48.799
32 1,2-Dichloroethane	62	7.377	7.377	(0.968)	108635	49.9644	49.964
33 Benzene	78	7.427	7.417	(0.975)	242606	52.2599	52.260
34 1,4-Difluorobenzene	114	7.618	7.608	(1.000)	159585	50.0000	
35 Trichloroethene	95	7.990	7.980	(1.049)	73944	49.8559	49.856
36 1,2-Dichloropropane	63	8.151	8.151	(1.070)	74337	50.1776	50.178
37 Bromodichloromethane	83	8.382	8.382	(1.100)	92114	50.2202	50.220
39 Dibromomethane	93	8.452	8.452	(1.109)	42727	49.7046	49.705
40 2-Chloroethyl Vinyl Ether	63	8.603	8.603	(1.129)	27299	53.6755	53.675(Q)
41 4-Methyl-2-Pentanone	58	8.633	8.633	(1.133)	102671	237.651	237.65
42 Cis 1,3-dichloropropene	75	8.894	8.884	(1.168)	103774	50.7838	50.784
43 d8-Toluene	98	9.166	9.166	(1.203)	187636	49.6177	49.618
44 Toluene	92	9.246	9.246	(1.214)	147075	49.8190	49.819
45 Trans 1,3-Dichloropropene	75	9.377	9.377	(1.231)	89798	50.2812	50.281
46 2-Hexanone	43	9.517	9.517	(0.884)	247857	251.111	251.11
47 1,1,2-Trichloroethane	97	9.568	9.558	(1.256)	48694	49.8464	49.846
48 1,3-Dichloropropane	76	9.819	9.819	(0.912)	96079	51.3624	51.362
49 Tetrachloroethene	166	9.939	9.939	(0.923)	74241	47.6659	47.666
50 Chlorodibromomethane	129	10.150	10.140	(0.943)	67039	52.6085	52.608
51 1,2-Dibromoethane	107	10.372	10.372	(1.361)	55922	51.2090	51.209
52 d5-Chlorobenzene	117	10.764	10.764	(1.000)	147063	50.0000	
53 Chlorobenzene	112	10.814	10.804	(1.005)	155069	49.5999	49.600
54 Ethyl Benzene	91	10.844	10.844	(1.007)	277191	53.6084	53.608
55 1,1,1,2-Tetrachloroethane	131	10.834	10.834	(1.007)	59116	49.8426	49.842
56 m,p-xylene	106	10.924	10.924	(1.015)	215223	101.413	101.41
57 o-Xylene	106	11.417	11.407	(1.061)	107355	49.4931	49.493
58 Styrene	104	11.447	11.437	(1.063)	168241	50.6902	50.690
59 Isopropyl Benzene	105	11.789	11.789	(0.877)	283787	52.2436	52.244
60 Bromoform	173	11.859	11.849	(0.882)	42329	50.1213	50.121
61 1,1,2,2-Tetrachloroethane	83	11.970	11.970	(0.890)	66988	50.5959	50.596
62 4-Bromofluorobenzene	95	12.090	12.080	(1.123)	82936	49.4800	49.480
63 1,2,3-Trichloropropane	110	12.140	12.140	(0.903)	16179	51.6532	51.653

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
65 Trans-1,4-Dichloro 2-Butene	53	12.191	12.191	(0.907)	22782	48.6661	48.666
66 N-Propyl Benzene	91	12.251	12.241	(0.911)	323677	50.9391	50.939
67 Bromobenzene	156	12.341	12.331	(0.918)	74838	47.7608	47.761
68 1,3,5-Trimethyl Benzene	105	12.422	12.412	(0.924)	223863	52.1170	52.117
69 2-Chloro Toluene	91	12.482	12.472	(0.928)	209809	49.7534	49.753
70 4-Chloro Toluene	91	12.522	12.522	(0.931)	201468	47.9857	47.986
71 T-Butyl Benzene	119	12.834	12.824	(0.954)	211695	53.7281	53.728
72 1,2,4-Trimethylbenzene	105	12.874	12.874	(0.957)	213866	50.3638	50.364
73 S-Butyl Benzene	105	13.075	13.075	(0.972)	303934	52.7800	52.780
74 4-Isopropyl Toluene	119	13.226	13.216	(0.984)	221215	51.2516	51.252
75 1,3-Dichlorobenzene	146	13.377	13.366	(0.995)	122736	44.9832	44.983
76 d4-1,4-Dichlorobenzene	152	13.447	13.447	(1.000)	82551	50.0000	
77 1,4-Dichlorobenzene	146	13.487	13.487	(1.003)	117674	44.4726	44.472
78 N-Butyl Benzene	91	13.698	13.698	(1.019)	211724	48.9427	48.943
79 d4-1,2-Dichlorobenzene	152	13.899	13.889	(1.034)	76405	50.5022	50.502
80 1,2-Dichlorobenzene	146	13.929	13.929	(1.036)	115442	46.3564	46.356
81 1,2-Dibromo 3-Chloropropane	75	14.834	14.824	(1.103)	12084	48.0656	48.066
82 1,2,4-Trichlorobenzene	180	15.879	15.869	(1.181)	64392	38.9016	38.902(R)
83 Hexachloro 1,3-Butadiene	225	16.030	16.030	(1.192)	48830	45.1780	45.178
84 Naphthalene	128	16.201	16.201	(1.205)	132517	46.8607	46.861
85 1,2,3-Trichlorobenzene	180	16.492	16.482	(1.226)	60858	40.6960	40.696

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem1/finn5.i/06JAN10.b/ICV0106.d
Report Date: 13-Jan-2010 10:08

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: ICV0106.d
Lab Smp Id: ICV0106
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

Calibration Date: 06-JAN-2010
Calibration Time: 12:28
Client Smp ID: ICV0106
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	111526	-1.65
34 1,4-Difluorobenze	160565	80282	321130	159585	-0.61
52 d5-Chlorobenzene	148719	74360	297438	147063	-1.11
76 d4-1,4-Dichlorobe	84322	42161	168644	82551	-2.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.61	0.00
34 1,4-Difluorobenze	7.62	7.12	8.12	7.62	0.00
52 d5-Chlorobenzene	10.76	10.26	11.26	10.76	0.00
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.45	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: Client SDG: 06JAN10
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: ICV0106 Client Smp ID: ICV0106
Level: LOW Operator: PB
Data Type: MS DATA SampleType: LCS
SpikeList File: all.spk Quant Type: ISTD
Sublist File: voa.sub
Method File: /chem1/finn5.i/06JAN10.b/s8260b.m
Misc Info: 09-

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	65.072	130.14	53-148
2	Chloromethane	50.000	53.355	106.71	64-125
3	Vinyl Chloride	50.000	63.611	127.22	63-137
4	Bromomethane	50.000	63.445	126.89	57-136
5	Chloroethane	50.000	60.863	121.73	64-131
6	Trichlorofluoromet	50.000	55.738	111.48	69-132
7	Acrolein	250.00	271.97	108.79	54-137
8	112Trichloro122Tri	50.000	52.264	104.53	74-130
9	Acetone	250.00	251.13	100.45	60-131
10	1,1-Dichloroethene	50.000	51.681	103.36	75-126
11	Bromoethane	50.000	57.535	115.07	76-126
12	Iodomethane	50.000	61.433	122.87	65-139
13	Methylene Chloride	50.000	63.105	126.21*	70-123
15	Carbon Disulfide	50.000	57.748	115.50	71-129
14	Acrylonitrile	50.000	54.287	108.57	67-125
16	Methyl tert-Butyl	50.000	50.596	101.19	70-120
17	Trans-1,2-Dichloro	50.000	51.804	103.61	80-120
18	Vinyl Acetate	50.000	52.757	105.51	60-136
19	1,1-Dichloroethane	50.000	53.486	106.97	80-120
20	2-Butanone	250.00	252.83	101.13	70-120
21	2,2-Dichloropropan	50.000	51.550	103.10	74-123
22	Cis-1,2-Dichloroet	50.000	49.334	98.67	80-120
24	Chloroform	50.000	52.032	104.06	80-120
26	Bromochloromethane	50.000	53.857	107.71	80-120
27	1,1,1-Trichloroeth	50.000	52.870	105.74	77-121
29	1,1-Dichloropropen	50.000	50.726	101.45	80-120
30	Carbon Tetrachlori	50.000	50.453	100.91	77-122
32	1,2-Dichloroethane	50.000	49.964	99.93	76-120
33	Benzene	50.000	52.260	104.52	80-120
35	Trichloroethene	50.000	49.856	99.71	80-120
36	1,2-Dichloropropan	50.000	50.178	100.36	80-120
37	Bromodichlorometha	50.000	50.220	100.44	77-121
39	Dibromomethane	50.000	49.705	99.41	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	53.675	107.35	10-191
41 4-Methyl-2-Pentano	250.00	237.65	95.06	67-120
42 Cis 1,3-dichloropr	50.000	50.784	101.57	74-120
44 Toluene	50.000	49.819	99.64	80-120
45 Trans 1,3-Dichloro	50.000	50.281	100.56	65-120
46 2-Hexanone	250.00	251.11	100.44	65-130
47 1,1,2-Trichloroeth	50.000	49.846	99.69	80-120
48 1,3-Dichloropropan	50.000	51.362	102.72	80-120
49 Tetrachloroethene	50.000	47.666	95.33	80-121
50 Chlorodibromometha	50.000	52.608	105.22	64-120
51 1,2-Dibromoethane	50.000	51.209	102.42	75-120
53 Chlorobenzene	50.000	49.600	99.20	80-120
55 1,1,1,2-Tetrachlor	50.000	49.842	99.69	69-121
54 Ethyl Benzene	50.000	53.608	107.22	80-127
56 m,p-xylene	100.00	101.41	101.41	80-125
57 o-Xylene	50.000	49.493	98.99	78-120
58 Styrene	50.000	50.690	101.38	80-123
59 Isopropyl Benzene	50.000	52.244	104.49	80-127
60 Bromoform	50.000	50.121	100.24	60-120
61 1,1,2,2-Tetrachlor	50.000	50.596	101.19	74-120
63 1,2,3-Trichloropro	50.000	51.653	103.31	72-121
65 Trans-1,4-Dichloro	50.000	48.666	97.33	65-126
66 N-Propyl Benzene	50.000	50.939	101.88	80-132
67 Bromobenzene	50.000	47.761	95.52	80-120
68 1,3,5-Trimethyl Be	50.000	52.117	104.23	80-125
69 2-Chloro Toluene	50.000	49.753	99.51	80-125
70 4-Chloro Toluene	50.000	47.986	95.97	80-127
71 T-Butyl Benzene	50.000	53.728	107.46	87-122
72 1,2,4-Trimethylben	50.000	50.364	100.73	80-126
73 S-Butyl Benzene	50.000	52.780	105.56	80-134
74 4-Isopropyl Toluen	50.000	51.252	102.50	80-131
75 1,3-Dichlorobenzen	50.000	44.983	89.97	80-120
77 1,4-Dichlorobenzen	50.000	44.472	88.95	80-120
78 N-Butyl Benzene	50.000	48.943	97.89	80-138
80 1,2-Dichlorobenzen	50.000	46.356	92.71	80-120
81 1,2-Dibromo 3-Chlo	50.000	48.066	96.13	59-120
82 1,2,4-Trichloroben	50.000	38.902	77.80*	78-130
83 Hexachloro 1,3-But	50.000	45.178	90.36	76-129
84 Naphthalene	50.000	46.861	93.72	66-120
85 1,2,3-Trichloroben	50.000	40.696	81.39	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	50.602	101.20	30-160

	SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$	31 d4-1,2-Dichloroeth	50.000	48.799	97.60	75-152
$	43 d8-Toluene	50.000	49.618	99.24	82-115
$	62 4-Bromofluorobenze	50.000	49.480	98.96	64-120
$	79 d4-1,2-Dichloroben	50.000	50.502	101.00	80-120

Data File: /chem1/finn5.i/06JAN10.b/ICV0106.d

Date : 06-JAN-2010 16:18

Client ID: ICV0106

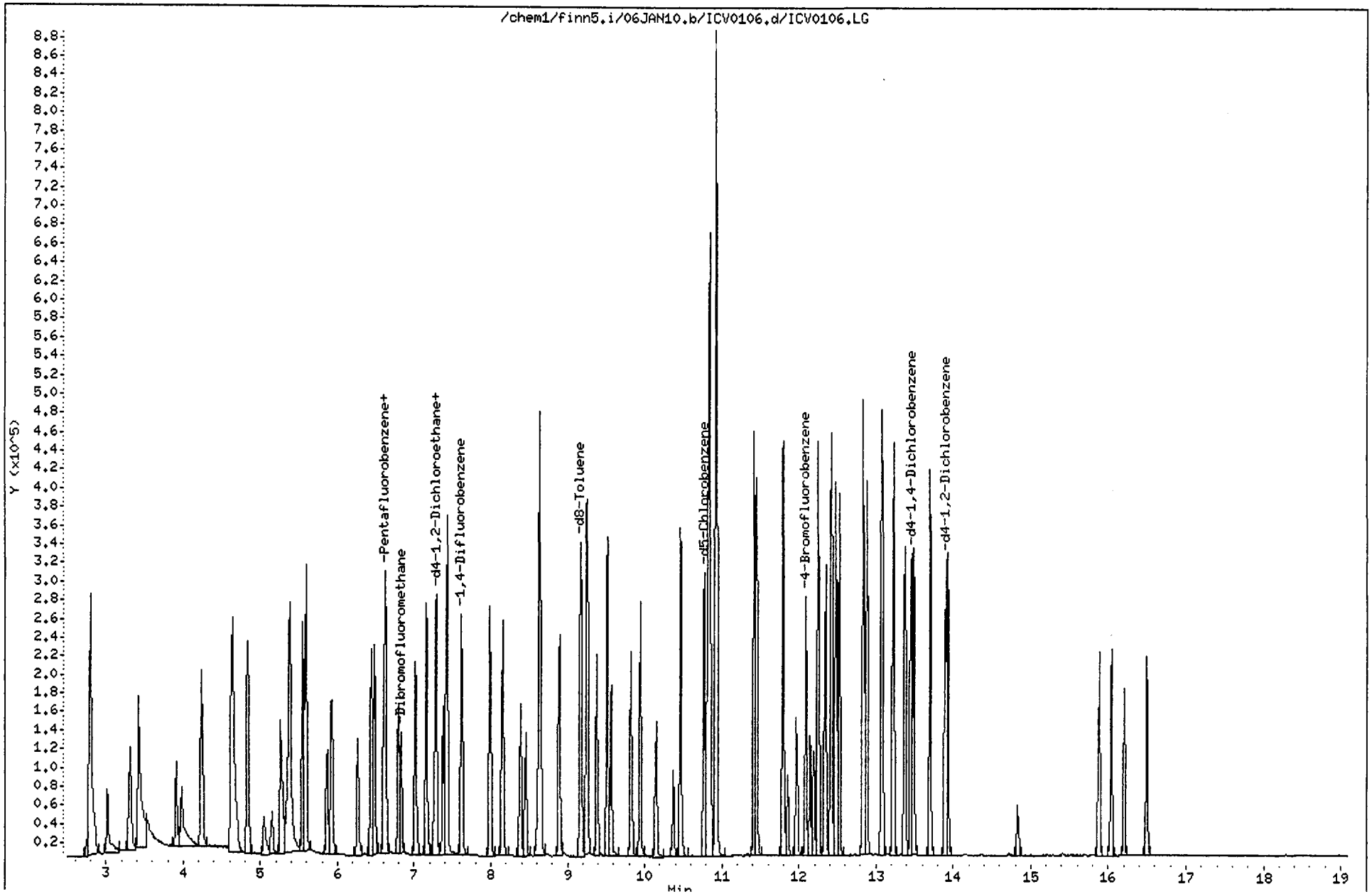
Sample Info: ICV0106,5,5,0

Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Cont. Calib. Date: 01/18/10

Init. Calib. Date: 01/06/10 Cont. Calib. Time: 1041

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Chloromethane	1.205	1.132	0.100	AVRG	-6.0
Vinyl Chloride	1.151	1.231	0.010	AVRG	7.0
Bromomethane	0.486	0.484	0.010	AVRG	-0.4
Chloroethane	0.668	0.753	0.010	AVRG	12.7
Trichlorofluoromethane	1.124	1.190	0.010	AVRG	5.9
Acrolein	0.110	0.112	0.010	AVRG	1.8
112Trichloro122Trifluoroetha	0.755	0.745	0.010	AVRG	-1.3
Acetone	0.230	0.218	0.010	AVRG	-5.2
1,1-Dichloroethene	0.581	0.551	0.010	AVRG	-5.2
Bromoethane	0.311	0.360	0.010	AVRG	15.8
Iodomethane	0.361	0.410	0.010	AVRG	13.6
Methylene Chloride	50.000	51.926	0.010	LINR	3.8
Acrylonitrile	0.181	0.182	0.010	AVRG	0.6
Carbon Disulfide	1.621	1.870	0.010	AVRG	15.4
Trans-1,2-Dichloroethene	0.597	0.568	0.010	AVRG	-4.8
Vinyl Acetate	1.319	1.338	0.010	AVRG	1.4
1,1-Dichloroethane	1.223	1.234	0.100	AVRG	0.9
2-Butanone	0.293	0.286	0.010	AVRG	-2.4
2,2-Dichloropropane	1.023	1.040	0.010	AVRG	1.7
Cis-1,2-Dichloroethene	0.608	0.593	0.010	AVRG	-2.5
Chloroform	1.136	1.128	0.010	AVRG	-0.7
Bromochloromethane	0.283	0.289	0.010	AVRG	2.1
1,1,1-Trichloroethane	1.030	1.036	0.010	AVRG	0.6
1,1-Dichloropropene	0.636	0.615	0.010	AVRG	-3.3
Carbon Tetrachloride	0.673	0.661	0.010	AVRG	-1.8
1,2-Dichloroethane	0.681	0.680	0.010	AVRG	-0.1
Benzene	1.455	1.429	0.010	AVRG	-1.8
Trichloroethene	0.465	0.447	0.010	AVRG	-3.9
1,2-Dichloropropane	0.464	0.441	0.010	AVRG	-5.0
Bromodichloromethane	0.574	0.564	0.010	AVRG	-1.7
Dibromomethane	0.269	0.258	0.010	AVRG	-4.1
2-Chloroethyl Vinyl Ether	0.159	0.168	0.010	AVRG	5.7
4-Methyl-2-Pentanone	0.135	0.126	0.010	AVRG	-6.7
Cis 1,3-dichloropropene	0.640	0.650	0.010	AVRG	1.6
Toluene	0.925	0.886	0.010	AVRG	-4.2
Trans 1,3-Dichloropropene	0.560	0.578	0.010	AVRG	3.2
2-Hexanone	250.00	244.52	0.010	LINR	-2.2

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Cont. Calib. Date: 01/18/10

Init. Calib. Date: 01/06/10 Cont. Calib. Time: 1041

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
1,1,2-Trichloroethane	0.306	0.295	0.010	AVRG	-3.6
1,3-Dichloropropane	0.636	0.630	0.010	AVRG	-0.9
Tetrachloroethene	0.530	0.498	0.010	AVRG	-6.0
Chlorodibromomethane	0.433	0.430	0.010	AVRG	-0.7
1,2-Dibromoethane	0.342	0.346	0.010	AVRG	1.2
Chlorobenzene	1.063	1.028	0.300	AVRG	-3.3
Ethyl Benzene	1.758	1.824	0.010	AVRG	3.8
1,1,1,2-Tetrachloroethane	0.403	0.393	0.010	AVRG	-2.5
m,p-xylene	0.722	0.720	0.010	AVRG	-0.3
o-Xylene	0.737	0.709	0.010	AVRG	-3.8
Styrene	1.128	1.127	0.010	AVRG	-0.1
Bromoform	0.512	0.497	0.100	AVRG	-2.9
1,1,2,2-Tetrachloroethane	0.802	0.785	0.300	AVRG	-2.1
1,2,3-Trichloropropane	0.190	0.190	0.010	AVRG	0.0
Trans-1,4-Dichloro 2-Butene	0.283	0.286	0.010	AVRG	1.1
N-Propyl Benzene	3.848	3.986	0.010	AVRG	3.6
Bromobenzene	0.949	0.902	0.010	AVRG	-5.0
Isopropyl Benzene	3.290	3.366	0.010	AVRG	2.3
2-Chloro Toluene	2.554	2.646	0.010	AVRG	3.6
4-Chloro Toluene	2.543	2.600	0.010	AVRG	2.2
T-Butyl Benzene	2.386	2.480	0.010	AVRG	3.9
1,3,5-Trimethyl Benzene	2.602	2.778	0.010	AVRG	6.8
1,2,4-Trimethylbenzene	2.572	2.742	0.010	AVRG	6.6
S-Butyl Benzene	3.488	3.633	0.010	AVRG	4.2
4-Isopropyl Toluene	2.614	2.821	0.010	AVRG	7.9
1,3-Dichlorobenzene	1.653	1.617	0.010	AVRG	-2.2
1,4-Dichlorobenzene	1.602	1.577	0.010	AVRG	-1.6
N-Butyl Benzene	2.620	2.884	0.010	AVRG	10.1
1,2-Dichlorobenzene	1.508	1.456	0.010	AVRG	-3.4
1,2-Dibromo 3-Chloropropane	0.152	0.147	0.010	AVRG	-3.3
1,2,4-Trichlorobenzene	1.002	1.039	0.010	AVRG	3.7
Hexachloro 1,3-Butadiene	0.655	0.669	0.010	AVRG	2.1
Naphthalene	1.712	1.673	0.010	AVRG	-2.3
1,2,3-Trichlorobenzene	0.906	0.902	0.010	AVRG	-0.4
Dichlorodifluoromethane	0.607	0.617	0.010	AVRG	1.6
Methyl tert-Butyl Ether	1.422	1.396	0.010	AVRG	-1.8

<- Exceeds QC limit of 20% D
* RF less than minimum RF

FORM VII VOA

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMI

Instrument ID: FINN5 Cont. Calib. Date: 01/18/10

Init. Calib. Date: 01/06/10 Cont. Calib. Time: 1041

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
d4-1,2-Dichloroethane	0.766	0.822	0.010	AVRG	7.3
d8-Toluene	1.185	1.207	0.010	AVRG	1.8
4-Bromofluorobenzene	0.570	0.572	0.010	AVRG	0.4
d4-1,2-Dichlorobenzene	0.916	0.920	0.010	AVRG	0.4
Dibromofluoromethane	0.576	0.609	0.010	AVRG	5.7

<- Exceeds QC limit of 20% D
* RF less than minimum RF

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/0500118.d
Lab Smp Id: CC0118 Client Smp ID: VSTD050
Inj Date : 18-JAN-2010 10:41
Operator : PB Inst ID: finn5.i
Smp Info : CC0118,5,5,0,
Misc Info : 10-
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 18-Jan-2010 11:43 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
1 Dichlorodifluoromethane	85	3.065	3.065	(0.460)	65651	50.0000	50.890
2 Chloromethane	50	3.367	3.367	(0.505)	120360	50.0000	46.953
3 Vinyl Chloride	62	3.477	3.477	(0.522)	130914	50.0000	53.469
4 Bromomethane	94	3.960	3.960	(0.594)	51512	50.0000	49.812
5 Chloroethane	64	4.030	4.030	(0.605)	80100	50.0000	56.386
6 Trichlorofluoromethane	101	4.291	4.291	(0.644)	126590	50.0000	52.942
7 Acrolein	56	4.673	4.673	(0.701)	59464	250.000	254.77
8 112Trichloro122Trifluoroethane	101	4.693	4.693	(0.704)	79208	50.0000	49.308
9 Acetone	43	4.723	4.723	(0.709)	116032	250.000	237.19
10 1,1-Dichloroethene	96	4.884	4.884	(0.733)	58623	50.0000	47.470
11 Bromoethane	108	5.105	5.105	(0.766)	38251	50.0000	57.890
12 Iodomethane	142	5.206	5.206	(0.781)	43615	50.0000	56.826
13 Methylene Chloride	84	5.316	5.316	(0.798)	66559	50.0000	51.926
14 Acrylonitrile	53	5.397	5.397	(0.810)	19332	50.0000	50.154

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.437	5.437	(0.816)	148495	50.0000	49.083
	15 Carbon Disulfide	76	5.427	5.427	(0.814)	198903	50.0000	57.704
	17 Trans-1,2-Dichloroethene	96	5.598	5.598	(0.840)	60357	50.0000	47.531
	18 Vinyl Acetate	43	5.919	5.919	(0.888)	142337	50.0000	50.756
	19 1,1-Dichloroethane	63	5.980	5.980	(0.897)	131281	50.0000	50.453
	20 2-Butanone	43	6.321	6.321	(0.949)	152057	250.000	244.20
	21 2,2-Dichloropropane	77	6.502	6.502	(0.976)	110585	50.0000	50.825
	22 Cis-1,2-Dichloroethene	96	6.532	6.532	(0.980)	63041	50.0000	48.752
*	23 Pentafluorobenzene	168	6.663	6.663	(1.000)	106341	50.0000	
	24 Chloroform	83	6.683	6.683	(1.003)	119914	50.0000	49.632
	26 Bromochloromethane	128	6.844	6.844	(1.027)	30774	50.0000	51.124
$	25 Dibromofluoromethane	111	6.884	6.884	(1.033)	64731	50.0000	52.800
	27 1,1,1-Trichloroethane	97	7.075	7.075	(1.062)	110127	50.0000	50.276
	29 1,1-Dichloropropene	75	7.216	7.216	(0.941)	93118	50.0000	48.356
	30 Carbon Tetrachloride	117	7.326	7.326	(0.955)	100036	50.0000	49.118
$	31 d4-1,2-Dichloroethane	65	7.347	7.347	(1.103)	87406	50.0000	53.673
	32 1,2-Dichloroethane	62	7.437	7.437	(0.970)	102877	50.0000	49.899
	33 Benzene	78	7.477	7.477	(0.975)	216196	50.0000	49.113
*	34 1,4-Difluorobenzene	114	7.668	7.668	(1.000)	151324	50.0000	
	35 Trichloroethene	95	8.040	8.040	(1.048)	67593	50.0000	48.062
	36 1,2-Dichloropropane	63	8.201	8.201	(1.069)	66751	50.0000	47.517
	37 Bromodichloromethane	83	8.442	8.442	(1.101)	85384	50.0000	49.092
	39 Dibromomethane	93	8.512	8.512	(1.110)	39087	50.0000	47.953
	40 2-Chloroethyl Vinyl Ether	63	8.653	8.653	(1.128)	25509	50.0000	52.895
	41 4-Methyl-2-Pentanone	58	8.683	8.683	(1.132)	95158	250.000	232.28
	42 Cis 1,3-dichloropropene	75	8.944	8.944	(1.166)	98293	50.0000	50.728
$	43 d8-Toluene	98	9.216	9.216	(1.202)	182596	50.0000	50.921
	44 Toluene	92	9.306	9.306	(1.214)	134109	50.0000	47.907
	45 Trans 1,3-Dichloropropene	75	9.427	9.427	(1.229)	87409	50.0000	51.615
	46 2-Hexanone	43	9.568	9.568	(0.884)	232375	250.000	244.52
	47 1,1,2-Trichloroethane	97	9.618	9.618	(1.254)	44705	50.0000	48.261
	48 1,3-Dichloropropane	76	9.869	9.869	(0.912)	89204	50.0000	49.529
	49 Tetrachloroethene	166	9.990	9.990	(0.923)	70576	50.0000	47.063
	50 Chlorodibromomethane	129	10.201	10.201	(0.942)	60851	50.0000	49.597
	51 1,2-Dibromoethane	107	10.422	10.422	(1.359)	52405	50.0000	50.609
*	52 d5-Chlorobenzene	117	10.824	10.824	(1.000)	141595	50.0000	
	53 Chlorobenzene	112	10.864	10.864	(1.004)	145573	50.0000	48.361
	54 Ethyl Benzene	91	10.894	10.894	(1.006)	258230	50.0000	51.870
	55 1,1,1,2-Tetrachloroethane	131	10.884	10.884	(1.006)	55653	50.0000	48.735
	56 m,p-xylene	106	10.975	10.975	(1.014)	203930	100.000	99.802
	57 o-Xylene	106	11.467	11.467	(1.059)	100383	50.0000	48.066
	58 Styrene	104	11.497	11.497	(1.062)	159558	50.0000	49.931
	59 Isopropyl Benzene	105	11.839	11.839	(0.877)	263121	50.0000	51.148
	60 Bromoform	173	11.899	11.899	(0.882)	38893	50.0000	48.628
	61 1,1,2,2-Tetrachloroethane	83	12.020	12.020	(0.891)	61392	50.0000	48.963
$	62 4-Bromofluorobenzene	95	12.140	12.140	(1.122)	80993	50.0000	50.187
	63 1,2,3-Trichloropropane	110	12.191	12.191	(0.903)	14881	50.0000	50.167

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/Kg)	AMOUNTS ON-COL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.241	12.241	(0.907)	22344	50.0000	50.400
	66 N-Propyl Benzene	91	12.291	12.291	(0.911)	311593	50.0000	51.780
	67 Bromobenzene	156	12.382	12.382	(0.917)	70556	50.0000	47.546
	68 1,3,5-Trimethyl Benzene	105	12.472	12.472	(0.924)	217205	50.0000	53.395
	69 2-Chloro Toluene	91	12.532	12.532	(0.929)	206904	50.0000	51.809
	70 4-Chloro Toluene	91	12.573	12.573	(0.931)	203248	50.0000	51.117
	71 T-Butyl Benzene	119	12.874	12.874	(0.954)	193929	50.0000	51.972
	72 1,2,4-Trimethylbenzene	105	12.924	12.924	(0.958)	214355	50.0000	53.302
	73 S-Butyl Benzene	105	13.125	13.125	(0.972)	284049	50.0000	52.086
	74 4-Isopropyl Toluene	119	13.266	13.266	(0.983)	220548	50.0000	53.955
	75 1,3-Dichlorobenzene	146	13.417	13.417	(0.994)	126388	50.0000	48.912
*	76 d4-1,4-Dichlorobenzene	152	13.497	13.497	(1.000)	78178	50.0000	
	77 1,4-Dichlorobenzene	146	13.537	13.537	(1.003)	123307	50.0000	49.208
	78 N-Butyl Benzene	91	13.748	13.748	(1.019)	225502	50.0000	55.043
$	79 d4-1,2-Dichlorobenzene	152	13.939	13.939	(1.033)	71907	50.0000	50.187
	80 1,2-Dichlorobenzene	146	13.980	13.980	(1.036)	113836	50.0000	48.268
	81 1,2-Dibromo 3-Chloropropane	75	14.884	14.884	(1.103)	11519	50.0000	48.381
	82 1,2,4-Trichlorobenzene	180	15.929	15.929	(1.180)	81245	50.0000	51.828
	83 Hexachloro 1,3-Butadiene	225	16.080	16.080	(1.191)	52332	50.0000	51.126
	84 Naphthalene	128	16.251	16.251	(1.204)	130831	50.0000	48.852
	85 1,2,3-Trichlorobenzene	180	16.542	16.542	(1.226)	70511	50.0000	49.788

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: 0500118.d
Lab Smp Id: CC0118
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: VSTD050
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	106341	-6.22
34 1,4-Difluorobenze	160565	80282	321130	151324	-5.76
52 d5-Chlorobenzene	148719	74360	297438	141595	-4.79
76 d4-1,4-Dichlorobe	84322	42161	168644	78178	-7.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.61	6.11	7.11	6.66	0.76
34 1,4-Difluorobenze	7.62	7.12	8.12	7.67	0.66
52 d5-Chlorobenzene	10.76	10.26	11.26	10.82	0.56
76 d4-1,4-Dichlorobe	13.45	12.95	13.95	13.50	0.37

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: finn5.i Injection Date: 18-JAN-2010 10:41
Lab File ID: 0500118.d Init. Cal. Date(s): 06-JAN-2010 06-JAN-2010
Analysis Type: SOIL Init. Cal. Times: 09:59 15:31
Lab Sample ID: CC0118 Quant Type: ISTD
Method: /chem1/finn5.i/18JAN10.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.60656	0.61737	0.61737	0.010	1.78079	20.00000	Averaged
2 Chloromethane	1.20526	1.13183	1.13183	0.100	-6.09318	20.00000	Averaged
3 Vinyl Chloride	1.15120	1.23107	1.23107	0.010	6.93825	20.00000	Averaged
4 Bromomethane	0.48624	0.48441	0.48441	0.010	-0.37698	20.00000	Averaged
5 Chloroethane	0.66793	0.75323	0.75323	0.010	12.77192	20.00000	Averaged
6 Trichlorofluoromethane	1.12426	1.19041	1.19041	0.010	5.88404	20.00000	Averaged
7 Acrolein	0.10974	0.11184	0.11184	0.010	1.90781	20.00000	Averaged
8 112Trichloro122Trifluoroeth	0.75530	0.74485	0.74485	0.010	-1.38285	20.00000	Averaged
9 Acetone	0.23002	0.21823	0.21823	0.010	-5.12505	20.00000	Averaged
10 1,1-Dichloroethene	0.58065	0.55127	0.55127	0.010	-5.05971	20.00000	Averaged
11 Bromoethane	0.31067	0.35970	0.35970	0.010	15.78120	20.00000	Averaged
12 Iodomethane	0.36088	0.41015	0.41015	0.010	13.65202	20.00000	Averaged
13 Methylene Chloride	51.92580	50.00000	0.62590	0.010	3.85160	20.00000	Linear
14 Acrylonitrile	0.18124	0.18180	0.18180	0.010	0.30755	20.00000	Averaged
16 Methyl tert-Butyl Ether	1.42248	1.39640	1.39640	0.010	-1.83337	20.00000	Averaged
15 Carbon Disulfide	1.62069	1.87043	1.87043	0.010	15.40887	20.00000	Averaged
17 Trans-1,2-Dichloroethene	0.59707	0.56758	0.56758	0.010	-4.93846	20.00000	Averaged
18 Vinyl Acetate	1.31855	1.33850	1.33850	0.010	1.51286	20.00000	Averaged
19 1,1-Dichloroethane	1.22344	1.23453	1.23453	0.100	0.90611	20.00000	Averaged
20 2-Butanone	0.29277	0.28598	0.28598	0.010	-2.31999	20.00000	Averaged
21 2,2-Dichloropropane	1.02303	1.03991	1.03991	0.010	1.65027	20.00000	Averaged
22 Cis-1,2-Dichloroethene	0.60799	0.59282	0.59282	0.010	-2.49568	20.00000	Averaged
24 Chloroform	1.13599	1.12764	1.12764	0.010	-0.73570	20.00000	Averaged
26 Bromochloromethane	0.28303	0.28939	0.28939	0.010	2.24716	20.00000	Averaged
$ 25 Dibromofluoromethane	0.57643	0.60871	0.60871	0.010	5.59984	20.00000	Averaged
27 1,1,1-Trichloroethane	1.02991	1.03560	1.03560	0.010	0.55277	20.00000	Averaged
29 1,1-Dichloropropene	0.63628	0.61536	0.61536	0.010	-3.28797	20.00000	Averaged
30 Carbon Tetrachloride	0.67294	0.66107	0.66107	0.010	-1.76372	20.00000	Averaged
$ 31 d4-1,2-Dichloroethane	0.76569	0.82194	0.82194	0.010	7.34637	20.00000	Averaged
32 1,2-Dichloroethane	0.68122	0.67985	0.67985	0.010	-0.20127	20.00000	Averaged
33 Benzene	1.45449	1.42870	1.42870	0.010	-1.77308	20.00000	Averaged
35 Trichloroethene	0.46469	0.44668	0.44668	0.010	-3.87569	20.00000	Averaged
36 1,2-Dichloropropane	0.46416	0.44112	0.44112	0.010	-4.96560	20.00000	Averaged
37 Bromodichloromethane	0.57468	0.56425	0.56425	0.010	-1.81562	20.00000	Averaged
39 Dibromomethane	0.26933	0.25830	0.25830	0.010	-4.09314	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i
Lab File ID: 0500118.d
Analysis Type: SOIL
Lab Sample ID: CC0118
Method: /chem1/finn5.i/18JAN10.b/s8260b.m

Injection Date: 18-JAN-2010 10:41
Init. Cal. Date(s): 06-JAN-2010 06-JAN-2010
Init. Cal. Times: 09:59 15:31
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
40 2-Chloroethyl Vinyl Ether	0.15935	0.16858	0.16858	0.001	5.78995	20.00000	Averaged
41 4-Methyl-2-Pentanone	0.13536	0.12577	0.12577	0.010	-7.08576	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.64024	0.64955	0.64955	0.010	1.45516	20.00000	Averaged
$ 43 d8-Toluene	1.18483	1.20666	1.20666	0.010	1.84261	20.00000	Averaged
44 Toluene	0.92496	0.88624	0.88624	0.010	-4.18631	20.00000	Averaged
45 Trans 1,3-Dichloropropene	0.55955	0.57763	0.57763	0.010	3.23055	20.00000	Averaged
46 2-Hexanone	245	250	0.32823	0.010	-2.19277	20.00000	Linear
47 1,1,2-Trichloroethane	0.30607	0.29543	0.29543	0.010	-3.47792	20.00000	Averaged
48 1,3-Dichloropropane	0.63599	0.63000	0.63000	0.010	-0.94235	20.00000	Averaged
49 Tetrachloroethene	0.52955	0.49844	0.49844	0.010	-5.87388	20.00000	Averaged
50 Chlorodibromomethane	0.43325	0.42976	0.42976	0.010	-0.80677	20.00000	Averaged
51 1,2-Dibromoethane	0.34215	0.34631	0.34631	0.010	1.21743	20.00000	Averaged
53 Chlorobenzene	1.06295	1.02810	1.02810	0.300	-3.27864	20.00000	Averaged
54 Ethyl Benzene	1.75798	1.82372	1.82372	0.010	3.73988	20.00000	Averaged
55 1,1,1,2-Tetrachloroethane	0.40325	0.39305	0.39305	0.010	-2.52931	20.00000	Averaged
56 m,p-xylene	0.72154	0.72012	0.72012	0.010	-0.19753	20.00000	Averaged
57 o-Xylene	0.73747	0.70894	0.70894	0.010	-3.86781	20.00000	Averaged
58 Styrene	1.12843	1.12686	1.12686	0.010	-0.13867	20.00000	Averaged
59 Isopropyl Benzene	3.29008	3.36563	3.36563	0.010	2.29638	20.00000	Averaged
60 Bromoform	0.51152	0.49749	0.49749	0.100	-2.74285	20.00000	Averaged
61 1,1,2,2-Tetrachloroethane	0.80192	0.78528	0.78528	0.300	-2.07463	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.56987	0.57201	0.57201	0.010	0.37459	20.00000	Averaged
63 1,2,3-Trichloropropane	0.18972	0.19035	0.19035	0.010	0.33488	20.00000	Averaged
65 Trans-1,4-Dichloro 2-Butene	0.28354	0.28582	0.28582	0.010	0.80091	20.00000	Averaged
66 N-Propyl Benzene	3.84865	3.98565	3.98565	0.010	3.55968	20.00000	Averaged
67 Bromobenzene	0.94908	0.90250	0.90250	0.010	-4.90775	20.00000	Averaged
68 1,3,5-Trimethyl Benzene	2.60165	2.77831	2.77831	0.010	6.79027	20.00000	Averaged
69 2-Chloro Toluene	2.55416	2.64656	2.64656	0.010	3.61747	20.00000	Averaged
70 4-Chloro Toluene	2.54297	2.59979	2.59979	0.010	2.23446	20.00000	Averaged
71 T-Butyl Benzene	2.38647	2.48059	2.48059	0.010	3.94360	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.57199	2.74185	2.74185	0.010	6.60432	20.00000	Averaged
73 S-Butyl Benzene	3.48784	3.63332	3.63332	0.010	4.17120	20.00000	Averaged
74 4-Isopropyl Toluene	2.61429	2.82107	2.82107	0.010	7.90970	20.00000	Averaged
75 1,3-Dichlorobenzene	1.65260	1.61665	1.61665	0.010	-2.17544	20.00000	Averaged
77 1,4-Dichlorobenzene	1.60264	1.57725	1.57725	0.010	-1.58429	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: finn5.i Injection Date: 18-JAN-2010 10:41
Lab File ID: 0500118.d Init. Cal. Date(s): 06-JAN-2010 06-JAN-2010
Analysis Type: SOIL Init. Cal. Times: 09:59 15:31
Lab Sample ID: CC0118 Quant Type: ISTD
Method: /chem1/finn5.i/18JAN10.b/s8260b.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.62017	2.88444	2.88444	0.010	10.08607	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.91635	0.91978	0.91978	0.010	0.37404	20.00000	Averaged
80 1,2-Dichlorobenzene	1.50835	1.45610	1.45610	0.010	-3.46369	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.15228	0.14735	0.14735	0.010	-3.23833	20.00000	Averaged
82 1,2,4-Trichlorobenzene	1.00257	1.03923	1.03923	0.010	3.65655	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	0.65465	0.66939	0.66939	0.010	2.25228	20.00000	Averaged
84 Naphthalene	1.71282	1.67349	1.67349	0.010	-2.29599	20.00000	Averaged
85 1,2,3-Trichlorobenzene	0.90577	0.90193	0.90193	0.010	-0.42439	20.00000	Averaged

Data File: /chem1/finn5.i/18JAN10.b/0500118.d

Date : 18-JAN-2010 10:41

Client ID: VSTD050

Sample Info: CC0118,5,5,0,

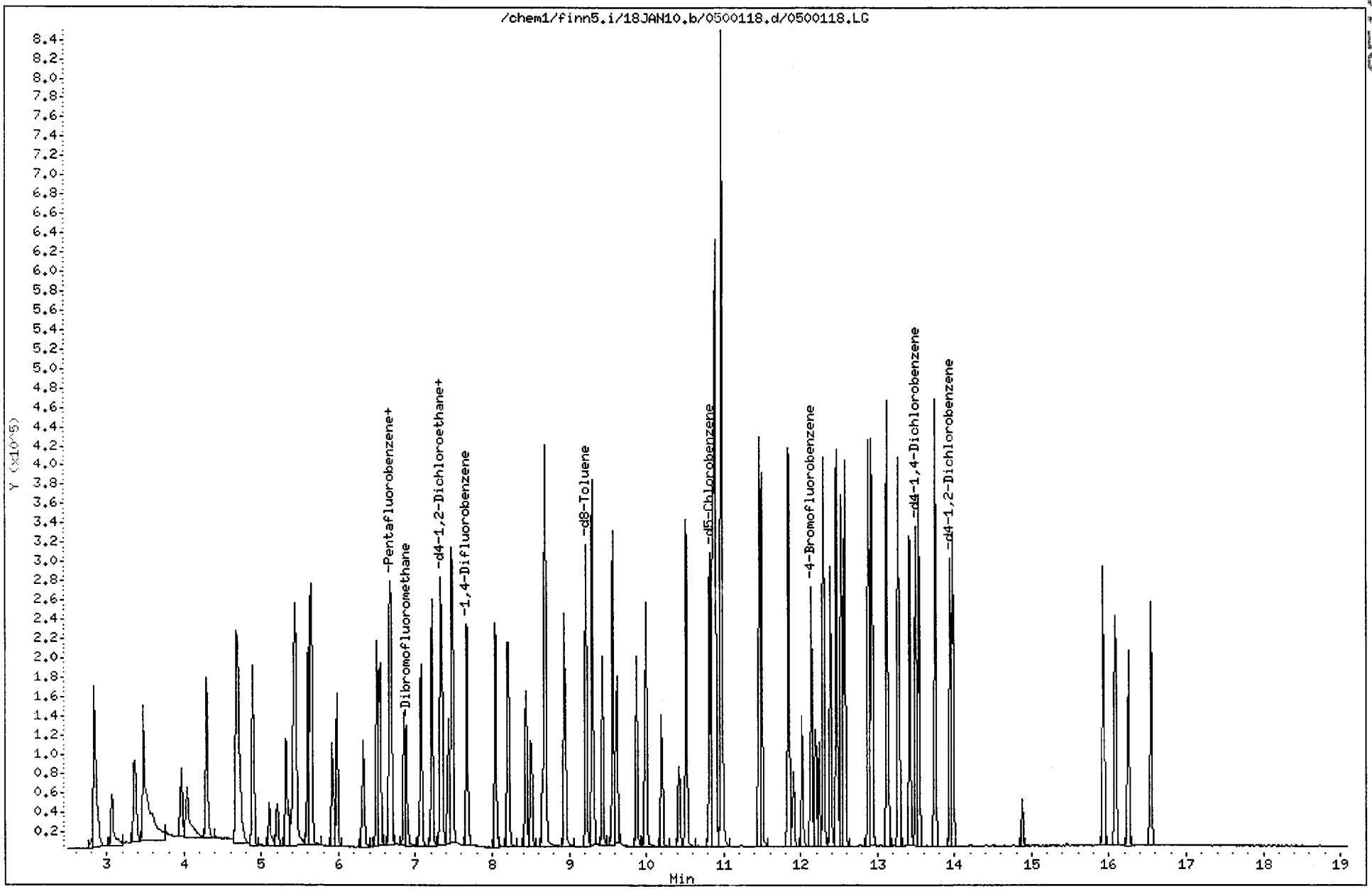
Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18

QF18:002231



Volatile Analysis
QC Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Data File: /chem1/finn5.i/06JAN10.b/BFB0106.d

Date : 06-JAN-2010 09:28

Client ID: BFB0106

Instrument: finn5.i

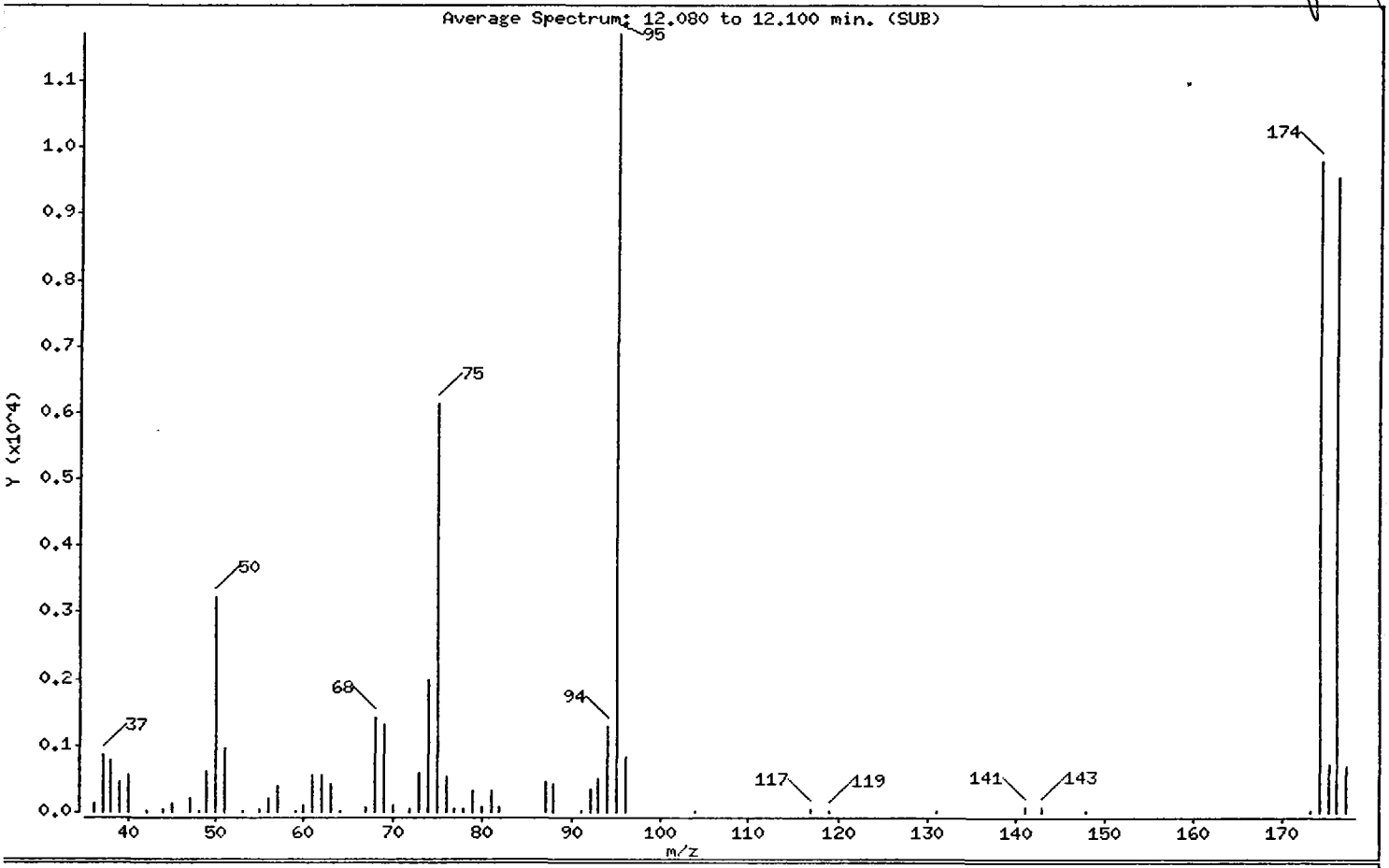
Sample Info: BFB0106,BFB0106,,1,06JAN10,,

Operator: PB

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	27.66
75	30.00 - 66.00% of mass 95	52.46
96	5.00 - 9.00% of mass 95	7.15
173	Less than 2.00% of mass 174	0.24 (0.29)
174	50.00 - 101.00% of mass 95	83.62
175	4.00 - 9.00% of mass 174	6.14 (7.34)
176	93.00 - 101.00% of mass 174	81.58 (97.57)
177	5.00 - 9.00% of mass 176	5.90 (7.23)

Data File: /chem1/finn5.i/06JAN10.b/BFB0106.d

Date : 06-JAN-2010 09:28

Client ID: BFB0106

Instrument: finn5.i

Sample Info: BFB0106,BFB0106,,1,06JAN10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18

Data File: BFB0106.d

Spectrum: Average Spectrum: 12.080 to 12.100 min. (SUB)

Location of Maximum: 95.00

Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	142	56.00	205	75.00	6138	96.00	837
37.00	866	57.00	410	76.00	531	104.00	17
38.00	769	59.00	40	77.00	61	117.00	43
39.00	445	60.00	118	78.00	53	119.00	21
40.00	570	61.00	576	79.00	311	131.00	25
42.00	25	62.00	571	80.00	83	141.00	87
44.00	59	63.00	432	81.00	320	143.00	82
45.00	134	64.00	28	82.00	80	148.00	17
47.00	214	67.00	90	87.00	447	173.00	28
48.00	40	68.00	1433	88.00	435	174.00	9784
49.00	606	69.00	1330	91.00	21	175.00	718
50.00	3236	70.00	114	92.00	338	176.00	9546
51.00	963	72.00	43	93.00	522	177.00	690
53.00	32	73.00	579	94.00	1284		
55.00	59	74.00	1996	95.00	11701		

Data File: /chem1/finn5.i/06JAN10.b/BFB0106.d

Date : 06-JAN-2010 09:28

Client ID: BFB0106

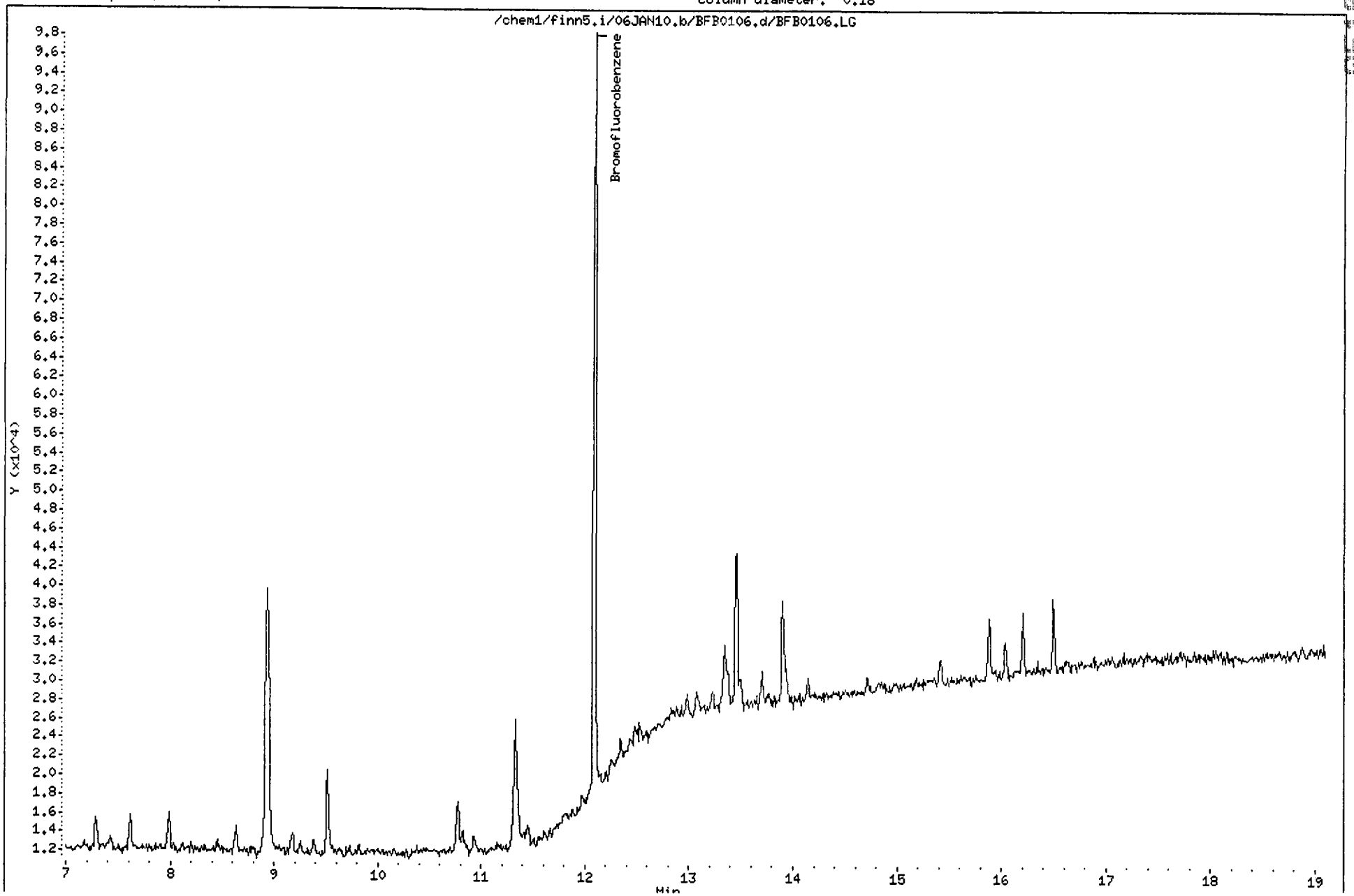
Sample Info: BFB0106,BFB0106,,1,06JAN10,,

Column phase: RTX502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18



Data File: /chem1/finn5.i/18JAN10.b/BFB0118.d

Date : 18-JAN-2010 10:08

Client ID: BFB0118

Instrument: finn5.i

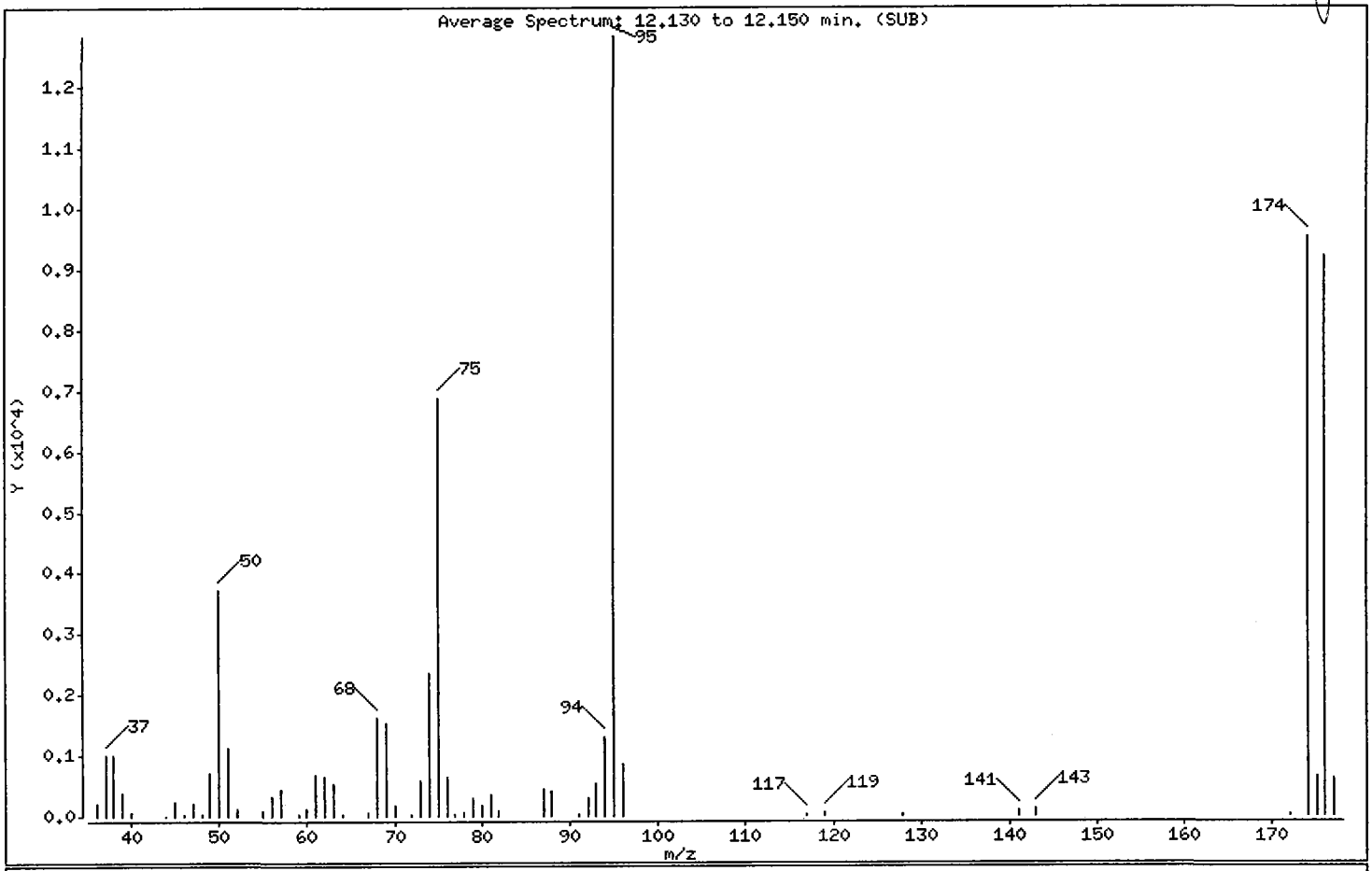
Sample Info: BFB0118,BFB0118,,1,18JAN10,,

Operator: PB

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	29.04
75	30.00 - 66.00% of mass 95	53.45
96	5.00 - 9.00% of mass 95	6.56
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 101.00% of mass 95	74.26
175	4.00 - 9.00% of mass 174	5.06 (6.82)
176	93.00 - 101.00% of mass 174	71.77 (96.64)
177	5.00 - 9.00% of mass 176	4.86 (6.77)

Data File: /chem1/finn5.i/18JAN10.b/BFB0118.d

Date : 18-JAN-2010 10:08

Client ID: BFB0118 Instrument: finn5.i

Sample Info: BFB0118,BFB0118,,1,18JAN10,,

Operator: PB

Column phase: RTX502.2 Column diameter: 0.18

Data File: BFB0118.d
Spectrum: Average Spectrum: 12.130 to 12.150 min. (SUB)
Location of Maximum: 95.00
Number of points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	205	56.00	320	75.00	6864	96.00	843
37.00	1012	57.00	433	76.00	636	117.00	18
38.00	990	59.00	35	77.00	43	119.00	53
39.00	392	60.00	120	78.00	51	128.00	20
40.00	71	61.00	675	79.00	305	141.00	87
44.00	5	62.00	648	80.00	185	143.00	119
45.00	231	63.00	539	81.00	363	172.00	20
46.00	17	64.00	21	82.00	75	174.00	9536
47.00	195	67.00	72	87.00	442	175.00	650
48.00	32	68.00	1620	88.00	404	176.00	9216
49.00	705	69.00	1539	91.00	20	177.00	624
50.00	3729	70.00	166	92.00	309		
51.00	1134	72.00	23	93.00	533		
52.00	129	73.00	581	94.00	1295		
55.00	74	74.00	2348	95.00	12841		

Data File: /chem1/finn5.i/18JAN10.b/BFB0118.d

Page 1

Date : 18-JAN-2010 10:08

Client ID: BFB0118

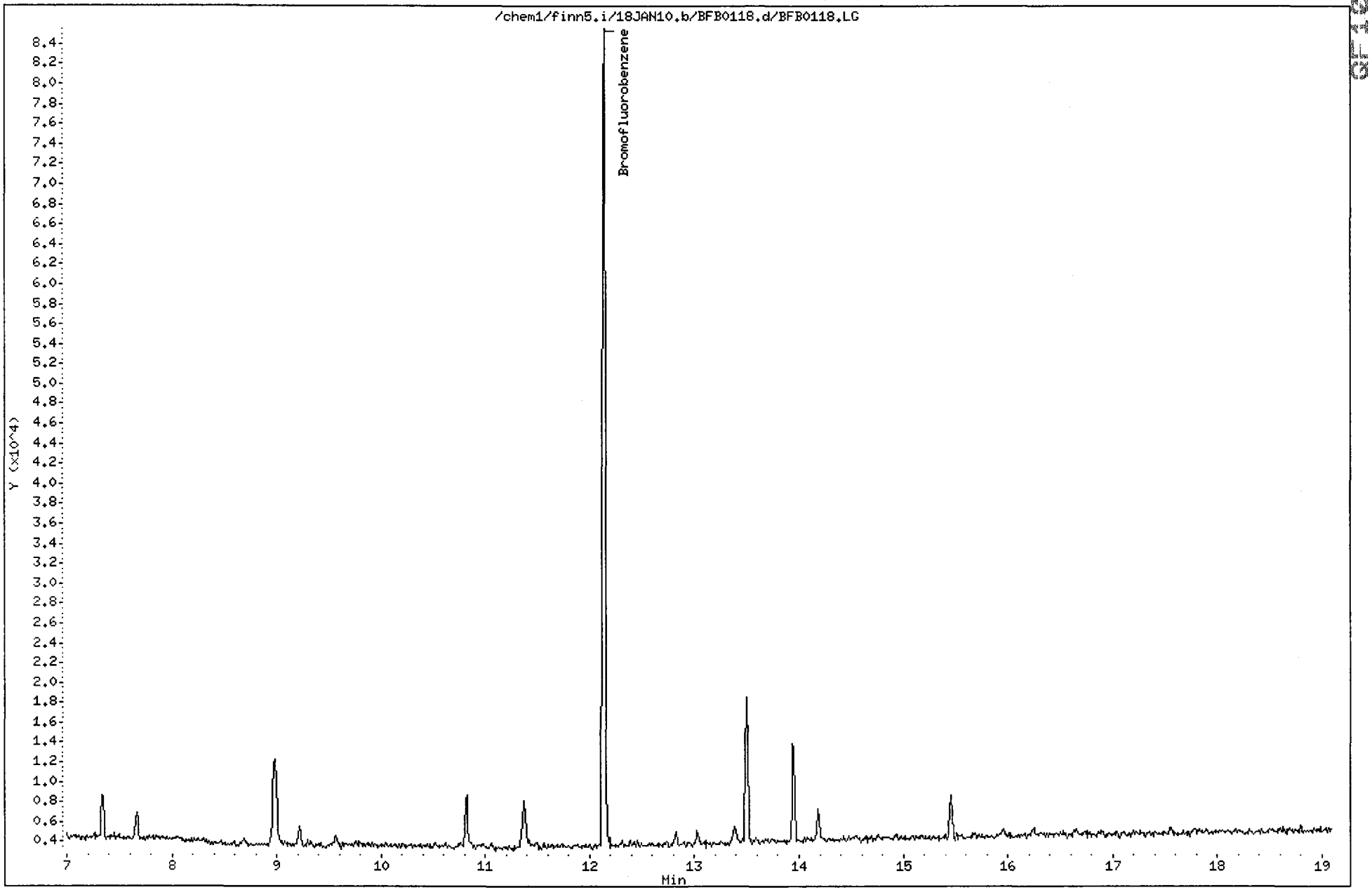
Instrument: finn5.i

Sample Info: BFB0118,BFB0118,,1,18JAN10,,

Operator: PB

Column phase: RTX502.2

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-011810**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-011810
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 13:02

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	103%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	100%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/MB0118.d
Lab Smp Id: MB0118 Client Smp ID: MB0118
Inj Date : 18-JAN-2010 13:02
Operator : PB Inst ID: finn5.i
Smp Info : MB0118,5,5,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:20 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
7 Acrolein	56	Compound Not Detected.					
8 112Trichloro122Trifluoroethane	101	Compound Not Detected.					
9 Acetone	43	4.734	4.723	(0.710)	2536	5.52560	5.526
10 1,1-Dichloroethene	96	Compound Not Detected.					
11 Bromoethane	108	Compound Not Detected.					
12 Iodomethane	142	Compound Not Detected.					
13 Methylene Chloride	84	Compound Not Detected.					
14 Acrylonitrile	53	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	Compound Not Detected.					
	15 Carbon Disulfide	76	Compound Not Detected.					
	17 Trans-1,2-Dichloroethene	96	Compound Not Detected.					
	18 Vinyl Acetate	43	Compound Not Detected.					
	19 1,1-Dichloroethane	63	Compound Not Detected.					
	20 2-Butanone	43	Compound Not Detected.					
	21 2,2-Dichloropropane	77	Compound Not Detected.					
	22 Cis-1,2-Dichloroethene	96	Compound Not Detected.					
*	23 Pentafluorobenzene	168	6.663	6.663	(1.000)	99766	50.0000	
	24 Chloroform	83	Compound Not Detected.					
	26 Bromochloromethane	128	Compound Not Detected.					
$	25 Dibromofluoromethane	111	6.884	6.884	(1.033)	57508	49.9996	50.000
	27 1,1,1-Trichloroethane	97	Compound Not Detected.					
	29 1,1-Dichloropropene	75	Compound Not Detected.					
	30 Carbon Tetrachloride	117	Compound Not Detected.					
$	31 d4-1,2-Dichloroethane	65	7.347	7.347	(1.103)	85188	55.7589	55.759
	32 1,2-Dichloroethane	62	Compound Not Detected.					
	33 Benzene	78	Compound Not Detected.					
*	34 1,4-Difluorobenzene	114	7.668	7.668	(1.000)	139354	50.0000	
	35 Trichloroethene	95	Compound Not Detected.					
	36 1,2-Dichloropropane	63	Compound Not Detected.					
	37 Bromodichloromethane	83	Compound Not Detected.					
	39 Dibromomethane	93	Compound Not Detected.					
	40 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	41 4-Methyl-2-Pentanone	58	Compound Not Detected.					
	42 Cis 1,3-dichloropropene	75	Compound Not Detected.					
$	43 d8-Toluene	98	9.216	9.216	(1.202)	170795	51.7214	51.721
	44 Toluene	92	Compound Not Detected.					
	45 Trans 1,3-Dichloropropene	75	Compound Not Detected.					
	46 2-Hexanone	43	Compound Not Detected.					
	47 1,1,2-Trichloroethane	97	Compound Not Detected.					
	48 1,3-Dichloropropane	76	Compound Not Detected.					
	49 Tetrachloroethene	166	Compound Not Detected.					
	50 Chlorodibromomethane	129	Compound Not Detected.					
	51 1,2-Dibromoethane	107	Compound Not Detected.					
*	52 d5-Chlorobenzene	117	10.814	10.824	(1.000)	132412	50.0000	
	53 Chlorobenzene	112	Compound Not Detected.					
	54 Ethyl Benzene	91	Compound Not Detected.					
	55 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	56 m,p-xylene	106	Compound Not Detected.					
	57 o-Xylene	106	Compound Not Detected.					
	58 Styrene	104	Compound Not Detected.					
	59 Isopropyl Benzene	105	Compound Not Detected.					
	60 Bromoform	173	Compound Not Detected.					
	61 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
$	62 4-Bromofluorobenzene	95	12.140	12.140	(1.123)	75003	49.6984	49.698
	63 1,2,3-Trichloropropane	110	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	Compound Not Detected.					
	66 N-Propyl Benzene	91	Compound Not Detected.					
	67 Bromobenzene	156	Compound Not Detected.					
	68 1,3,5-Trimethyl Benzene	105	Compound Not Detected.					
	69 2-Chloro Toluene	91	Compound Not Detected.					
	70 4-Chloro Toluene	91	Compound Not Detected.					
	71 T-Butyl Benzene	119	Compound Not Detected.					
	72 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	73 S-Butyl Benzene	105	Compound Not Detected.					
	74 4-Isopropyl Toluene	119	Compound Not Detected.					
	75 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	76 d4-1,4-Dichlorobenzene	152	13.497	13.497	(1.000)	71238	50.0000	
	77 1,4-Dichlorobenzene	146	Compound Not Detected.					
	78 N-Butyl Benzene	91	Compound Not Detected.					
$	79 d4-1,2-Dichlorobenzene	152	13.939	13.939	(1.033)	65524	50.1878	50.188
	80 1,2-Dichlorobenzene	146	Compound Not Detected.					
	81 1,2-Dibromo 3-Chloropropane	75	Compound Not Detected.					
	82 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	83 Hexachloro 1,3-Butadiene	225	Compound Not Detected.					
	84 Naphthalene	128	16.251	16.251	(1.204)	4968	2.03577	2.036
	85 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: MB0118.d
Lab Smp Id: MB0118
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: MB0118
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	99766	-12.02
34 1,4-Difluorobenze	160565	80282	321130	139354	-13.21
52 d5-Chlorobenzene	148719	74360	297438	132412	-10.96
76 d4-1,4-Dichlorobe	84322	42161	168644	71238	-15.52

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.66	0.00
34 1,4-Difluorobenze	7.67	7.17	8.17	7.67	0.00
52 d5-Chlorobenzene	10.82	10.32	11.32	10.81	-0.09
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.50	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:
Sample Matrix: SOLID
Lab Smp Id: MB0118
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: 18JAN10
Fraction: VOA
Client Smp ID: MB0118
Operator: PB
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	50.000	100.00	30-160
$ 31 d4-1,2-Dichloroeth	50.000	55.759	111.52	75-152
$ 43 d8-Toluene	50.000	51.721	103.44	82-115
$ 62 4-Bromofluorobenze	50.000	49.698	99.40	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.188	100.38	80-120

Data File: /chem1/finn5.i/18JAN10.b/MB0118.d

Date : 18-JAN-2010 13:02

Client ID: MB0118

Sample Info: MB0118,5,5,0

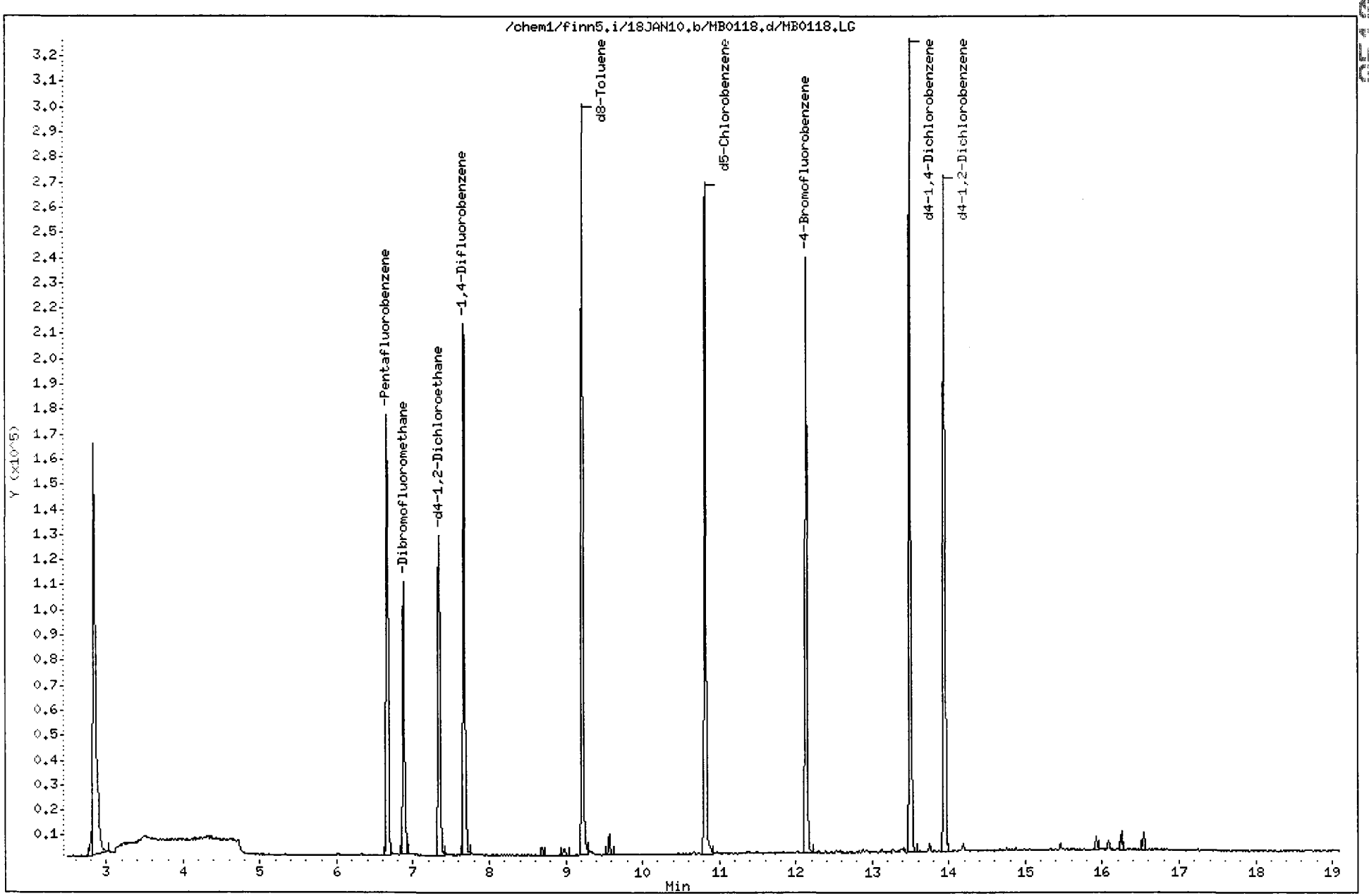
Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18

QF10-00210



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
MATRIX SPIKE
Page 1 of 1

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 21:11

Sample Amount: 5.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	1.0	---	
156-59-2	cis-1,2-Dichloroethene	1.0	---	
107-06-2	1,2-Dichloroethane	1.0	---	
79-01-6	Trichloroethene	1.0	---	
127-18-4	Tetrachloroethene	1.0	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	104%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	104%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/QF10AMS.d
Lab Smp Id: QF10AMS Client Smp ID: CB31A011110SED MS
Inj Date : 18-JAN-2010 21:11
Operator : PB Inst ID: finn5.i
Smp Info : QF10AMS,5,6.50,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:20 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	6.50000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.055	3.065	(0.459)	59714	46.6517	35.886
2 Chloromethane	50	3.357	3.367	(0.505)	119978	47.1723	36.286
3 Vinyl Chloride	62	3.467	3.477	(0.521)	134895	55.5281	42.714
4 Bromomethane	94	3.950	3.960	(0.594)	48543	47.3091	36.392
5 Chloroethane	64	4.020	4.030	(0.604)	74157	52.6127	40.471
6 Trichlorofluoromethane	101	4.281	4.291	(0.644)	94759	39.9412	30.724
7 Acrolein	56	4.663	4.673	(0.701)	16946	73.1737	56.287(R)
8 112Trichloro122Trifluoroethane	101	4.683	4.693	(0.704)	49401	30.9945	23.842(R)
9 Acetone	43	4.723	4.723	(0.710)	142274	293.114	225.47
10 1,1-Dichloroethene	96	4.874	4.884	(0.733)	47799	39.0096	30.007
11 Bromoethane	108	5.095	5.105	(0.766)	31591	48.1866	37.066
12 Iodomethane	142	5.196	5.206	(0.781)	33917	44.5373	34.259
13 Methylene Chloride	84	5.306	5.316	(0.798)	52523	41.2977	31.767
14 Acrylonitrile	53	5.387	5.397	(0.810)	15054	39.3606	30.277

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.427	5.437	(0.816)	118400	39.4433	30.341
	15 Carbon Disulfide	76	5.417	5.427	(0.814)	132914	38.8631	29.895
	17 Trans-1,2-Dichloroethene	96	5.588	5.598	(0.840)	47326	37.5617	28.894(R)
	18 Vinyl Acetate	43	5.909	5.919	(0.888)	61430	22.0777	16.983(R)
	19 1,1-Dichloroethane	63	5.970	5.980	(0.897)	105833	40.9926	31.533
	20 2-Butanone	43	6.311	6.321	(0.949)	133480	216.051	166.19
	21 2,2-Dichloropropane	77	6.492	6.502	(0.976)	78614	36.4149	28.011(R)
	22 Cis-1,2-Dichloroethene	96	6.522	6.532	(0.980)	46658	36.3660	27.974(R)
*	23 Pentafluorobenzene	168	6.653	6.663	(1.000)	105512	50.0000	
	24 Chloroform	83	6.673	6.683	(1.003)	87291	36.4135	28.010(R)
	26 Bromochloromethane	128	6.834	6.844	(1.027)	21546	36.0747	27.750(R)
$	25 Dibromofluoromethane	111	6.874	6.884	(1.033)	64199	52.7773	40.598
	27 1,1,1-Trichloroethane	97	7.065	7.075	(1.062)	75844	34.8973	26.844(R)
	29 1,1-Dichloropropene	75	7.206	7.216	(0.941)	60995	31.2422	24.032(R)
	30 Carbon Tetrachloride	117	7.316	7.326	(0.955)	59892	29.0057	22.312(R)
$	31 d4-1,2-Dichloroethane	65	7.336	7.347	(1.103)	93955	58.1482	44.729
	32 1,2-Dichloroethane	62	7.417	7.437	(0.968)	73846	35.3290	27.176(R)
	33 Benzene	78	7.467	7.477	(0.975)	164152	36.7815	28.293(R)
*	34 1,4-Difluorobenzene	114	7.658	7.668	(1.000)	153418	50.0000	
	35 Trichloroethene	95	8.030	8.040	(1.049)	43368	30.4159	23.397(R)
	36 1,2-Dichloropropane	63	8.191	8.201	(1.070)	48952	34.3710	26.439(R)
	37 Bromodichloromethane	83	8.432	8.442	(1.101)	52658	29.8628	22.971(R)
	39 Dibromomethane	93	8.492	8.512	(1.109)	26529	32.1020	24.694(R)
	40 2-Chloroethyl Vinyl Ether	63	8.673	8.653	(1.133)	153	0.31292	0.2407(QR)
	41 4-Methyl-2-Pentanone	58	8.673	8.683	(1.133)	83247	200.436	154.18(Q)
	42 Cis 1,3-dichloropropene	75	8.934	8.944	(1.167)	60707	30.9023	23.771(R)
$	43 d8-Toluene	98	9.206	9.216	(1.202)	189608	52.1548	40.119
	44 Toluene	92	9.286	9.306	(1.213)	86214	30.3773	23.367(R)
	45 Trans 1,3-Dichloropropene	75	9.417	9.427	(1.230)	47666	27.7627	21.356(R)
	46 2-Hexanone	43	9.547	9.568	(0.884)	198212	198.429	152.64
	47 1,1,2-Trichloroethane	97	9.598	9.618	(1.253)	27596	29.3844	22.603(R)
	48 1,3-Dichloropropane	76	9.859	9.869	(0.913)	55866	29.5102	22.700(R)
	49 Tetrachloroethene	166	9.980	9.990	(0.924)	29806	18.9093	14.546(R)
	50 Chlorodibromomethane	129	10.191	10.201	(0.943)	30931	23.9844	18.450(R)
	51 1,2-Dibromoethane	107	10.412	10.422	(1.360)	30451	29.0056	22.312(R)
*	52 d5-Chlorobenzene	117	10.804	10.824	(1.000)	148831	50.0000	
	53 Chlorobenzene	112	10.854	10.864	(1.005)	67059	21.1944	16.303(R)
	54 Ethyl Benzene	91	10.884	10.894	(1.007)	108263	20.6892	15.915(R)
	55 1,1,1,2-Tetrachloroethane	131	10.874	10.884	(1.006)	26108	21.7509	16.731(R)
	56 m,p-xylene	106	10.954	10.975	(1.014)	80428	37.4473	28.806(R)
	57 o-Xylene	106	11.447	11.467	(1.060)	39264	17.8866	13.759(R)
	58 Styrene	104	11.477	11.497	(1.062)	55568	16.5435	12.726(R)
	59 Isopropyl Benzene	105	11.829	11.839	(0.877)	78342	14.0217	10.786(R)
	60 Bromoform	173	11.889	11.899	(0.882)	15606	17.9654	13.820(R)
	61 1,1,2,2-Tetrachloroethane	83	12.010	12.020	(0.890)	29964	22.0029	16.925(R)
$	62 4-Bromofluorobenzene	95	12.130	12.140	(1.123)	87560	51.6183	39.706
	63 1,2,3-Trichloropropane	110	12.181	12.191	(0.903)	8300	25.7624	19.817(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.231	12.241	(0.907)	10833	22.4977	17.306(R)
	66 N-Propyl Benzene	91	12.281	12.291	(0.911)	80862	12.3722	9.517(R)
	67 Bromobenzene	156	12.372	12.382	(0.917)	22915	14.2177	10.937(R)
	68 1,3,5-Trimethyl Benzene	105	12.452	12.472	(0.923)	49163	11.1276	8.560(R)
	69 2-Chloro Toluene	91	12.512	12.532	(0.928)	54988	12.6774	9.752(R)
	70 4-Chloro Toluene	91	12.562	12.573	(0.931)	58048	13.4418	10.340(R)
	71 T-Butyl Benzene	119	12.864	12.874	(0.954)	41503	10.2408	7.878(R)
	72 1,2,4-Trimethylbenzene	105	12.914	12.924	(0.958)	47629	10.9047	8.388(R)
	73 S-Butyl Benzene	105	13.105	13.125	(0.972)	53741	9.07321	6.979(R)
	74 4-Isopropyl Toluene	119	13.256	13.266	(0.983)	64987	14.6381	11.260(R)
	75 1,3-Dichlorobenzene	146	13.407	13.417	(0.994)	26113	9.30463	7.157(R)
*	76 d4-1,4-Dichlorobenzene	152	13.487	13.497	(1.000)	84910	50.0000	
	77 1,4-Dichlorobenzene	146	13.517	13.537	(1.002)	25939	9.53080	7.331(R)
	78 N-Butyl Benzene	91	13.728	13.748	(1.018)	33385	7.50297	5.772(R)
$	79 d4-1,2-Dichlorobenzene	152	13.929	13.939	(1.033)	80618	51.8063	39.851
	80 1,2-Dichlorobenzene	146	13.959	13.980	(1.035)	23344	9.11348	7.010(R)
	81 1,2-Dibromo 3-Chloropropane	75	14.864	14.884	(1.102)	4645	17.9617	13.817(R)
	82 1,2,4-Trichlorobenzene	180	15.909	15.929	(1.180)	8596	5.04886	3.884(R)
	83 Hexachloro 1,3-Butadiene	225	16.060	16.080	(1.191)	5048	4.54068	3.493(R)
	84 Naphthalene	128	16.231	16.251	(1.203)	25653	8.81939	6.784(R)
	85 1,2,3-Trichlorobenzene	180	16.522	16.542	(1.225)	7628	4.95910	3.815(R)

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: finn5.i
Lab File ID: QF10AMS.d
Lab Smp Id: QF10AMS
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: CB31A011110SED MS
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	105512	-6.95
34 1,4-Difluorobenze	160565	80282	321130	153418	-4.45
52 d5-Chlorobenzene	148719	74360	297438	148831	0.08
76 d4-1,4-Dichlorobe	84322	42161	168644	84910	0.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.65	-0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.66	-0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.80	-0.19
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.49	-0.07

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: SOLID
Lab Smp Id: QF10AMS
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: QF10
Fraction: VOA
Client Smp ID: CB31A011110SED MS
Operator: PB
SampleType: MS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	38.462	35.886	93.30	53-148
2	Chloromethane	38.462	36.286	94.34	64-125
3	Vinyl Chloride	38.462	42.714	111.06	63-137
4	Bromomethane	38.462	36.392	94.62	57-136
5	Chloroethane	38.462	40.471	105.23	64-131
6	Trichlorofluoromet	38.462	30.724	79.88	69-132
7	Acrolein	192.31	56.287	29.27*	54-137
8	112Trichloro122Tri	38.462	23.842	61.99*	74-130
9	Acetone	192.31	225.47	117.25	60-131
10	1,1-Dichloroethene	38.462	30.007	78.02	75-126
11	Bromoethane	38.462	37.066	96.37	76-126
12	Iodomethane	38.462	34.259	89.07	65-139
13	Methylene Chloride	38.462	31.767	82.60	70-123
15	Carbon Disulfide	38.462	29.895	77.73	71-129
14	Acrylonitrile	38.462	30.277	78.72	67-125
16	Methyl tert-Butyl	38.462	30.341	78.89	70-120
17	Trans-1,2-Dichloro	38.462	28.894	75.12*	80-120
18	Vinyl Acetate	38.462	16.983	44.16*	60-136
19	1,1-Dichloroethane	38.462	31.533	81.99	80-120
20	2-Butanone	192.31	166.19	86.42	70-120
21	2,2-Dichloropropan	38.462	28.011	72.83*	74-123
22	Cis-1,2-Dichloroet	38.462	27.974	72.73*	80-120
24	Chloroform	38.462	28.010	72.83*	80-120
26	Bromochloromethane	38.462	27.750	72.15*	80-120
27	1,1,1-Trichloroeth	38.462	26.844	69.79*	77-121
29	1,1-Dichloropropen	38.462	24.032	62.48*	80-120
30	Carbon Tetrachlori	38.462	22.312	58.01*	77-122
32	1,2-Dichloroethane	38.462	27.176	70.66*	76-120
33	Benzene	38.462	28.293	73.56*	80-120
35	Trichloroethene	38.462	23.397	60.83*	80-120
36	1,2-Dichloropropan	38.462	26.439	68.74*	80-120
37	Bromodichlorometha	38.462	22.971	59.73*	77-121
39	Dibromomethane	38.462	24.694	64.20*	80-120

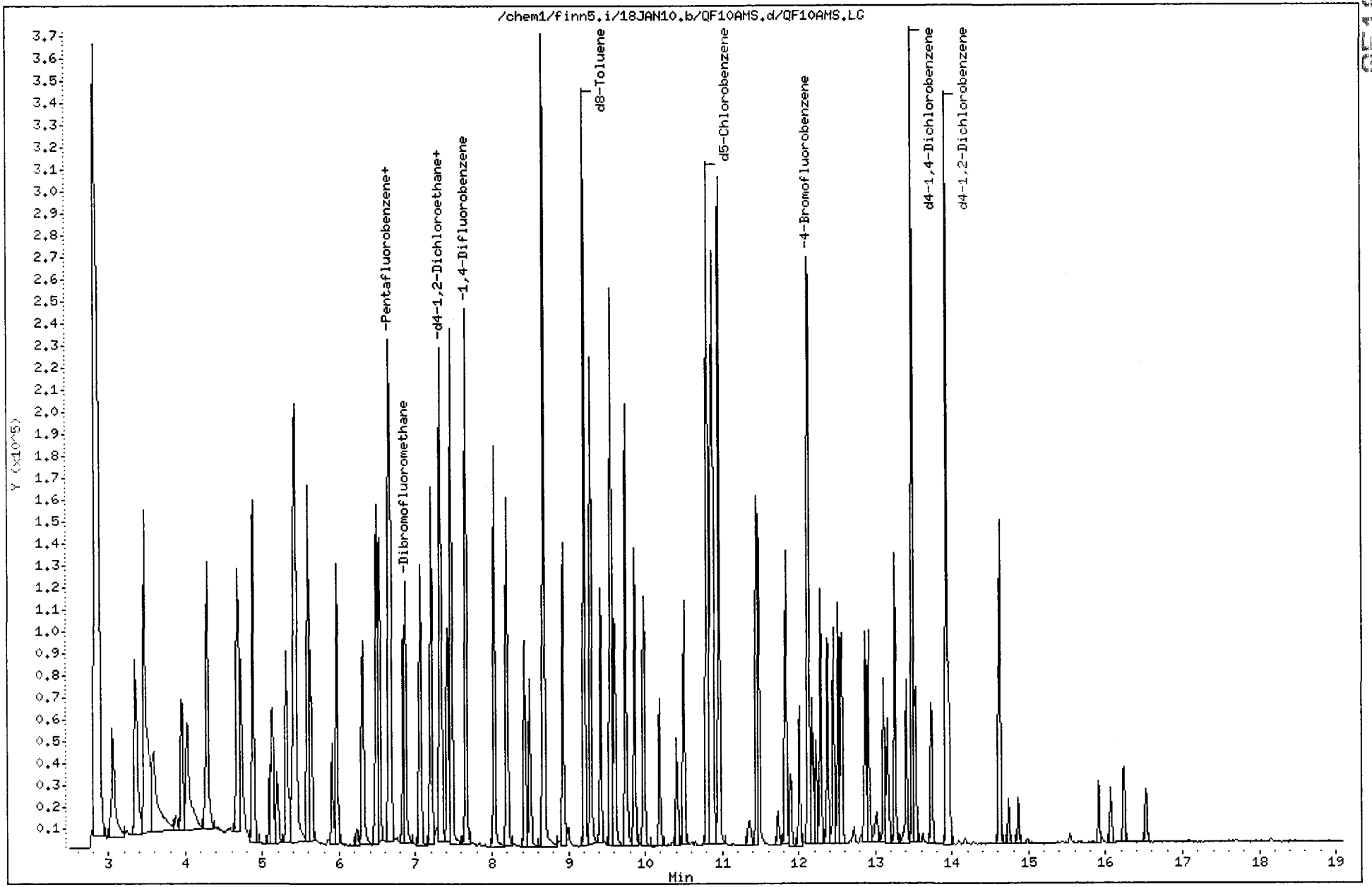
SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	38.462	0.2407	0.63*	10-191
41 4-Methyl-2-Pentano	192.31	154.18	80.17	67-120
42 Cis 1,3-dichloropr	38.462	23.771	61.80*	74-120
44 Toluene	38.462	23.367	60.75*	80-120
45 Trans 1,3-Dichloro	38.462	21.356	55.53*	65-120
46 2-Hexanone	192.31	152.64	79.37	65-130
47 1,1,2-Trichloroeth	38.462	22.603	58.77*	80-120
48 1,3-Dichloropropan	38.462	22.700	59.02*	80-120
49 Tetrachloroethene	38.462	14.546	37.82*	80-121
50 Chlorodibromometha	38.462	18.450	47.97*	64-120
51 1,2-Dibromoethane	38.462	22.312	58.01*	75-120
53 Chlorobenzene	38.462	16.303	42.39*	80-120
55 1,1,1,2-Tetrachlor	38.462	16.731	43.50*	69-121
54 Ethyl Benzene	38.462	15.915	41.38*	80-127
56 m,p-xylene	76.923	28.806	37.45*	80-125
57 o-Xylene	38.462	13.759	35.77*	78-120
58 Styrene	38.462	12.726	33.09*	80-123
59 Isopropyl Benzene	38.462	10.786	28.04*	80-127
60 Bromoform	38.462	13.820	35.93*	60-120
61 1,1,2,2-Tetrachlor	38.462	16.925	44.01*	74-120
63 1,2,3-Trichloropro	38.462	19.817	51.52*	72-121
65 Trans-1,4-Dichloro	38.462	17.306	45.00*	65-126
66 N-Propyl Benzene	38.462	9.517	24.74*	80-132
67 Bromobenzene	38.462	10.937	28.44*	80-120
68 1,3,5-Trimethyl Be	38.462	8.560	22.26*	80-125
69 2-Chloro Toluene	38.462	9.752	25.35*	80-125
70 4-Chloro Toluene	38.462	10.340	26.88*	80-127
71 T-Butyl Benzene	38.462	7.878	20.48*	87-122
72 1,2,4-Trimethylben	38.462	8.388	21.81*	80-126
73 S-Butyl Benzene	38.462	6.979	18.15*	80-134
74 4-Isopropyl Toluen	38.462	11.260	29.28*	80-131
75 1,3-Dichlorobenzen	38.462	7.157	18.61*	80-120
77 1,4-Dichlorobenzen	38.462	7.331	19.06*	80-120
78 N-Butyl Benzene	38.462	5.772	15.01*	80-138
80 1,2-Dichlorobenzen	38.462	7.010	18.23*	80-120
81 1,2-Dibromo 3-Chlo	38.462	13.817	35.92*	59-120
82 1,2,4-Trichloroben	38.462	3.884	10.10*	78-130
83 Hexachloro 1,3-But	38.462	3.493	9.08*	76-129
84 Naphthalene	38.462	6.784	17.64*	66-120
85 1,2,3-Trichloroben	38.462	3.815	9.92*	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	52.777	105.55	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	58.148	116.30	75-152
$ 43 d8-Toluene	50.000	52.155	104.31	82-115
$ 62 4-Bromofluorobenze	50.000	51.618	103.24	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.806	103.61	80-120

Data File: /chem1/finn5.i/18JAN10.b/QF10AMS.d
Date : 18-JAN-2010 21:11
Client ID: CB31A011110SED MS
Sample Info: QF10AMS,5,6.50,0

Instrument: finn5.i
Operator: PB
Column phase: Rtx502.2
Column diameter: 0.18



QF10:00257

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: CB31A011110SED**
MATRIX SPIKE DUP

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Instrument/Analyst: FINN5/PAB
Date Analyzed: 01/18/10 21:38

Sample Amount: 5.31 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.1%

CAS Number	Analyte	RL	Result	Q
156-60-5	trans-1,2-Dichloroethene	0.9	---	
156-59-2	cis-1,2-Dichloroethene	0.9	---	
107-06-2	1,2-Dichloroethane	0.9	---	
79-01-6	Trichloroethene	0.9	---	
127-18-4	Tetrachloroethene	0.9	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	106%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	103%

Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/QF10AMSD.d
Lab Smp Id: QF10AMSD Client Smp ID: CB31A011110SED MSD
Inj Date : 18-JAN-2010 21:38
Operator : PB Inst ID: finn5.i
Smp Info : QF10AMSD,5,6.73,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:20 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	6.73000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.075	3.065	(0.461)	57611	46.4455	34.506
2 Chloromethane	50	3.377	3.367	(0.506)	119073	48.3110	35.892
3 Vinyl Chloride	62	3.487	3.477	(0.523)	133715	56.7994	42.199
4 Bromomethane	94	3.970	3.960	(0.595)	52857	53.1579	39.493
5 Chloroethane	64	4.050	4.030	(0.607)	73500	53.8112	39.979
6 Trichlorofluoromethane	101	4.301	4.291	(0.645)	98280	42.7478	31.759
7 Acrolein	56	4.683	4.673	(0.702)	17914	79.8229	59.304(R)
8 112Trichloro122Trifluoroethane	101	4.703	4.693	(0.705)	52360	33.8997	25.186(R)
9 Acetone	43	4.744	4.723	(0.711)	147715	314.039	233.31
10 1,1-Dichloroethene	96	4.904	4.884	(0.735)	47574	40.0654	29.766
11 Bromoethane	108	5.115	5.105	(0.767)	33299	52.4132	38.940
12 Iodomethane	142	5.216	5.206	(0.782)	40609	55.0270	40.882
13 Methylene Chloride	84	5.337	5.316	(0.800)	53887	43.7227	32.483
14 Acrylonitrile	53	5.407	5.397	(0.810)	16548	44.6481	33.171

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.447	5.437	(0.816)	125663	43.1992	32.094
	15 Carbon Disulfide	76	5.437	5.427	(0.815)	147151	44.3994	32.986
	17 Trans-1,2-Dichloroethene	96	5.618	5.598	(0.842)	47808	39.1556	29.090(R)
	18 Vinyl Acetate	43	5.929	5.919	(0.889)	62997	23.3636	17.358(R)
	19 1,1-Dichloroethane	63	5.990	5.980	(0.898)	107428	42.9387	31.901
	20 2-Butanone	43	6.331	6.321	(0.949)	140577	234.801	174.44
	21 2,2-Dichloropropane	77	6.512	6.502	(0.976)	80456	38.4578	28.572
	22 Cis-1,2-Dichloroethene	96	6.553	6.532	(0.982)	47664	38.3361	28.481(R)
*	23 Pentafluorobenzene	168	6.673	6.663	(1.000)	102248	50.0000	
	24 Chloroform	83	6.693	6.683	(1.003)	90572	38.9882	28.966(R)
	26 Bromochloromethane	128	6.854	6.844	(1.027)	22205	38.3649	28.503(R)
$	25 Dibromofluoromethane	111	6.894	6.884	(1.033)	63201	53.6154	39.833
	27 1,1,1-Trichloroethane	97	7.085	7.075	(1.062)	78158	37.1100	27.570(R)
	29 1,1-Dichloropropene	75	7.226	7.216	(0.941)	62649	33.3653	24.788(R)
	30 Carbon Tetrachloride	117	7.336	7.326	(0.955)	62286	31.3646	23.302(R)
$	31 d4-1,2-Dichloroethane	65	7.357	7.347	(1.102)	92462	59.0510	43.871
	32 1,2-Dichloroethane	62	7.437	7.437	(0.969)	77588	38.5952	28.674
	33 Benzene	78	7.487	7.477	(0.975)	167576	39.0418	29.006(R)
*	34 1,4-Difluorobenzene	114	7.678	7.668	(1.000)	147551	50.0000	
	35 Trichloroethene	95	8.050	8.040	(1.048)	44303	32.3071	24.002(R)
	36 1,2-Dichloropropane	63	8.211	8.201	(1.069)	50094	36.5714	27.170(R)
	37 Bromodichloromethane	83	8.452	8.442	(1.101)	56532	33.3346	24.766(R)
	39 Dibromomethane	93	8.522	8.512	(1.110)	27994	35.2217	26.168(R)
	40 2-Chloroethyl Vinyl Ether	63	8.693	8.653	(1.132)	159	0.33812	0.2512(QR)
	41 4-Methyl-2-Pentanone	58	8.693	8.683	(1.132)	90204	225.823	167.77(Q)
	42 Cis 1,3-dichloropropene	75	8.955	8.944	(1.166)	64597	34.1900	25.401(R)
$	43 d8-Toluene	98	9.226	9.216	(1.202)	184740	52.8364	39.254
	44 Toluene	92	9.316	9.306	(1.213)	89480	32.7817	24.355(R)
	45 Trans 1,3-Dichloropropene	75	9.437	9.427	(1.229)	52149	31.5816	23.463(R)
	46 2-Hexanone	43	9.578	9.568	(0.885)	214938	215.074	159.79
	47 1,1,2-Trichloroethane	97	9.618	9.618	(1.253)	30480	33.7458	25.071(R)
	48 1,3-Dichloropropane	76	9.879	9.869	(0.913)	61707	32.5805	24.205(R)
	49 Tetrachloroethene	166	10.000	9.990	(0.924)	31345	19.8765	14.767(R)
	50 Chlorodibromomethane	129	10.211	10.201	(0.943)	34429	26.6844	19.825(R)
	51 1,2-Dibromoethane	107	10.432	10.422	(1.359)	33617	33.2945	24.736(R)
*	52 d5-Chlorobenzene	117	10.824	10.824	(1.000)	148900	50.0000	
	53 Chlorobenzene	112	10.874	10.864	(1.005)	71605	22.6207	16.806(R)
	54 Ethyl Benzene	91	10.904	10.894	(1.007)	119201	22.7689	16.916(R)
	55 1,1,1,2-Tetrachloroethane	131	10.894	10.884	(1.006)	28333	23.5936	17.529(R)
	56 m,p-xylene	106	10.985	10.975	(1.015)	87248	40.6039	30.166(R)
	57 o-Xylene	106	11.467	11.467	(1.059)	43698	19.8973	14.782(R)
	58 Styrene	104	11.497	11.497	(1.062)	63257	18.8239	13.985(R)
	59 Isopropyl Benzene	105	11.849	11.839	(0.877)	88078	15.4954	11.512(R)
	60 Bromoform	173	11.909	11.899	(0.882)	18283	20.6882	15.370(R)
	61 1,1,2,2-Tetrachloroethane	83	12.030	12.020	(0.891)	33716	24.3359	18.080(R)
$	62 4-Bromofluorobenzene	95	12.150	12.140	(1.123)	88865	52.3633	38.903
	63 1,2,3-Trichloropropane	110	12.201	12.191	(0.903)	9278	28.3069	21.030(QR)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
65	Trans-1,4-Dichloro 2-Butene	53	12.251	12.241	(0.907)	12593	25.7069	19.099(R)
66	N-Propyl Benzene	91	12.301	12.291	(0.911)	91308	13.7323	10.202(R)
67	Bromobenzene	156	12.392	12.382	(0.917)	26434	16.1214	11.977(R)
68	1,3,5-Trimethyl Benzene	105	12.472	12.472	(0.923)	57046	12.6916	9.429(R)
69	2-Chloro Toluene	91	12.532	12.532	(0.928)	62976	14.2715	10.603(R)
70	4-Chloro Toluene	91	12.583	12.573	(0.932)	67823	15.4375	11.469(R)
71	T-Butyl Benzene	119	12.884	12.874	(0.954)	47752	11.5818	8.605(R)
72	1,2,4-Trimethylbenzene	105	12.934	12.924	(0.958)	54733	12.3175	9.151(R)
73	S-Butyl Benzene	105	13.135	13.125	(0.972)	61320	10.1763	7.560(R)
74	4-Isopropyl Toluene	119	13.276	13.266	(0.983)	74808	16.5629	12.305(R)
75	1,3-Dichlorobenzene	146	13.427	13.417	(0.994)	30871	10.8124	8.033(R)
* 76	d4-1,4-Dichlorobenzene	152	13.507	13.497	(1.000)	86383	50.0000	
77	1,4-Dichlorobenzene	146	13.547	13.537	(1.003)	30666	11.0755	8.228(R)
78	N-Butyl Benzene	91	13.758	13.748	(1.019)	38942	8.60261	6.391(R)
$ 79	d4-1,2-Dichlorobenzene	152	13.949	13.939	(1.033)	81391	51.4111	38.196
80	1,2-Dichlorobenzene	146	13.980	13.980	(1.035)	27330	10.4877	7.792(R)
81	1,2-Dibromo 3-Chloropropane	75	14.884	14.884	(1.102)	5319	20.2173	15.020(R)
82	1,2,4-Trichlorobenzene	180	15.929	15.929	(1.179)	9394	5.42348	4.029(R)
83	Hexachloro 1,3-Butadiene	225	16.080	16.080	(1.190)	5650	4.99552	3.711(R)
84	Naphthalene	128	16.261	16.251	(1.204)	26514	8.95996	6.657(R)
85	1,2,3-Trichlorobenzene	180	16.542	16.542	(1.225)	7612	4.86431	3.614(R)

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: finn5.i
Lab File ID: QF10AMSD.d
Lab Smp Id: QF10AMSD
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: CB31A011110SED MSD
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	102248	-9.83
34 1,4-Difluorobenze	160565	80282	321130	147551	-8.11
52 d5-Chlorobenzene	148719	74360	297438	148900	0.12
76 d4-1,4-Dichlorobe	84322	42161	168644	86383	2.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.67	0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.68	0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.82	0.00
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.51	0.07

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: SOLID
Lab Smp Id: QF10AMSD
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: QF10
Fraction: VOA
Client Smp ID: CB31A011110SED MSD
Operator: PB
SampleType: MSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	37.147	34.506	92.89	53-148
2	Chloromethane	37.147	35.892	96.62	64-125
3	Vinyl Chloride	37.147	42.199	113.60	63-137
4	Bromomethane	37.147	39.493	106.32	57-136
5	Chloroethane	37.147	39.979	107.62	64-131
6	Trichlorofluoromet	37.147	31.759	85.50	69-132
7	Acrolein	185.74	59.304	31.93*	54-137
8	112Trichloro122Tri	37.147	25.186	67.80*	74-130
9	Acetone	185.74	233.31	125.62	60-131
10	1,1-Dichloroethene	37.147	29.766	80.13	75-126
11	Bromoethane	37.147	38.940	104.83	76-126
12	Iodomethane	37.147	40.882	110.05	65-139
13	Methylene Chloride	37.147	32.483	87.45	70-123
15	Carbon Disulfide	37.147	32.986	88.80	71-129
14	Acrylonitrile	37.147	33.171	89.30	67-125
16	Methyl tert-Butyl	37.147	32.094	86.40	70-120
17	Trans-1,2-Dichloro	37.147	29.090	78.31*	80-120
18	Vinyl Acetate	37.147	17.358	46.73*	60-136
19	1,1-Dichloroethane	37.147	31.901	85.88	80-120
20	2-Butanone	185.74	174.44	93.92	70-120
21	2,2-Dichloropropan	37.147	28.572	76.92	74-123
22	Cis-1,2-Dichloroet	37.147	28.481	76.67*	80-120
24	Chloroform	37.147	28.966	77.98*	80-120
26	Bromochloromethane	37.147	28.503	76.73*	80-120
27	1,1,1-Trichloroeth	37.147	27.570	74.22*	77-121
29	1,1-Dichloropropen	37.147	24.788	66.73*	80-120
30	Carbon Tetrachlori	37.147	23.302	62.73*	77-122
32	1,2-Dichloroethane	37.147	28.674	77.19	76-120
33	Benzene	37.147	29.006	78.08*	80-120
35	Trichloroethene	37.147	24.002	64.61*	80-120
36	1,2-Dichloropropan	37.147	27.170	73.14*	80-120
37	Bromodichlorometha	37.147	24.766	66.67*	77-121
39	Dibromomethane	37.147	26.168	70.44*	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	37.147	0.2512	0.68*	10-191
41 4-Methyl-2-Pentano	185.74	167.77	90.33	67-120
42 Cis 1,3-dichloropr	37.147	25.401	68.38*	74-120
44 Toluene	37.147	24.355	65.56*	80-120
45 Trans 1,3-Dichloro	37.147	23.463	63.16*	65-120
46 2-Hexanone	185.74	159.79	86.03	65-130
47 1,1,2-Trichloroeth	37.147	25.071	67.49*	80-120
48 1,3-Dichloropropan	37.147	24.205	65.16*	80-120
49 Tetrachloroethene	37.147	14.767	39.75*	80-121
50 Chlorodibromometha	37.147	19.825	53.37*	64-120
51 1,2-Dibromoethane	37.147	24.736	66.59*	75-120
53 Chlorobenzene	37.147	16.806	45.24*	80-120
55 1,1,1,2-Tetrachlor	37.147	17.529	47.19*	69-121
54 Ethyl Benzene	37.147	16.916	45.54*	80-127
56 m,p-xylene	74.294	30.166	40.60*	80-125
57 o-Xylene	37.147	14.782	39.79*	78-120
58 Styrene	37.147	13.985	37.65*	80-123
59 Isopropyl Benzene	37.147	11.512	30.99*	80-127
60 Bromoform	37.147	15.370	41.38*	60-120
61 1,1,2,2-Tetrachlor	37.147	18.080	48.67*	74-120
63 1,2,3-Trichloropro	37.147	21.030	56.61*	72-121
65 Trans-1,4-Dichloro	37.147	19.099	51.41*	65-126
66 N-Propyl Benzene	37.147	10.202	27.46*	80-132
67 Bromobenzene	37.147	11.977	32.24*	80-120
68 1,3,5-Trimethyl Be	37.147	9.429	25.38*	80-125
69 2-Chloro Toluene	37.147	10.603	28.54*	80-125
70 4-Chloro Toluene	37.147	11.469	30.88*	80-127
71 T-Butyl Benzene	37.147	8.605	23.16*	87-122
72 1,2,4-Trimethylben	37.147	9.151	24.63*	80-126
73 S-Butyl Benzene	37.147	7.560	20.35*	80-134
74 4-Isopropyl Toluen	37.147	12.305	33.13*	80-131
75 1,3-Dichlorobenzen	37.147	8.033	21.62*	80-120
77 1,4-Dichlorobenzen	37.147	8.228	22.15*	80-120
78 N-Butyl Benzene	37.147	6.391	17.21*	80-138
80 1,2-Dichlorobenzen	37.147	7.792	20.98*	80-120
81 1,2-Dibromo 3-Chlo	37.147	15.020	40.43*	59-120
82 1,2,4-Trichloroben	37.147	4.029	10.85*	78-130
83 Hexachloro 1,3-But	37.147	3.711	9.99*	76-129
84 Naphthalene	37.147	6.657	17.92*	66-120
85 1,2,3-Trichloroben	37.147	3.614	9.73*	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	53.615	107.23	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	59.051	118.10	75-152
$ 43 d8-Toluene	50.000	52.836	105.67	82-115
$ 62 4-Bromofluorobenze	50.000	52.363	104.73	64-120
$ 79 d4-1,2-Dichloroben	50.000	51.411	102.82	80-120

Data File: /chem1/finn5.i/18JAN10.b/QF10AMSD.d

Date : 18-JAN-2010 21:38

Client ID: CB31A011110SED MSD

Sample Info: QF10AMSD,5,6.73,0

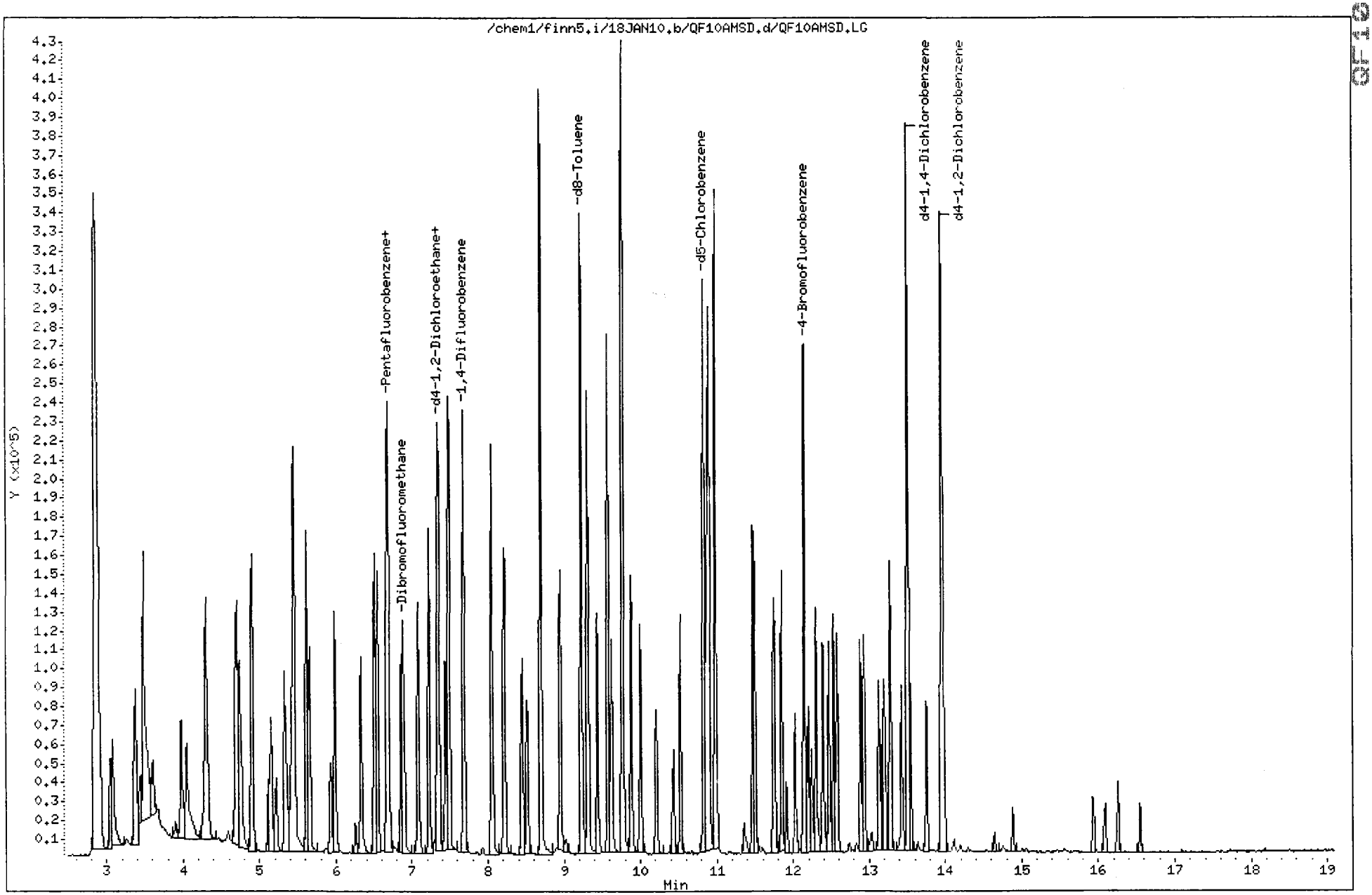
Column phase: Rtx502.2

Instrument: finn5.i

Operator: PB

Column diameter: 0.18

QF10:60250



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/LCS0118.d
Lab Smp Id: LCS0118 Client Smp ID: LCS0118
Inj Date : 18-JAN-2010 12:01
Operator : PB Inst ID: finn5.i
Smp Info : LCS0118,5,5,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:20 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.055	3.065	(0.459)	61052	44.4973	44.497
2 Chloromethane	50	3.347	3.367	(0.503)	111922	41.0529	41.053
3 Vinyl Chloride	62	3.467	3.477	(0.521)	123563	47.4513	47.451
4 Bromomethane	94	3.950	3.960	(0.594)	50117	45.5666	45.566
5 Chloroethane	64	4.020	4.030	(0.604)	74155	49.0820	49.082
6 Trichlorofluoromethane	101	4.281	4.291	(0.644)	116335	45.7462	45.746
7 Acrolein	56	4.663	4.673	(0.701)	57236	230.569	230.57
8 112Trichloro122Trifluoroethane	101	4.683	4.693	(0.704)	74023	43.3271	43.327
9 Acetone	43	4.713	4.723	(0.708)	112501	216.227	216.23
10 1,1-Dichloroethene	96	4.874	4.884	(0.733)	53520	40.7485	40.748
11 Bromoethane	108	5.095	5.105	(0.766)	37062	52.7393	52.739
12 Iodomethane	142	5.196	5.206	(0.781)	45949	56.2892	56.289
13 Methylene Chloride	84	5.306	5.316	(0.798)	62066	45.5274	45.527
14 Acrylonitrile	53	5.387	5.397	(0.810)	19014	46.3796	46.380

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.427	5.437	(0.816)	140992	43.8187	43.819
	15 Carbon Disulfide	76	5.407	5.427	(0.813)	181779	49.5854	49.585
	17 Trans-1,2-Dichloroethene	96	5.588	5.598	(0.840)	56370	41.7385	41.738
	18 Vinyl Acetate	43	5.909	5.919	(0.888)	136164	45.6539	45.654
	19 1,1-Dichloroethane	63	5.970	5.980	(0.897)	121868	44.0370	44.037
	20 2-Butanone	43	6.301	6.321	(0.947)	150104	226.660	226.66
	21 2,2-Dichloropropane	77	6.482	6.502	(0.974)	102355	44.2315	44.231
	22 Cis-1,2-Dichloroethene	96	6.522	6.532	(0.980)	56584	41.1440	41.144
*	23 Pentafluorobenzene	168	6.653	6.663	(1.000)	113099	50.0000	
	24 Chloroform	83	6.673	6.683	(1.003)	111463	43.3777	43.378
	26 Bromochloromethane	128	6.834	6.844	(1.027)	28812	45.0042	45.004
$	25 Dibromofluoromethane	111	6.864	6.884	(1.032)	66679	51.1388	51.139
	27 1,1,1-Trichloroethane	97	7.055	7.075	(1.060)	101350	43.5048	43.505
	29 1,1-Dichloropropene	75	7.196	7.216	(0.940)	87096	42.4388	42.439
	30 Carbon Tetrachloride	117	7.316	7.326	(0.955)	92905	42.8027	42.803
$	31 d4-1,2-Dichloroethane	65	7.326	7.347	(1.101)	88256	50.9570	50.957
	32 1,2-Dichloroethane	62	7.417	7.437	(0.968)	96719	44.0184	44.018
	33 Benzene	78	7.467	7.477	(0.975)	205683	43.8429	43.843
*	34 1,4-Difluorobenzene	114	7.658	7.668	(1.000)	161272	50.0000	
	35 Trichloroethene	95	8.030	8.040	(1.049)	64756	43.2045	43.204
	36 1,2-Dichloropropane	63	8.191	8.201	(1.070)	64230	42.9019	42.902
	37 Bromodichloromethane	83	8.422	8.442	(1.100)	80724	43.5498	43.550
	39 Dibromomethane	93	8.492	8.512	(1.109)	37296	42.9330	42.933
	40 2-Chloroethyl Vinyl Ether	63	8.643	8.653	(1.129)	24118	46.9241	46.924(Q)
	41 4-Methyl-2-Pentanone	58	8.673	8.683	(1.133)	94994	217.581	217.58
	42 Cis 1,3-dichloropropene	75	8.924	8.944	(1.165)	93689	45.3689	45.369
$	43 d8-Toluene	98	9.206	9.216	(1.202)	200080	52.3551	52.355
	44 Toluene	92	9.286	9.306	(1.213)	129842	43.5215	43.521
	45 Trans 1,3-Dichloropropene	75	9.417	9.427	(1.230)	84087	46.5907	46.591
	46 2-Hexanone	43	9.547	9.568	(0.884)	237385	233.810	233.81
	47 1,1,2-Trichloroethane	97	9.598	9.618	(1.253)	42930	43.4859	43.486
	48 1,3-Dichloropropane	76	9.859	9.869	(0.913)	84904	44.1253	44.125
	49 Tetrachloroethene	166	9.980	9.990	(0.924)	67245	41.9728	41.973
	50 Chlorodibromomethane	129	10.191	10.201	(0.943)	59528	45.4141	45.414
	51 1,2-Dibromoethane	107	10.412	10.422	(1.360)	50345	45.6198	45.620
*	52 d5-Chlorobenzene	117	10.804	10.824	(1.000)	151272	50.0000	
	53 Chlorobenzene	112	10.854	10.864	(1.005)	140988	43.8411	43.841
	54 Ethyl Benzene	91	10.884	10.894	(1.007)	247482	46.5309	46.531
	55 1,1,1,2-Tetrachloroethane	131	10.874	10.884	(1.006)	52533	43.0597	43.060
	56 m,p-xylene	106	10.965	10.975	(1.015)	198233	90.8080	90.808
	57 o-Xylene	106	11.447	11.467	(1.060)	97004	43.4768	43.477
	58 Styrene	104	11.477	11.497	(1.062)	155314	45.4933	45.493
	59 Isopropyl Benzene	105	11.829	11.839	(0.877)	254673	44.4236	44.424
	60 Bromoform	173	11.889	11.899	(0.882)	37718	42.3175	42.318
	61 1,1,2,2-Tetrachloroethane	83	12.010	12.020	(0.890)	60237	43.1091	43.109
$	62 4-Bromofluorobenzene	95	12.130	12.140	(1.123)	89283	51.7847	51.785
	63 1,2,3-Trichloropropane	110	12.181	12.191	(0.903)	14674	44.3897	44.390

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.231	12.241	(0.907)	22064	44.6581	44.658
	66 N-Propyl Benzene	91	12.281	12.291	(0.911)	308190	45.9566	45.956
	67 Bromobenzene	156	12.372	12.382	(0.917)	69186	41.8363	41.836
	68 1,3,5-Trimethyl Benzene	105	12.452	12.472	(0.923)	215211	47.4736	47.474
	69 2-Chloro Toluene	91	12.512	12.532	(0.928)	210008	47.1873	47.187
	70 4-Chloro Toluene	91	12.562	12.573	(0.931)	198261	44.7438	44.744
	71 T-Butyl Benzene	119	12.864	12.874	(0.954)	186914	44.9492	44.949
	72 1,2,4-Trimethylbenzene	105	12.914	12.924	(0.958)	211180	47.1217	47.122
	73 S-Butyl Benzene	105	13.115	13.125	(0.972)	280902	46.2206	46.221
	74 4-Isopropyl Toluene	119	13.256	13.266	(0.983)	219894	48.2722	48.272
	75 1,3-Dichlorobenzene	146	13.407	13.417	(0.994)	128715	44.6990	44.699
*	76 d4-1,4-Dichlorobenzene	152	13.487	13.497	(1.000)	87123	50.0000	
	77 1,4-Dichlorobenzene	146	13.527	13.537	(1.003)	126136	45.1691	45.169
	78 N-Butyl Benzene	91	13.738	13.748	(1.019)	230526	50.4926	50.492
$	79 d4-1,2-Dichlorobenzene	152	13.929	13.939	(1.033)	79625	49.8684	49.868
	80 1,2-Dichlorobenzene	146	13.959	13.980	(1.035)	114204	43.4527	43.453
	81 1,2-Dibromo 3-Chloropropane	75	14.864	14.884	(1.102)	11472	43.2342	43.234
	82 1,2,4-Trichlorobenzene	180	15.909	15.929	(1.180)	85524	48.9566	48.956
	83 Hexachloro 1,3-Butadiene	225	16.070	16.080	(1.192)	52271	45.8236	45.824
	84 Naphthalene	128	16.241	16.251	(1.204)	137944	46.2199	46.220
	85 1,2,3-Trichlorobenzene	180	16.522	16.542	(1.225)	72952	46.2227	46.223

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0118.d
Lab Smp Id: LCS0118
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: LCS0118
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	113099	-0.26
34 1,4-Difluorobenze	160565	80282	321130	161272	0.44
52 d5-Chlorobenzene	148719	74360	297438	151272	1.72
76 d4-1,4-Dichlorobe	84322	42161	168644	87123	3.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.65	-0.15
34 1,4-Difluorobenze	7.67	7.17	8.17	7.66	-0.13
52 d5-Chlorobenzene	10.82	10.32	11.32	10.80	-0.19
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.49	-0.07

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: SOLID
Lab Smp Id: LCS0118
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: 18JAN10
Fraction: VOA
Client Smp ID: LCS0118
Operator: PB
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	44.497	88.99	53-148
2	Chloromethane	50.000	41.053	82.11	64-125
3	Vinyl Chloride	50.000	47.451	94.90	63-137
4	Bromomethane	50.000	45.566	91.13	57-136
5	Chloroethane	50.000	49.082	98.16	64-131
6	Trichlorofluoromet	50.000	45.746	91.49	69-132
7	Acrolein	250.00	230.57	92.23	54-137
8	112Trichloro122Tri	50.000	43.327	86.65	74-130
9	Acetone	250.00	216.23	86.49	60-131
10	1,1-Dichloroethene	50.000	40.748	81.50	75-126
11	Bromoethane	50.000	52.739	105.48	76-126
12	Iodomethane	50.000	56.289	112.58	65-139
13	Methylene Chloride	50.000	45.527	91.05	70-123
15	Carbon Disulfide	50.000	49.585	99.17	71-129
14	Acrylonitrile	50.000	46.380	92.76	67-125
16	Methyl tert-Butyl	50.000	43.819	87.64	70-120
17	Trans-1,2-Dichloro	50.000	41.738	83.48	80-120
18	Vinyl Acetate	50.000	45.654	91.31	60-136
19	1,1-Dichloroethane	50.000	44.037	88.07	80-120
20	2-Butanone	250.00	226.66	90.66	70-120
21	2,2-Dichloropropan	50.000	44.231	88.46	74-123
22	Cis-1,2-Dichloroet	50.000	41.144	82.29	80-120
24	Chloroform	50.000	43.378	86.76	80-120
26	Bromochloromethane	50.000	45.004	90.01	80-120
27	1,1,1-Trichloroeth	50.000	43.505	87.01	77-121
29	1,1-Dichloropropen	50.000	42.439	84.88	80-120
30	Carbon Tetrachlori	50.000	42.803	85.61	77-122
32	1,2-Dichloroethane	50.000	44.018	88.04	76-120
33	Benzene	50.000	43.843	87.69	80-120
35	Trichloroethene	50.000	43.204	86.41	80-120
36	1,2-Dichloropropan	50.000	42.902	85.80	80-120
37	Bromodichlorometha	50.000	43.550	87.10	77-121
39	Dibromomethane	50.000	42.933	85.87	80-120

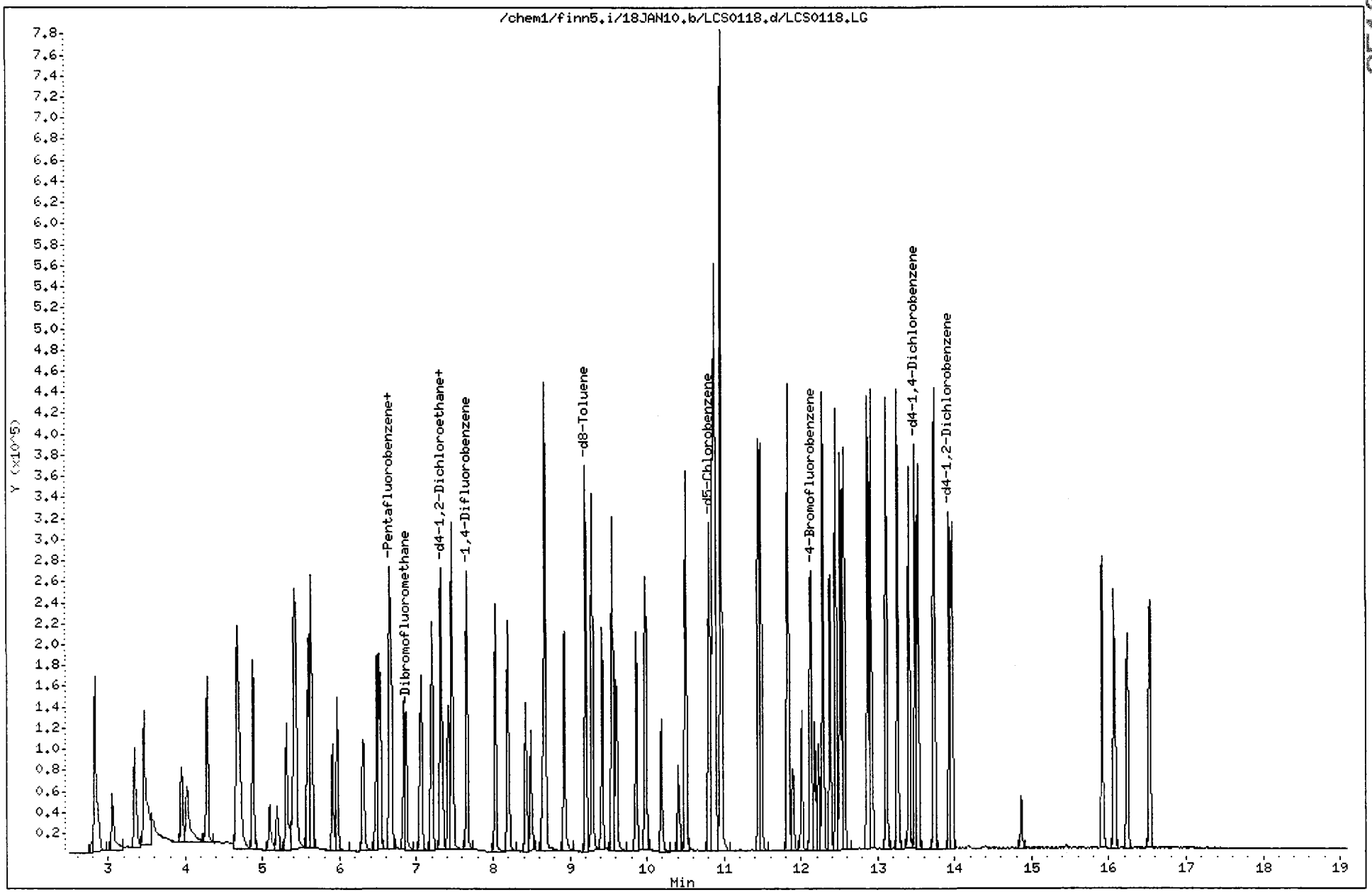
SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	46.924	93.85	10-191
41 4-Methyl-2-Pentano	250.00	217.58	87.03	67-120
42 Cis 1,3-dichloropr	50.000	45.369	90.74	74-120
44 Toluene	50.000	43.521	87.04	80-120
45 Trans 1,3-Dichloro	50.000	46.591	93.18	65-120
46 2-Hexanone	250.00	233.81	93.52	65-130
47 1,1,2-Trichloroeth	50.000	43.486	86.97	80-120
48 1,3-Dichloropropan	50.000	44.125	88.25	80-120
49 Tetrachloroethene	50.000	41.973	83.95	80-121
50 Chlorodibromometha	50.000	45.414	90.83	64-120
51 1,2-Dibromoethane	50.000	45.620	91.24	75-120
53 Chlorobenzene	50.000	43.841	87.68	80-120
55 1,1,1,2-Tetrachlor	50.000	43.060	86.12	69-121
54 Ethyl Benzene	50.000	46.531	93.06	80-127
56 m,p-xylene	100.00	90.808	90.81	80-125
57 o-Xylene	50.000	43.477	86.95	78-120
58 Styrene	50.000	45.493	90.99	80-123
59 Isopropyl Benzene	50.000	44.424	88.85	80-127
60 Bromoform	50.000	42.318	84.64	60-120
61 1,1,2,2-Tetrachlor	50.000	43.109	86.22	74-120
63 1,2,3-Trichloropro	50.000	44.390	88.78	72-121
65 Trans-1,4-Dichloro	50.000	44.658	89.32	65-126
66 N-Propyl Benzene	50.000	45.956	91.91	80-132
67 Bromobenzene	50.000	41.836	83.67	80-120
68 1,3,5-Trimethyl Be	50.000	47.474	94.95	80-125
69 2-Chloro Toluene	50.000	47.187	94.37	80-125
70 4-Chloro Toluene	50.000	44.744	89.49	80-127
71 T-Butyl Benzene	50.000	44.949	89.90	87-122
72 1,2,4-Trimethylben	50.000	47.122	94.24	80-126
73 S-Butyl Benzene	50.000	46.221	92.44	80-134
74 4-Isopropyl Toluen	50.000	48.272	96.54	80-131
75 1,3-Dichlorobenzen	50.000	44.699	89.40	80-120
77 1,4-Dichlorobenzen	50.000	45.169	90.34	80-120
78 N-Butyl Benzene	50.000	50.492	100.99	80-138
80 1,2-Dichlorobenzen	50.000	43.453	86.91	80-120
81 1,2-Dibromo 3-Chlo	50.000	43.234	86.47	59-120
82 1,2,4-Trichloroben	50.000	48.956	97.91	78-130
83 Hexachloro 1,3-But	50.000	45.824	91.65	76-129
84 Naphthalene	50.000	46.220	92.44	66-120
85 1,2,3-Trichloroben	50.000	46.223	92.45	73-123

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	51.139	102.28	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	50.957	101.91	75-152
$ 43 d8-Toluene	50.000	52.355	104.71	82-115
$ 62 4-Bromofluorobenze	50.000	51.785	103.57	64-120
$ 79 d4-1,2-Dichloroben	50.000	49.868	99.74	80-120

Data File: /chem1/finn5.i/18JAN10.b/LCS0118.d
Date : 18-JAN-2010 12:01
Client ID: LCS0118
Sample Info: LCS0118,5,5,0

Instrument: finn5.i
Operator: PB
Column phase: Rtx502.2
Column diameter: 0.18



Analytical Resources, Inc.

8260C

Data file : /chem1/finn5.i/18JAN10.b/LCS0118A.d
Lab Smp Id: LCS0118 Client Smp ID: LCS0118
Inj Date : 18-JAN-2010 12:35
Operator : PB Inst ID: finn5.i
Smp Info : LCS0118,5,5,0
Misc Info : 10-690
Comment :
Method : /chem1/finn5.i/18JAN10.b/s8260b.m
Meth Date : 21-Jan-2010 12:20 patrickb Quant Type: ISTD
Cal Date : 06-JAN-2010 13:53 Cal File: 2000106.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: voa.sub
Target Version: 3.50
Processing Host: cserv3

Concentration Formula: Amt * DF * Pv * 1 / (Sa * ((100 - M) / 100)) * CpndVaria

Name	Value	Description
DF	1.00000	Dilution Factor
Pv	5.00000	Purge Volume
Sa	5.00000	Sample Amount
M	0.00000	Moisture (%)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
1 Dichlorodifluoromethane	85	3.045	3.065	(0.458)	67747	48.8338	48.834
2 Chloromethane	50	3.347	3.367	(0.504)	127442	46.2314	46.231
3 Vinyl Chloride	62	3.457	3.477	(0.520)	143484	54.4953	54.495
4 Bromomethane	94	3.950	3.960	(0.595)	57253	51.4820	51.482
5 Chloroethane	64	4.020	4.030	(0.605)	85842	56.1924	56.192
6 Trichlorofluoromethane	101	4.271	4.291	(0.643)	135015	52.5076	52.508
7 Acrolein	56	4.653	4.673	(0.700)	68064	271.172	271.17
8 112Trichloro122Trifluoroethane	101	4.673	4.693	(0.703)	86584	50.1217	50.122
9 Acetone	43	4.713	4.723	(0.710)	135959	258.439	258.44
10 1,1-Dichloroethene	96	4.874	4.884	(0.734)	61108	46.0140	46.014
11 Bromoethane	108	5.085	5.105	(0.766)	39240	55.2244	55.224
12 Iodomethane	142	5.186	5.206	(0.781)	47506	57.5564	57.556
13 Methylene Chloride	84	5.296	5.316	(0.797)	68533	49.7182	49.718
14 Acrylonitrile	53	5.377	5.397	(0.809)	20820	50.2261	50.226

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
	16 Methyl tert-Butyl Ether	73	5.417	5.437	(0.815)	159708	49.0894	49.089
	15 Carbon Disulfide	76	5.407	5.427	(0.814)	193720	52.2613	52.261
	17 Trans-1,2-Dichloroethene	96	5.588	5.598	(0.841)	64073	46.9202	46.920
	18 Vinyl Acetate	43	5.899	5.919	(0.888)	152864	50.6893	50.689
	19 1,1-Dichloroethane	63	5.960	5.980	(0.897)	137433	49.1151	49.115
	20 2-Butanone	43	6.301	6.321	(0.949)	170733	254.974	254.97
	21 2,2-Dichloropropane	77	6.482	6.502	(0.976)	115500	49.3629	49.363
	22 Cis-1,2-Dichloroethene	96	6.522	6.532	(0.982)	65056	46.7839	46.784
*	23 Pentafluorobenzene	168	6.643	6.663	(1.000)	114357	50.0000	
	24 Chloroform	83	6.663	6.683	(1.003)	125637	48.3559	48.356
	26 Bromochloromethane	128	6.824	6.844	(1.027)	32471	50.1616	50.162
$	25 Dibromofluoromethane	111	6.864	6.884	(1.033)	66041	50.0924	50.092
	27 1,1,1-Trichloroethane	97	7.055	7.075	(1.062)	116516	49.4647	49.465
	29 1,1-Dichloropropene	75	7.196	7.216	(0.941)	98332	48.8521	48.852
	30 Carbon Tetrachloride	117	7.306	7.326	(0.955)	104956	49.3019	49.302
$	31 d4-1,2-Dichloroethane	65	7.326	7.347	(1.103)	89570	51.1468	51.147
	32 1,2-Dichloroethane	62	7.417	7.437	(0.970)	107217	49.7519	49.752
	33 Benzene	78	7.457	7.477	(0.975)	226303	49.1830	49.183
*	34 1,4-Difluorobenzene	114	7.648	7.668	(1.000)	158174	50.0000	
	35 Trichloroethene	95	8.020	8.040	(1.049)	70794	48.1581	48.158
	36 1,2-Dichloropropane	63	8.181	8.201	(1.070)	69734	47.4906	47.490
	37 Bromodichloromethane	83	8.422	8.442	(1.101)	87787	48.2879	48.288
	39 Dibromomethane	93	8.492	8.512	(1.110)	41425	48.6200	48.620
	40 2-Chloroethyl Vinyl Ether	63	8.633	8.653	(1.129)	25110	49.8110	49.811(Q)
	41 4-Methyl-2-Pentanone	58	8.663	8.683	(1.133)	105140	245.537	245.54
	42 Cis 1,3-dichloropropene	75	8.924	8.944	(1.167)	101693	50.2093	50.209
$	43 d8-Toluene	98	9.196	9.216	(1.202)	194099	51.7848	51.785
	44 Toluene	92	9.286	9.306	(1.214)	140311	47.9517	47.952
	45 Trans 1,3-Dichloropropene	75	9.407	9.427	(1.230)	92027	51.9888	51.989
	46 2-Hexanone	43	9.547	9.568	(0.885)	268414	268.398	268.40
	47 1,1,2-Trichloroethane	97	9.598	9.618	(1.255)	47738	49.3033	49.303
	48 1,3-Dichloropropane	76	9.849	9.869	(0.912)	94058	49.6271	49.627
	49 Tetrachloroethene	166	9.970	9.990	(0.924)	76195	48.2834	48.283
	50 Chlorodibromomethane	129	10.181	10.201	(0.943)	64505	49.9604	49.960
	51 1,2-Dibromoethane	107	10.402	10.422	(1.360)	54798	50.6274	50.627
*	52 d5-Chlorobenzene	117	10.794	10.824	(1.000)	149003	50.0000	
	53 Chlorobenzene	112	10.844	10.864	(1.005)	152716	48.2111	48.211
	54 Ethyl Benzene	91	10.874	10.894	(1.007)	273467	52.1995	52.200
	55 1,1,1,2-Tetrachloroethane	131	10.864	10.884	(1.007)	56965	47.4035	47.403
	56 m,p-xylene	106	10.954	10.975	(1.015)	217735	101.260	101.26
	57 o-Xylene	106	11.437	11.467	(1.060)	106100	48.2777	48.278
	58 Styrene	104	11.467	11.497	(1.062)	170008	50.5557	50.556
	59 Isopropyl Benzene	105	11.819	11.839	(0.877)	281138	49.2833	49.283
	60 Bromoform	173	11.879	11.899	(0.881)	41487	46.7770	46.777
	61 1,1,2,2-Tetrachloroethane	83	12.000	12.020	(0.890)	66677	47.9547	47.955
$	62 4-Bromofluorobenzene	95	12.120	12.140	(1.123)	88317	52.0044	52.004
	63 1,2,3-Trichloropropane	110	12.171	12.191	(0.903)	16072	48.8599	48.860(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/Kg)	CONCENTRATIONS FINAL (ug/Kg)
	65 Trans-1,4-Dichloro 2-Butene	53	12.221	12.241	(0.907)	24764	50.3715	50.372
	66 N-Propyl Benzene	91	12.271	12.291	(0.910)	338630	50.7462	50.746
	67 Bromobenzene	156	12.361	12.382	(0.917)	73936	44.9304	44.930
	68 1,3,5-Trimethyl Benzene	105	12.442	12.472	(0.923)	235292	52.1608	52.161
	69 2-Chloro Toluene	91	12.502	12.532	(0.928)	225057	50.8195	50.819
	70 4-Chloro Toluene	91	12.552	12.573	(0.931)	218008	49.4444	49.444
	71 T-Butyl Benzene	119	12.854	12.874	(0.954)	207409	50.1253	50.125
	72 1,2,4-Trimethylbenzene	105	12.904	12.924	(0.957)	233820	52.4323	52.432
	73 S-Butyl Benzene	105	13.105	13.125	(0.972)	310054	51.2705	51.270
	74 4-Isopropyl Toluene	119	13.246	13.266	(0.983)	242325	53.4602	53.460
	75 1,3-Dichlorobenzene	146	13.397	13.417	(0.994)	139744	48.7697	48.770
*	76 d4-1,4-Dichlorobenzene	152	13.477	13.497	(1.000)	86693	50.0000	
	77 1,4-Dichlorobenzene	146	13.517	13.537	(1.003)	136783	49.2247	49.225
	78 N-Butyl Benzene	91	13.728	13.748	(1.019)	254103	55.9328	55.933
$	79 d4-1,2-Dichlorobenzene	152	13.919	13.939	(1.033)	80357	50.5765	50.576
	80 1,2-Dichlorobenzene	146	13.959	13.980	(1.036)	124702	47.6823	47.682
	81 1,2-Dibromo 3-Chloropropane	75	14.864	14.884	(1.103)	13425	50.8454	50.845
	82 1,2,4-Trichlorobenzene	180	15.909	15.929	(1.180)	96157	55.3162	55.316
	83 Hexachloro 1,3-Butadiene	225	16.060	16.080	(1.192)	58674	51.6919	51.692
	84 Naphthalene	128	16.231	16.251	(1.204)	158981	53.5329	53.533
	85 1,2,3-Trichlorobenzene	180	16.512	16.542	(1.225)	82954	52.8207	52.821

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: finn5.i
Lab File ID: LCS0118A.d
Lab Smp Id: LCS0118
Analysis Type: VOA
Quant Type: ISTD
Operator: PB
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 10:41
Client Smp ID: LCS0118
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 5.
If Continuing Cal. use Initial Cal. Level 5

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	113395	56698	226790	114357	0.85
34 1,4-Difluorobenze	160565	80282	321130	158174	-1.49
52 d5-Chlorobenzene	148719	74360	297438	149003	0.19
76 d4-1,4-Dichlorobe	84322	42161	168644	86693	2.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
23 Pentafluorobenzen	6.66	6.16	7.16	6.64	-0.30
34 1,4-Difluorobenze	7.67	7.17	8.17	7.65	-0.26
52 d5-Chlorobenzene	10.82	10.32	11.32	10.79	-0.28
76 d4-1,4-Dichlorobe	13.50	13.00	14.00	13.48	-0.15

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: SOLID
Lab Smp Id: LCS0118
Level: LOW
Data Type: MS DATA
SpikeList File: all.spk
Sublist File: voa.sub
Method File: /chem1/finn5.i/18JAN10.b/s8260b.m
Misc Info: 10-690

Client SDG: 18JAN10
Fraction: VOA
Client Smp ID: LCS0118
Operator: PB
SampleType: LCSD
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
1	Dichlorodifluorome	50.000	48.834	97.67	53-148
2	Chloromethane	50.000	46.231	92.46	64-125
3	Vinyl Chloride	50.000	54.495	108.99	63-137
4	Bromomethane	50.000	51.482	102.96	57-136
5	Chloroethane	50.000	56.192	112.38	64-131
6	Trichlorofluoromet	50.000	52.508	105.02	69-132
7	Acrolein	250.00	271.17	108.47	54-137
8	112Trichloro122Tri	50.000	50.122	100.24	74-130
9	Acetone	250.00	258.44	103.38	60-131
10	1,1-Dichloroethene	50.000	46.014	92.03	75-126
11	Bromoethane	50.000	55.224	110.45	76-126
12	Iodomethane	50.000	57.556	115.11	65-139
13	Methylene Chloride	50.000	49.718	99.44	70-123
15	Carbon Disulfide	50.000	52.261	104.52	71-129
14	Acrylonitrile	50.000	50.226	100.45	67-125
16	Methyl tert-Butyl	50.000	49.089	98.18	70-120
17	Trans-1,2-Dichloro	50.000	46.920	93.84	80-120
18	Vinyl Acetate	50.000	50.689	101.38	60-136
19	1,1-Dichloroethane	50.000	49.115	98.23	80-120
20	2-Butanone	250.00	254.97	101.99	70-120
21	2,2-Dichloropropan	50.000	49.363	98.73	74-123
22	Cis-1,2-Dichloroet	50.000	46.784	93.57	80-120
24	Chloroform	50.000	48.356	96.71	80-120
26	Bromochloromethane	50.000	50.162	100.32	80-120
27	1,1,1-Trichloroeth	50.000	49.465	98.93	77-121
29	1,1-Dichloropropen	50.000	48.852	97.70	80-120
30	Carbon Tetrachlori	50.000	49.302	98.60	77-122
32	1,2-Dichloroethane	50.000	49.752	99.50	76-120
33	Benzene	50.000	49.183	98.37	80-120
35	Trichloroethene	50.000	48.158	96.32	80-120
36	1,2-Dichloropropan	50.000	47.490	94.98	80-120
37	Bromodichlorometha	50.000	48.288	96.58	77-121
39	Dibromomethane	50.000	48.620	97.24	80-120

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
40 2-Chloroethyl Viny	50.000	49.811	99.62	10-191
41 4-Methyl-2-Pentano	250.00	245.54	98.21	67-120
42 Cis 1,3-dichloropr	50.000	50.209	100.42	74-120
44 Toluene	50.000	47.952	95.90	80-120
45 Trans 1,3-Dichloro	50.000	51.989	103.98	65-120
46 2-Hexanone	250.00	268.40	107.36	65-130
47 1,1,2-Trichloroeth	50.000	49.303	98.61	80-120
48 1,3-Dichloropropan	50.000	49.627	99.25	80-120
49 Tetrachloroethene	50.000	48.283	96.57	80-121
50 Chlorodibromometha	50.000	49.960	99.92	64-120
51 1,2-Dibromoethane	50.000	50.627	101.25	75-120
53 Chlorobenzene	50.000	48.211	96.42	80-120
55 1,1,1,2-Tetrachlor	50.000	47.403	94.81	69-121
54 Ethyl Benzene	50.000	52.200	104.40	80-127
56 m,p-xylene	100.00	101.26	101.26	80-125
57 o-Xylene	50.000	48.278	96.56	78-120
58 Styrene	50.000	50.556	101.11	80-123
59 Isopropyl Benzene	50.000	49.283	98.57	80-127
60 Bromoform	50.000	46.777	93.55	60-120
61 1,1,2,2-Tetrachlor	50.000	47.955	95.91	74-120
63 1,2,3-Trichloropro	50.000	48.860	97.72	72-121
65 Trans-1,4-Dichloro	50.000	50.372	100.74	65-126
66 N-Propyl Benzene	50.000	50.746	101.49	80-132
67 Bromobenzene	50.000	44.930	89.86	80-120
68 1,3,5-Trimethyl Be	50.000	52.161	104.32	80-125
69 2-Chloro Toluene	50.000	50.819	101.64	80-125
70 4-Chloro Toluene	50.000	49.444	98.89	80-127
71 T-Butyl Benzene	50.000	50.125	100.25	87-122
72 1,2,4-Trimethylben	50.000	52.432	104.86	80-126
73 S-Butyl Benzene	50.000	51.270	102.54	80-134
74 4-Isopropyl Toluen	50.000	53.460	106.92	80-131
75 1,3-Dichlorobenzen	50.000	48.770	97.54	80-120
77 1,4-Dichlorobenzen	50.000	49.225	98.45	80-120
78 N-Butyl Benzene	50.000	55.933	111.87	80-138
80 1,2-Dichlorobenzen	50.000	47.682	95.36	80-120
81 1,2-Dibromo 3-Chlo	50.000	50.845	101.69	59-120
82 1,2,4-Trichloroben	50.000	55.316	110.63	78-130
83 Hexachloro 1,3-But	50.000	51.692	103.38	76-129
84 Naphthalene	50.000	53.533	107.07	66-120
85 1,2,3-Trichloroben	50.000	52.821	105.64	73-123

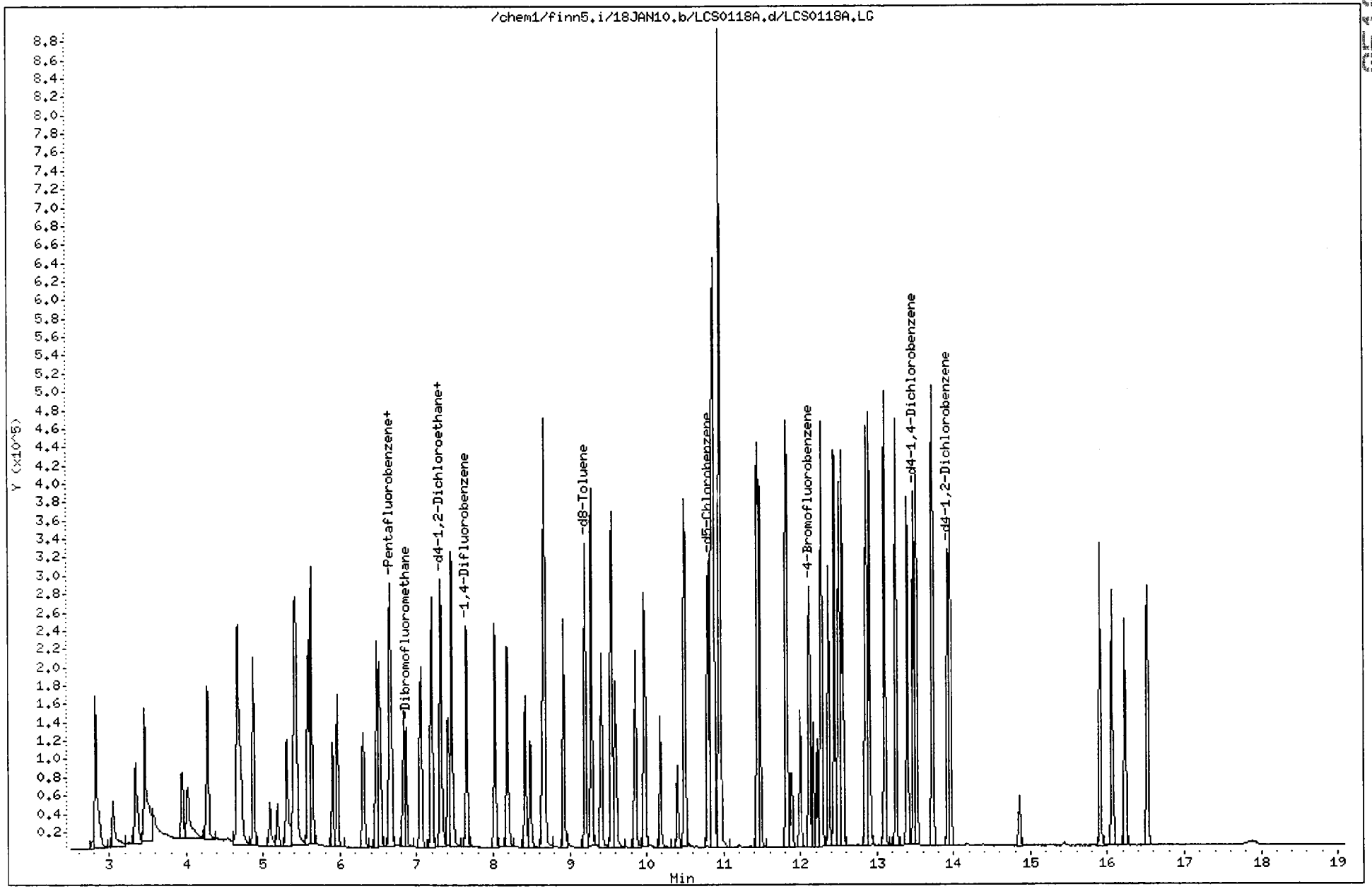
SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 25 Dibromofluorometha	50.000	50.092	100.18	30-160

SURROGATE COMPOUND	AMOUNT ADDED ug/Kg	AMOUNT RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 31 d4-1,2-Dichloroeth	50.000	51.147	102.29	75-152
$ 43 d8-Toluene	50.000	51.785	103.57	82-115
$ 62 4-Bromofluorobenze	50.000	52.004	104.01	64-120
$ 79 d4-1,2-Dichloroben	50.000	50.576	101.15	80-120

Data File: /chem1/finn5.i/18JAN10.b/LCS0118A.d
Date : 18-JAN-2010 12:35
Client ID: LCS0118
Sample Info: LCS0118,5,5,0

Instrument: finn5.i
Operator: PB
Column diameter: 0.18

Column phase: Rtx502.2



Volatile Analysis
Run Logs

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Analytical Resources Inc.: Organics Instrument Log

FINN5 Serial No.: 5500-000421A

Date: 1/6/10 Analysis: 8260C Analyst: LP

GC Program: FT Column No: B179 Column Type: VMS02

Instrument Tune (.U or .CT.): BFB0106 EM Voltage: 1705

Calibration File: 0106.d Curve Date: 1/6/10

IS/SS	Ical/Ccal	LCS/ICV
WG15-2	WG12-3	WG14-2
	WG15-1	WJ80-2
	WG12-5	WJ64-5
	WG11-1	WG14-3
	WG10-3	WJ82-1

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/finn5.i/06JAN10.b

	Time	Filename	LabID	ClientID	WT						
1	0928	BFB0106.d	BFB0106	BFB0106	0.00						
2	1131	0050106.d	IC0106	VSTD5	5.00 | 6.62	111234|| 7.63	152932||10.78	140638||13.46	76594|		
3	1201	0100106.d	IC0106	VSTD10	5.00 | 6.62	113628|| 7.63	157784||10.78	147314||13.46	80299|		
4	1228	0500106.d	IC0106	VSTD50	5.00 | 6.61	113395|| 7.62	160565||10.76	148719||13.45	84322|		
5	1254	1000106.d	IC0106	VSTD100	5.00 | 6.62	123198|| 7.64	174397||10.78	158426||13.47	91063|		
6	1321	1500106.d	IC0106	VSTD150	5.00 | 6.61	135536|| 7.61	191249||10.77	173984||13.46	102290|		
7	1353	2000106.d	IC0106	VSTD200	5.00 | 6.60	140248|| 7.61	197651||10.76	179253||13.45	112283|		
8	1456	0010106.d	IC0106	VSTD1	5.00 | 6.63	111773|| 7.64	156714||10.79	145653||13.47	79086|		
9	1531	0020106.d	IC0106	VSTD2	5.00 | 6.61	112862|| 7.62	157205||10.77	145390||13.45	77969|		
10	1618	ICV0106.d	ICV0106	ICV0106	5.00 | 6.61	111526|| 7.62	159685||10.76	147063||13.45	82551|		

1/7/10

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 peri

QF10:00284

Analytical Resources, Incorporated
Analytical Chemists and Consultants

VOA Analyst Notes / Corrective Action Log

ARI Project ID: FSical Client ID: _____

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **703S**(SIM) **706S**(524.2) **708S**(8260C) **710S**(MME)

Parameter(s): _____

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 1/6/10 Analysis Start Date: 1/6/10

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):

linear
DCM
2 hexanone

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 1/13/10

Reviewer's Signature: _____ **Date:** 1/13/10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Volatile Organics Extraction Bench Sheet

(8260B, 8260B-SIM, 8021, NWTPH-Gx, AK-101, TPH-G, VPH, TCLP-ZHE)

ARI Project No. QF10 | Client ID/Project | Extraction Date | MeOH Lot No. | Analyst

1st Extraction: | 2nd Extraction: | V 1/18/10

	Lab ID	Vial No.	Preservative		Method 5035 Sample Weight					Comments
			$NaHSO_3$	CH_3OH	Vial Weight	Tare (from vial)	Sample Weight	Extract Volume	MeOH Spilt Volume	
	MB:									
	LCS:									
	LCSD:									
1	QF10 A	5	—		37.05	30.79	6.26			
2	B	3	—		37.29	30.63	6.66			
3	C	1					5mL			
4	Ag	3	—	37.22	30.72		6.50			
5	Ag	2	—	37.55	30.82		6.73			
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
	Balance ID:									

	Solution ID	Concentration	Amount Spiked	Analyst	Witness
Surrogate:					
Spike:					

Analytical Resources Inc.: Organics Instrument Log

FINN5 Serial No.: 5500-000421A

Date: 1/18/10 Analysis: 8260-SIM Analyst: JP

GC Program: F5 Column No: 881729 Column Type: RTX-502.2

Instrument Tune (.U or .CT.): BFB0118 EM Voltage: 1207

Calibration File: 0500118 Curve Date: 1/6/10

IS/SS	Ical/Ccal	LCS/ICV
WG615-L	WG616	WG616
	WG615-1	WG615-1
	WG614	WG614
	WG611	WG611
	WG610	WG610

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem1/finn5.i/18JAN10.b

	Time	Filename	LabID	ClientID	WT									
1	1003	BFB0118.d	BFB0118	BFB0118	0.00									
2	1041	0500118.d	CC0118	VSTD050	5.00	6.66	106341	7.67	151324	10.82	141595	13.50	78178	
3	1201	LCS0118.d	LCS0118	LCS0118	5.00	6.65	113099	7.66	161272	10.80	151272	13.49	87123	
4	1235	LCS0118A.d	LCS0118	LCS0118	5.00	6.64	114357	7.65	158174	10.79	149003	13.48	86693	
5	1302	MB0118.d	MB0118	MB0118	5.00	6.66	99766	7.67	139354	10.81	132412	13.50	71238	
6	1358	QE38A2.d	QE38A	MW-26-59-60	5.00	6.66	103612	7.67	142586	10.81	131398	13.50	71996	
7	1428	QF10A.d	QF10A	CB31A011110SED	5.00	6.67	99113	7.66	142772	10.82	141073	13.50	82539	
8	1458	QF10B.d	QF10B	CB99011110SED	5.00	6.67	101953	7.68	146113	10.82	145130	13.51	82602	
9	1522	QF10C.d	QF10C	Trip Blank	LL 1	6.67	96718	7.68	138137	10.82	136145	13.51	75466	
10	1549	QF64C.d	QF64C	EST9-8.5-9.5	5.00	6.67	94809	7.68	138418	10.82	139007	13.50	80019	
11	1616	QF64D.d	QF64D	EST9-15-16	5.00	6.65	93414	7.67	136169	10.81	138202	13.49	76654	
12	1642	QF64E.d	QF64E	TRIP BLANK	LL 1	6.66	88482	7.67	131347	10.81	127126	13.50	67635	
13	1709	QF81A.d	QF81A	C1	5.00	6.65	94357	7.66	140893	10.80	136515	13.49	74644	
14	1736	QF81B.d	QF81B	C4	5.00	6.65	91963	7.66	135018	10.80	134071	13.49	72097	
15	1803	QF81C.d	QF81C	C2	5.00	6.67	90630	7.68	133880	10.82	132842	13.50	72405	
16	1830	QF81D.d	QF81D	C3	5.00	6.66	95155	7.67	130650	10.81	126063	13.50	68886	
17	1857	QF81E.d	QF81E	C5	5.00	6.65	85962	7.67	130881	10.81	130614	13.50	71673	
18	1924	QF62A.d	QF62A	SP-Soil	5.00	6.66	66105	7.68	104554	10.82	79064	13.50	18472	
19	1951	QF62B.d	QF62B	SP-Water	1	6.66	99594	7.67	144377	10.81	137051	13.49	72316	
20	2018	QF81EMS.d	QF81EMS	C5 MS	5.00	6.65	116485	7.66	158735	10.80	162305	13.49	95708	
21	2045	QF81EMSD.d	QF81EMSD	C5 MSD	5.00	6.65	110291	7.66	161168	10.80	155174	13.49	88966	
22	2111	QF10AMS.d	QF10AMS	CB31A011110SED MS	5.00	6.65	105512	7.66	153418	10.80	146831	13.49	84910	
23	2138	QF10AMSD.d	QF10AMSD	CB31A011110SED MSD	5.00	6.67	102248	7.68	147551	10.82	148900	13.51	86383	

Maintenance

JP 1/18/10

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: QF10 Client ID: Floyd Snider

ARI SOP: **404S**(Gas) **410S**(BTEX) **430S**(VPH) **703S**(SIM) **706S**(524.2) **708S**(8260C) **710S**(MME)

Parameter(s): _____

Instrument: NT-3 NT-5 NT-7 NT-9 NT-10 PID-1 PID-2 PID-3 FID-6 FINN-5

Purge Volume (mL) 5 Curve Date: 1/6/10 Analysis Start Date: 1/18/10

pH ≤ 2.0 YES / NO / NA Method Blank In Control? YES / NO

BFB Tune Meets Criteria? YES / NO / NA (sample C) 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):

QC on A

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 1/20/10

Reviewer's Signature: _____ **Date:** 1/21/10

Semivolatile PAH Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8270 PNA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	TER	FBP	TOT OUT
MB-011410	88.4%	71.6%	0
LCS-011410	67.6%	56.8%	0
CB31A011110SED	99.2%	76.4%	0
CB31A011110SED MS	78.0%	77.2%	0
CB31A011110SED MSD	83.6%	78.4%	0
CB99011110SED	80.8%	78.4%	0

	LCS/MB LIMITS	QC LIMITS
(TER) = d14-p-Terphenyl	(47-112)	(35-112)
(FBP) = 2-Fluorobiphenyl	(40-100)	(34-100)

Prep Method: SW3550B
Log Number Range: 10-690 to 10-691

FORM-II SW8270 PNA

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by SW8270D GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
MS/MSD

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/14/10

Sample Amount MS: 25.6 g-dry-wt
MSD: 25.2 g-dry-wt

Date Analyzed MS: 01/19/10 12:54
MSD: 01/19/10 13:27

Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL

Instrument/Analyst MS: NT4/JZ
MSD: NT4/JZ

Dilution Factor MS: 1.00
MSD: 1.00

GPC Cleanup: No
Silica Gel Cleanup: Yes

Alumina Cleanup: No

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	< 19.7	316	488	64.8%	328	496	66.1%	3.7%
2-Methylnaphthalene	< 19.7	347	488	71.1%	357	496	72.0%	2.8%
1-Methylnaphthalene	< 19.7	358	488	73.4%	371	496	74.8%	3.6%
Acenaphthylene	< 19.7	364	488	74.6%	373	496	75.2%	2.4%
Acenaphthene	12.6	352	488	69.5%	354	496	68.8%	0.6%
Fluorene	15.6	380	488	74.7%	384	496	74.3%	1.0%
Phenanthrene	184	493	488	63.3%	437	496	51.0%	12.0%
Anthracene	33.9	391	488	73.2%	388	496	71.4%	0.8%
Fluoranthene	343	623	488	57.4%	614	496	54.6%	1.5%
Pyrene	272	465	488	39.5%	471	496	40.1%	1.3%
Benzo(a)anthracene	95.3	423	488	67.2%	431	496	67.7%	1.9%
Chrysene	148	454	488	62.7%	464	496	63.7%	2.2%
Benzo(b)fluoranthene	136	406	488	55.3%	455	496	64.3%	11.4%
Benzo(k)fluoranthene	136	418	488	57.8%	393	496	51.8%	6.2%
Benzo(a)pyrene	114	389	488	56.4%	400	496	57.7%	2.8%
Indeno(1,2,3-cd)pyrene	31.9	403	488	76.0%	442	496	82.7%	9.2%
Dibenz(a,h)anthracene	< 19.7	372	488	76.2%	408	496	82.3%	9.2%
Benzo(g,h,i)perylene	37.4	378	488	69.8%	434	496	80.0%	13.8%
Dibenzofuran	< 19.7	377	488	77.3%	380	496	76.6%	0.8%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by SW8270D GC/MS

Sample ID: LCS-011410
LAB CONTROL

Lab Sample ID: LCS-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: NA
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 18:12
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Alumina Cleanup: No

Analyte	Lab Control	Spike Added	Recovery
Naphthalene	255	500	51.0%
2-Methylnaphthalene	257	500	51.4%
1-Methylnaphthalene	272	500	54.4%
Acenaphthylene	269	500	53.8%
Acenaphthene	263	500	52.6%
Fluorene	298	500	59.6%
Phenanthrene	297	500	59.4%
Anthracene	304	500	60.8%
Fluoranthene	373	500	74.6%
Pyrene	268	500	53.6%
Benzo(a)anthracene	308	500	61.6%
Chrysene	314	500	62.8%
Benzo(b)fluoranthene	304	500	60.8%
Benzo(k)fluoranthene	341	500	68.2%
Benzo(a)pyrene	281	500	56.2%
Indeno(1,2,3-cd)pyrene	303	500	60.6%
Dibenz(a,h)anthracene	297	500	59.4%
Benzo(g,h,i)perylene	276	500	55.2%
Dibenzofuran	289	500	57.8%

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	67.6%
2-Fluorobiphenyl	56.8%

Results reported in µg/kg

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: FLOYD-SNIDER

ARI Job No: QF10
Project: POS-LORA LAKE APTS I

Lab File ID: 01181007
Date Extracted: 01/14/10

Instrument ID: NT4
Date Analyzed: 01/18/10

Matrix: SOLID
Time Analyzed: 1738

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	QF10LCSS1	QF10LCSS1	01181008	01/18/10
02	CB31A011110SED	QF10A	01181009	01/18/10
03	CB31A011110SED M	QF10AMS	01191002	01/19/10
04	CB31A011110SED M	QF10AMSD	01191003	01/19/10
05	CB99011110SED	QF10B	01191004	01/19/10
06				
07				
08				
09				
10				
11				
12				
13				
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30				

COMMENTS:

FORM IV SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

Instrument ID: NT4 Project: POS-LORA LAKE APTS INTERIMINAL

DFTPP Injection Date: 01/07/10 DFTPP Injection Time: 1218

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	39.1
68	Less than 2.0% of mass 69	0.1 (0.3)1
69	Mass 69 relative abundance	42.7
70	Less than 2.0% of mass 69	0.4 (0.9)1
127	25.0 - 75.0% of mass 198	61.1
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	7.0
275	10.0 - 30.0% of mass 198	23.5
365	Greater than 0.75% of mass 198	2.71
441	Present, but less than mass 443	12.2
442	40.0 - 110.0% of mass 198	81.5
443	15.0 - 24.0% of mass 442	16.1 (19.7)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	IC010107	IC010107	01071002	01/07/10	1314
02	IC050107	IC050107	01071003	01/07/10	1415
03	IC100107	IC100107	01071004	01/07/10	1449
04	IC250107	IC250107	01071005	01/07/10	1522
05	IC400107	IC400107	01071006	01/07/10	1555
06	IC600107	IC600107	01071007	01/07/10	1629
07	IC800107	IC800107	01071008	01/07/10	1702
08					
09					
10					
11					
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22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

Instrument ID: NT4 Project: POS-LORA LAKE APTS INTERIMINAL

DFTPP Injection Date: 01/18/10 DFTPP Injection Time: 1338

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	37.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	40.9
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	25.0 - 75.0% of mass 198	60.6
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	6.9
275	10.0 - 30.0% of mass 198	24.9
365	Greater than 0.75% of mass 198	2.99
441	Present, but less than mass 443	12.1
442	40.0 - 110.0% of mass 198	80.8
443	15.0 - 24.0% of mass 442	16.0 (19.8)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	CC0118	CC0118	01181001	01/18/10	1338
02	QF10MBS1	QF10MBS1	01181007	01/18/10	1738
03	QF10LCSS1	QF10LCSS1	01181008	01/18/10	1812
04	CB31A011110SED	QF10A	01181009	01/18/10	1845
05					
06					
07					
08					
09					
10					
11					
12					
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15					
16					
17					
18					
19					
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21					
22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

Instrument ID: NT4 Project: POS-LORA LAKE APTS INTERIMINAL

DFTPP Injection Date: 01/19/10 DFTPP Injection Time: 1217

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	37.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	40.1
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	25.0 - 75.0% of mass 198	59.6
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	6.8
275	10.0 - 30.0% of mass 198	24.1
365	Greater than 0.75% of mass 198	2.83
441	Present, but less than mass 443	11.7
442	40.0 - 110.0% of mass 198	78.7
443	15.0 - 24.0% of mass 442	15.4 (19.5)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	CC0119	CC0119	01191001	01/19/10	1217
02	CB31A011110SED M	QF10AMS	01191002	01/19/10	1254
03	CB31A011110SED M	QF10AMSD	01191003	01/19/10	1327
04	CB99011110SED	QF10B	01191004	01/19/10	1401
05					
06					
07					
08					
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20					
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22					

FORM V SV

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 Ical Date: 01/07/10

Instrument ID: NT4 Cont. Cal Date: 01/18/10

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	286117	8.66	1035557	10.71	594267	13.60
	UPPER LIMIT	572234		2071114		1188534	
	LOWER LIMIT	143058		517778		297134	
	CCAL	224637	8.60	827743	10.65	516264	13.53
	UPPER LIMIT		9.10		11.15		14.03
	LOWER LIMIT		8.10		10.15		13.03
01	QF10MBS1			818034	10.64	493700	13.53
02	QF10LCSS1			868069	10.64	535370	13.53
03	CB31A011110S			961142	10.64	634456	13.53
04							
05							
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23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-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-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 — Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 — Ical Date: 01/07/10

Instrument ID: NT4 — Cont. Cal Date: 01/18/10

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	ICAL MIDPT	951721		16.01		794862		20.36		826094		22.56	
	UPPER LIMIT	1903442				1589724				1652188			
	LOWER LIMIT	475860				397431				413047			
	CCAL	932152		15.94		1007190		20.29		1014030		22.48	
	UPPER LIMIT			16.44				20.79				22.98	
	LOWER LIMIT			15.44				19.79				21.98	
01	QF10MBS1	844560		15.93		889769		20.28		899718		22.47	
02	QF10LCSS1	946659		15.92		1099560		20.28		1104984		22.47	
03	CB31A011110S	1166372		15.93		1089592		20.30		465781		22.50	
04													
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22													
23													
24													
25													

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = 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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 Ical Date: 01/07/10

Instrument ID: NT4 Cont. Cal Date: 01/18/10

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	1280700	21.42				
	UPPER LIMIT	2561400					
	LOWER LIMIT	640350					
	CCAL	1663134	21.36				
	UPPER LIMIT		21.86				
	LOWER LIMIT		20.86				
01	QF10MBS1						
02	QF10LCSS1						
03	CB31A011110S						
04							
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IS7 = Di-n-octylphthalate-d4

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-3

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 Ical Date: 01/07/10

Instrument ID: NT4 Cont. Cal Date: 01/19/10

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	286117	8.66	1035557	10.71	594267	13.60
	UPPER LIMIT	572234		2071114		1188534	
	LOWER LIMIT	143058		517778		297134	
	CCAL	342716	8.58	1226801	10.63	724591	13.52
	UPPER LIMIT		9.08		11.13		14.02
	LOWER LIMIT		8.08		10.13		13.02
01	CB31A011110S			1044534	10.62	635241	13.51
02	CB31A011110S			1305784	10.63	801110	13.52
03	CB99011110SE			1192791	10.64	719314	13.52
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24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-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-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 Ical Date: 01/07/10

Instrument ID: NT4 Cont. Cal Date: 01/19/10

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	ICAL MIDPT	951721		16.01		794862		20.36		826094		22.56	
	UPPER LIMIT	1903442				1589724				1652188			
	LOWER LIMIT	475860				397431				413047			
	CCAL	1182161		15.91		1097102		20.27		1040303		22.46	
	UPPER LIMIT			16.41				20.77				22.96	
	LOWER LIMIT			15.41				19.77				21.96	
01	CB31A011110S	1071795		15.91		1147301		20.29		1240238		22.50	
02	CB31A011110S	1345950		15.92		1417131		20.30		1453270		22.52	
03	CB99011110SE	1220847		15.93		1331661		20.31		1307072		22.55	
04													
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IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = 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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATER

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINAL

Ical Midpoint ID: 01071005 Ical Date: 01/07/10

Instrument ID: NT4 Cont. Cal Date: 01/19/10

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	1280700	21.42				
	UPPER LIMIT	2561400					
	LOWER LIMIT	640350					
	CCAL	1808730	21.34				
	UPPER LIMIT		21.84				
	LOWER LIMIT		20.84				
01	CB31A011110S						
02	CB31A011110S						
03	CB99011110SE						
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IS7 = Di-n-octylphthalate-d4

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-3

Semivolatile PAH Analysis
Sample Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
SAMPLE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 18:45
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	**Acenaphthene**	**20**	**13 J**
86-73-7	**Fluorene**	**20**	**16 J**
85-01-8	**Phenanthrene**	**20**	**180**
120-12-7	**Anthracene**	**20**	**34**
206-44-0	**Fluoranthene**	**20**	**340**
129-00-0	**Pyrene**	**20**	**270**
56-55-3	**Benzo(a)anthracene**	**20**	**95**
218-01-9	**Chrysene**	**20**	**150**
205-99-2	**Benzo(b)fluoranthene**	**20**	**140**
207-08-9	**Benzo(k)fluoranthene**	**20**	**140**
50-32-8	**Benzo(a)pyrene**	**20**	**110**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**32**
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	**Benzo(g,h,i)perylene**	**20**	**37**
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery	
d14-p-Terphenyl	99.2%
2-Fluorobiphenyl	76.4%

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100118.b/01181009.d
Lab Smp Id: QF10A Client Smp ID: CB31A011110SED
Inj Date : 18-JAN-2010 18:45
Operator : JZ Inst ID: nt4.i
Smp Info : QF10A
Misc Info : 10-690
Comment : 1ul Injection
Method : /chem3/nt4.i/20100118.b/SW846100107.m
Meth Date : 19-Jan-2010 16:03 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

01/19/10

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	32.40000	Weight of sample extracted (g)
M	21.60000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.644	10.654	(1.000)	961142	20.0000	
28 Naphthalene	128	Compound Not Detected.					
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
$ 36 2-Fluorobiphenyl	172	12.436	12.446	(0.919)	698613	19.0738	375.4
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	13.528	13.533	(1.000)	634456	20.0000	
44 Acenaphthene	153	13.575	13.586	(1.003)	21330	0.63686	12.54
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	14.398	14.414	(1.064)	29636	0.79394	15.63
* 59 Phenanthrene-d10	188	15.931	15.935	(1.000)	1166372	20.0000	
60 Phenanthrene	178	15.966	15.977	(1.002)	566558	9.34118	183.9
61 Anthracene	178	16.037	16.047	(1.007)	102774	1.72054	33.87
64 Fluoranthene	202	17.928	17.933	(1.125)	1039015	17.4323	343.1
65 Pyrene	202	18.292	18.291	(0.901)	959865	13.8333	272.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)	
$	66 Terphenyl-d14	244	18.580	18.579	(0.915)	1001767	24.7917	488.0	
	68 Benzo(a)anthracene	228	20.272	20.265	(0.999)	310825	4.83537	95.18	
*	69 Chrysene-d12	240	20.301	20.288	(1.000)	1089592	20.0000		
	71 Chrysene	228	20.337	20.329	(1.002)	458712	7.51371	147.9	
	74 Benzo(b)fluoranthene	252	21.952	21.939	(0.976)	395763	13.8014	271.7(M)	6.92
	75 Benzo(k)fluoranthene	252	21.952	21.968	(0.976)	395763	13.8934	273.5(M)	6.92
	76 Benzo(a)pyrene	252	22.410	22.397	(0.996)	150228	5.79727	114.1	
*	77 Perylene-d12	264	22.498	22.479	(1.000)	465781	20.0000		
	78 Indeno(1,2,3-cd)pyrene	276	24.290	24.295	(1.080)	48272	1.62132	31.91	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
	80 Benzo(g,h,i)perylene	276	24.807	24.806	(1.103)	50403	1.89572	37.31	

QC Flag Legend

M - Compound response manually integrated.

01/19/10

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01181009.d
Lab Smp Id: QF10A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 13:38
Client Smp ID: CB31A011110SED
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	961142	-7.19
42 Acenaphthene-d10	594267	297134	1188534	634456	6.76
59 Phenanthrene-d10	951721	475860	1903442	1166372	22.55
69 Chrysene-d12	794862	397431	1589724	1089592	37.08
77 Perylene-d12	826094	413047	1652188	465781	-43.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.65	10.15	11.15	10.64	-0.10
42 Acenaphthene-d10	13.53	13.03	14.03	13.53	-0.03
59 Phenanthrene-d10	15.94	15.44	16.44	15.93	-0.03
69 Chrysene-d12	20.29	19.79	20.79	20.30	0.06
77 Perylene-d12	22.48	21.98	22.98	22.50	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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: QF10A
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

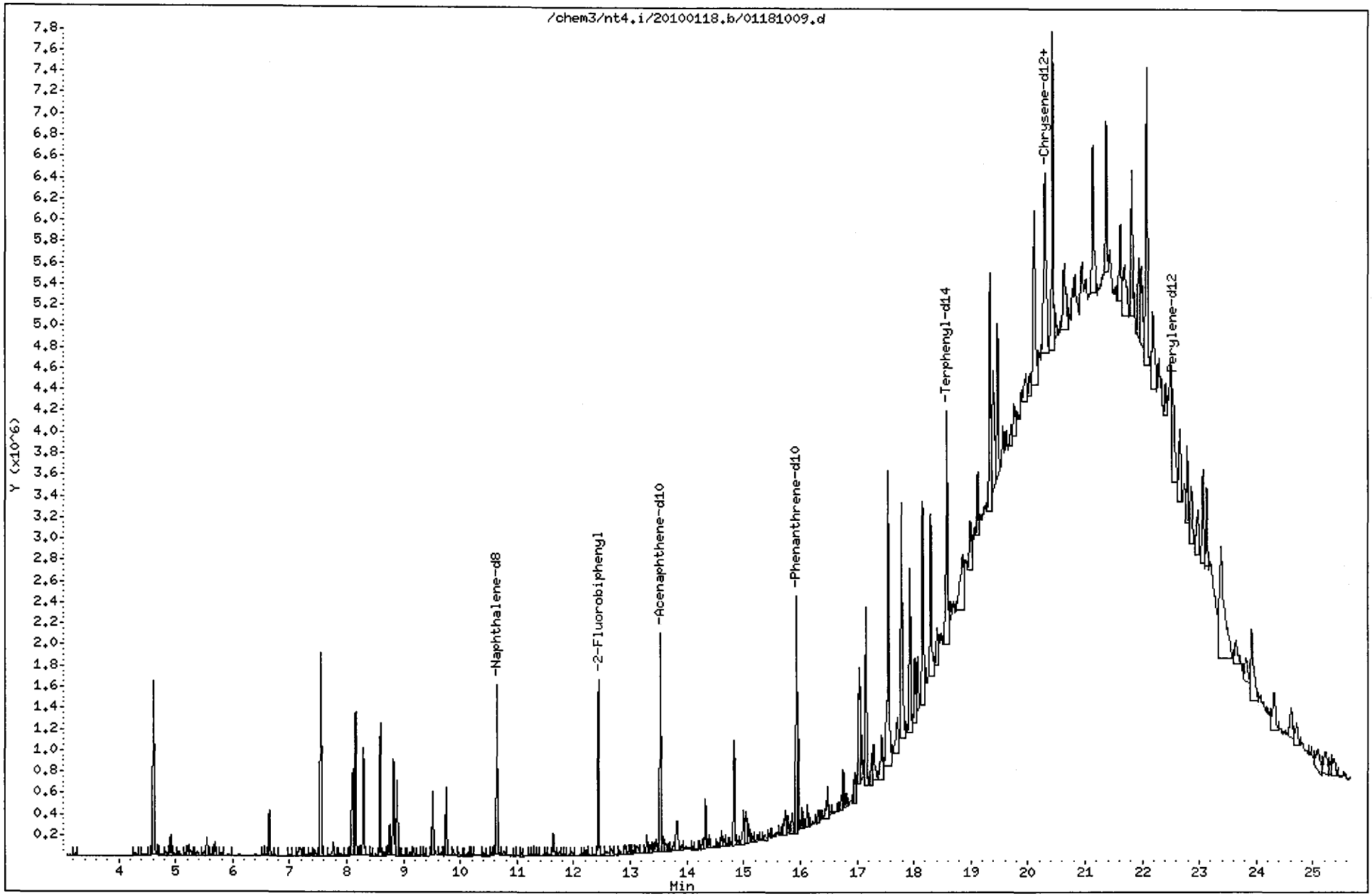
Client SDG: QF10
Fraction: SV
Client Smp ID: CB31A011110SED
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	492.1	375.4	76.30	34-100
$ 66 Terphenyl-d14	492.1	488.0	99.17	35-112

Data File: /chem3/nt4.i/20100118.b/01181009.d
Date : 18-JAN-2010 18:45
Client ID: CB31A011110SED
Sample Info: QF10A
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32

QF10:99329



Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

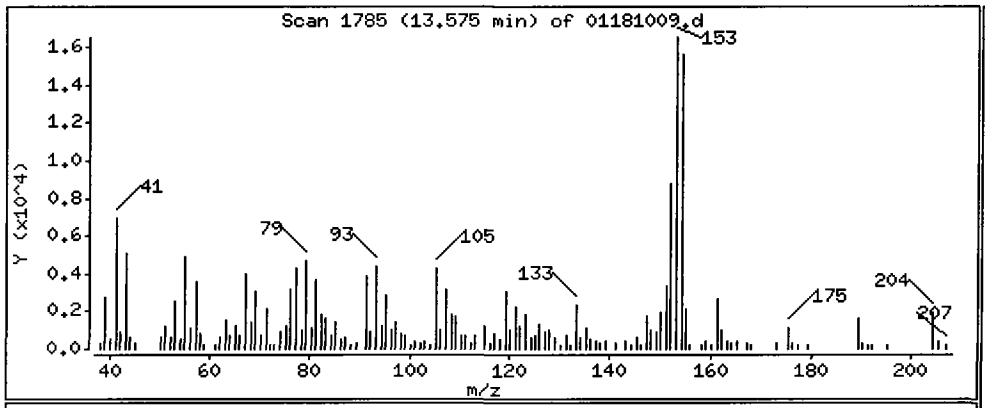
Operator: JZ

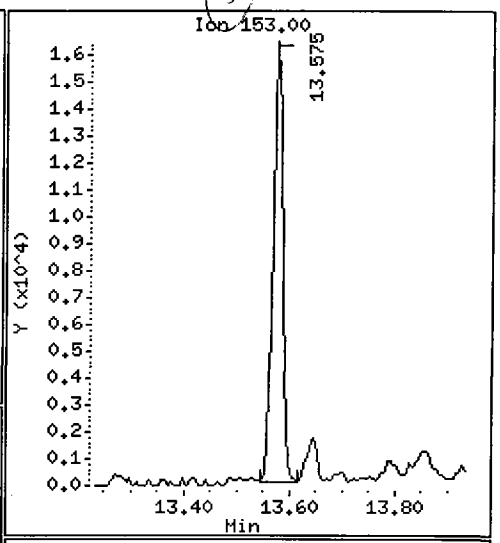
Column phase: ZB-5msi

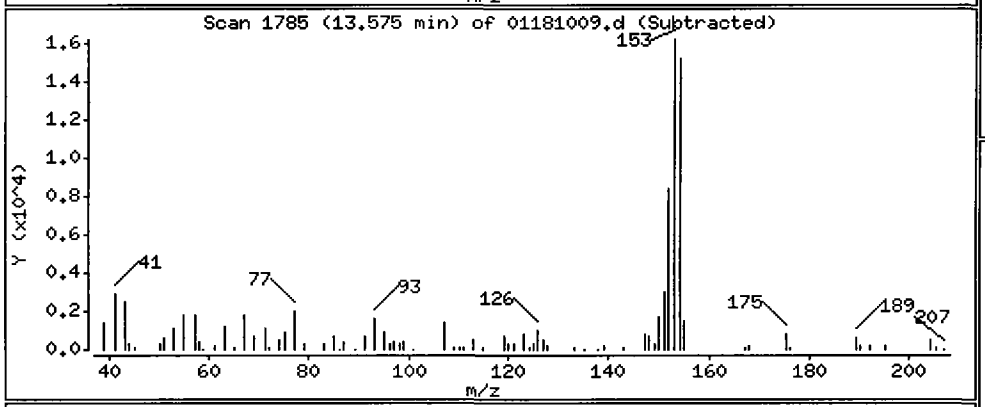
Column diameter: 0.32

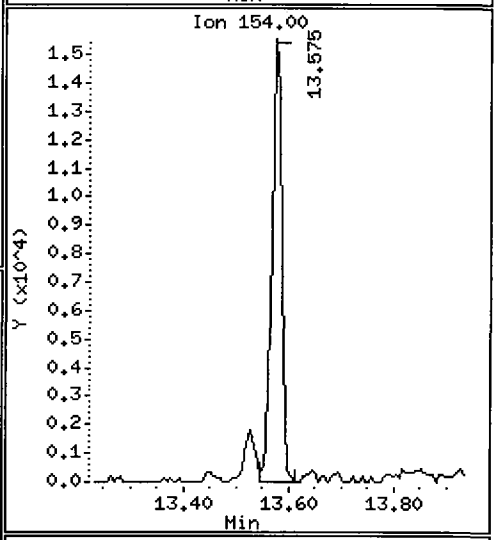
44 Acenaphthene

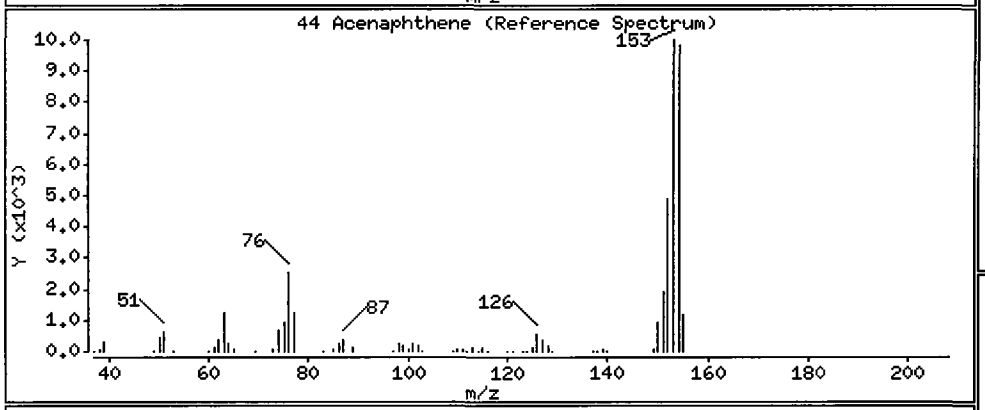
Concentration: 12.54 ug/kg

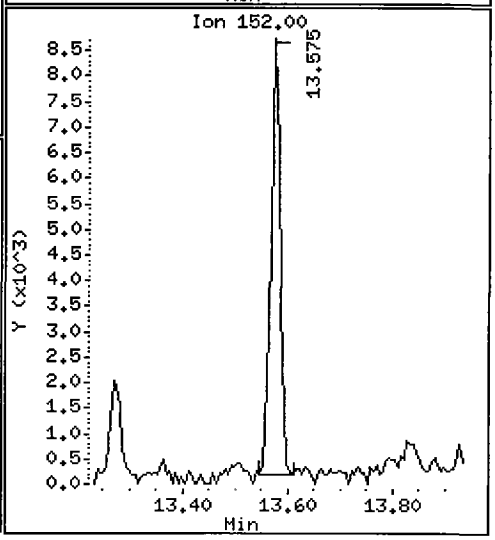


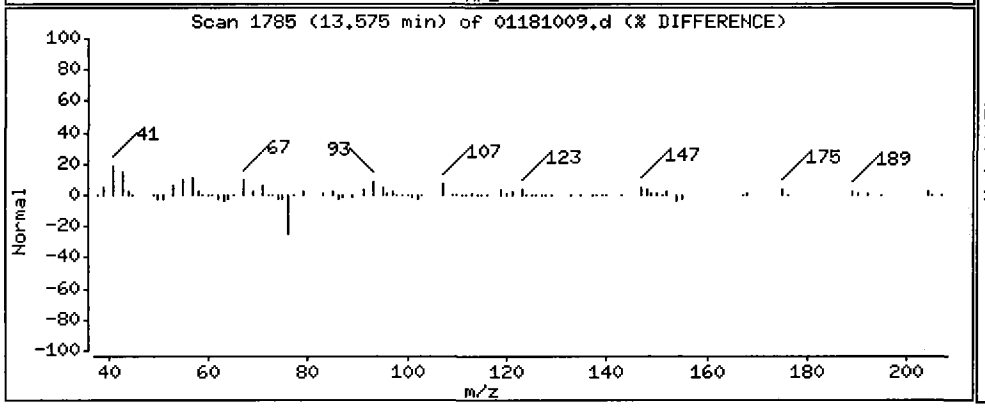












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

Operator: JZ

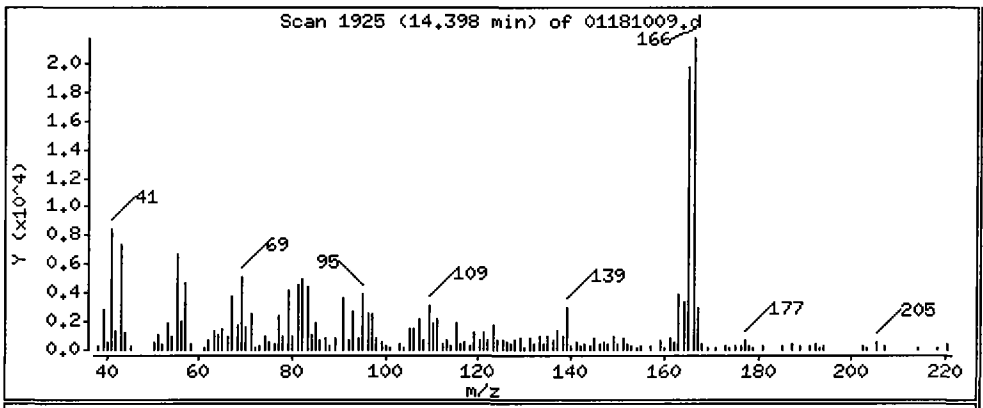
Column phase: ZB-5msi

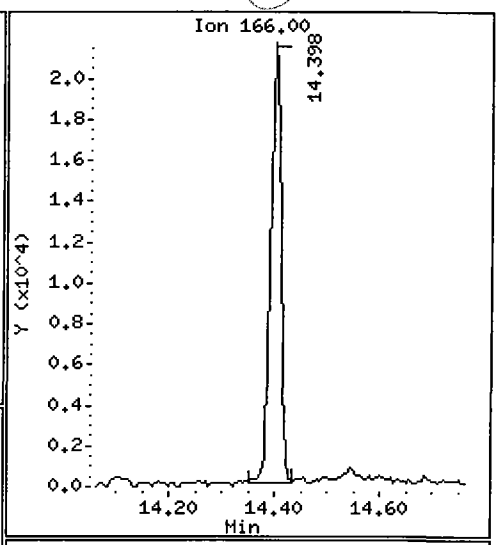
Column diameter: 0.32

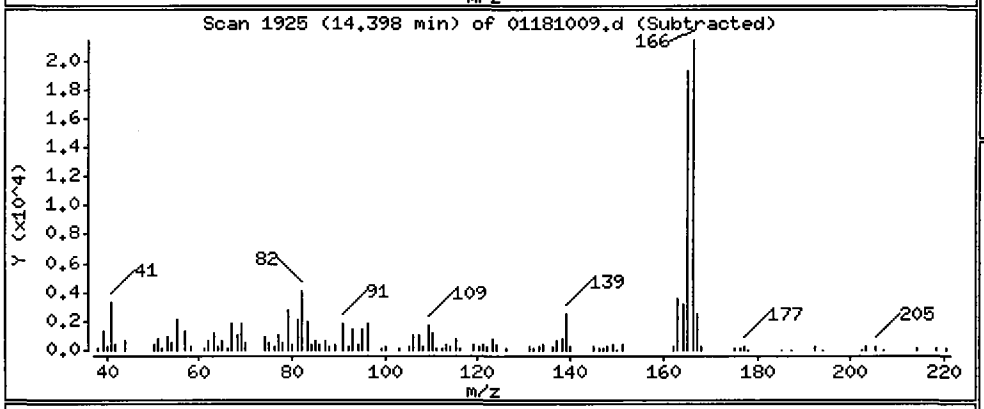
49 Fluorene

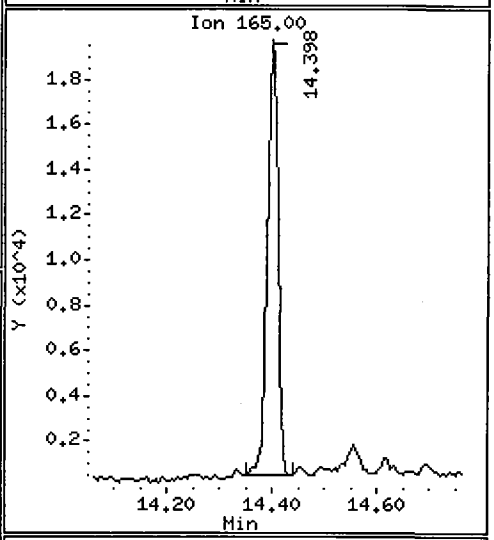
Concentration: 15.63 ug/kg

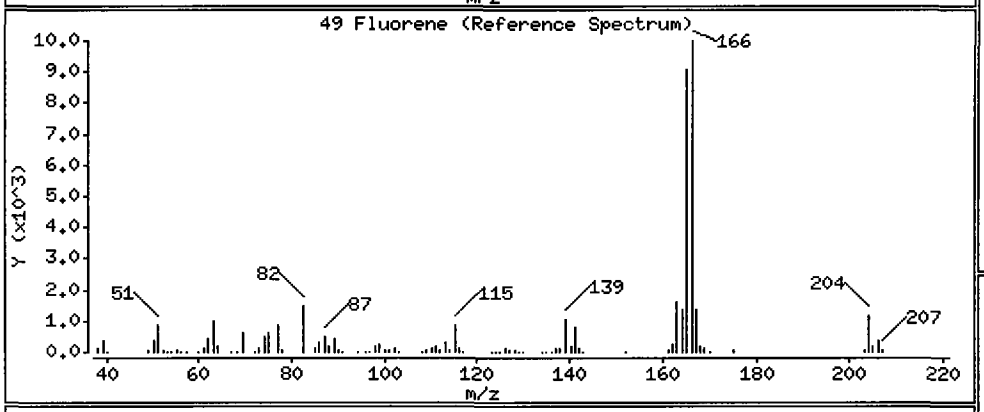
JLR

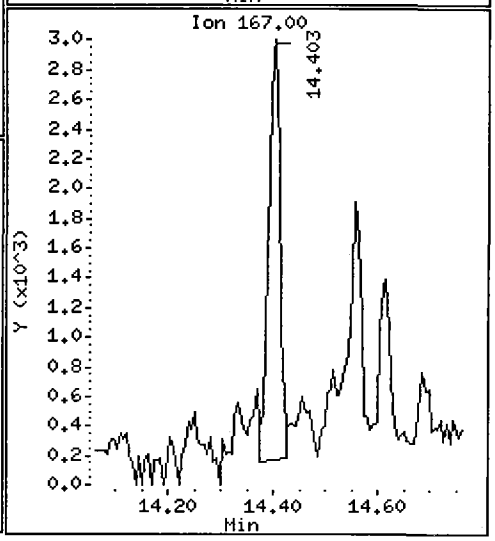


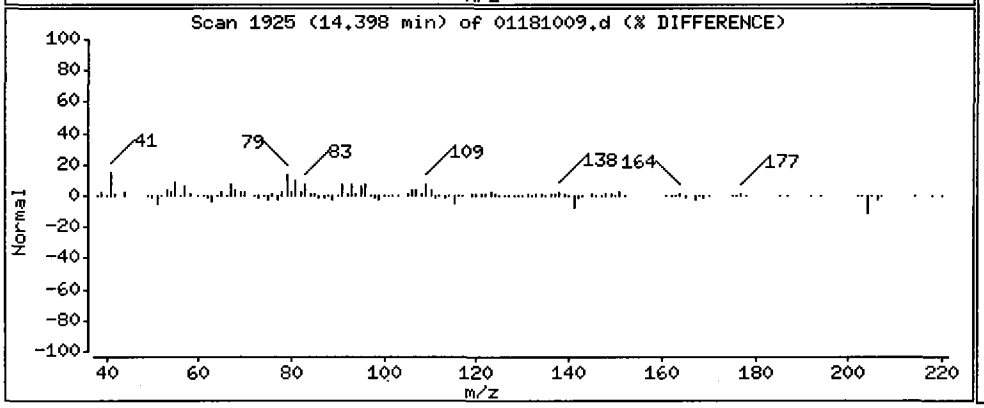












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

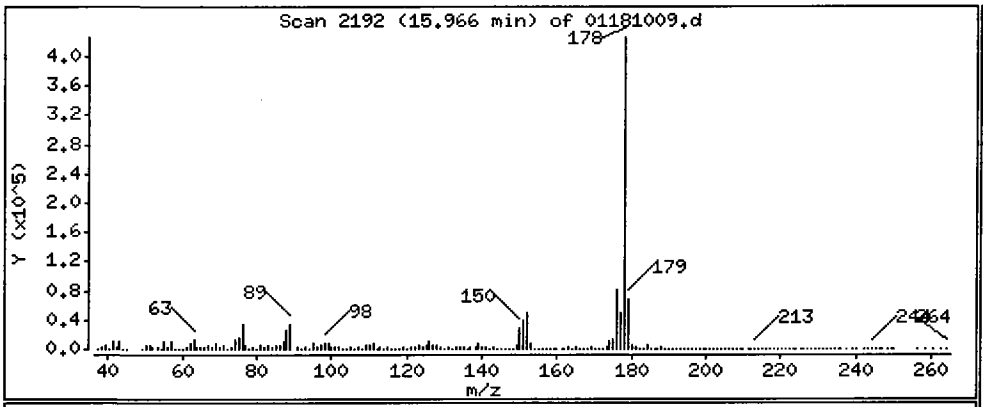
Operator: JZ

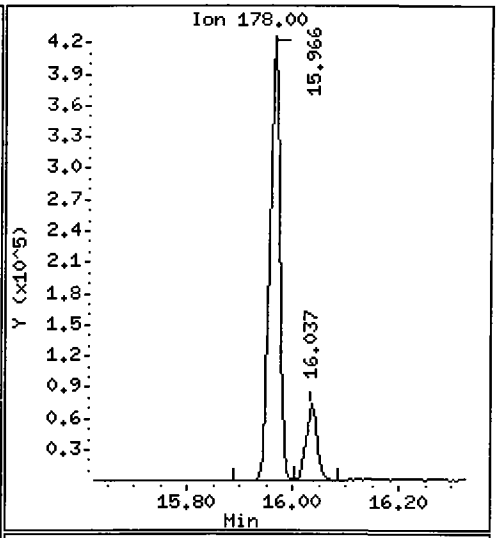
Column phase: ZB-5msi

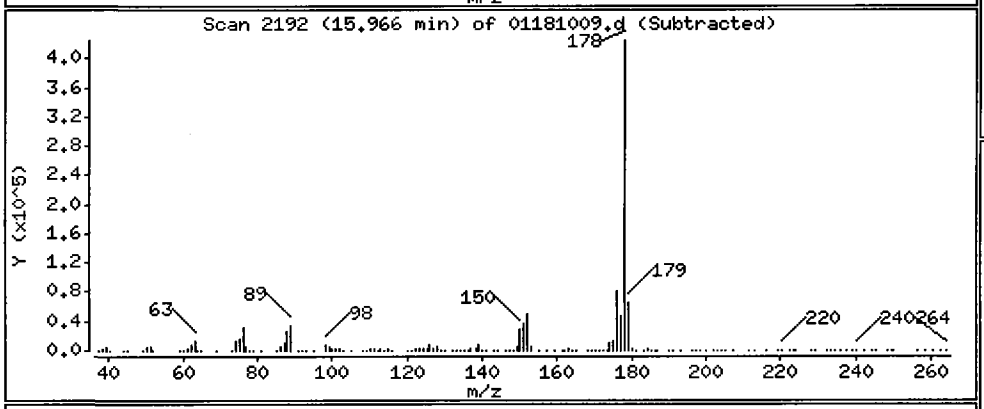
Column diameter: 0.32

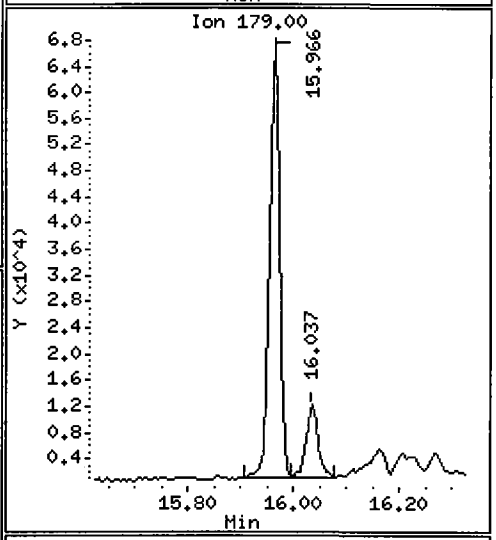
60 Phenanthrene

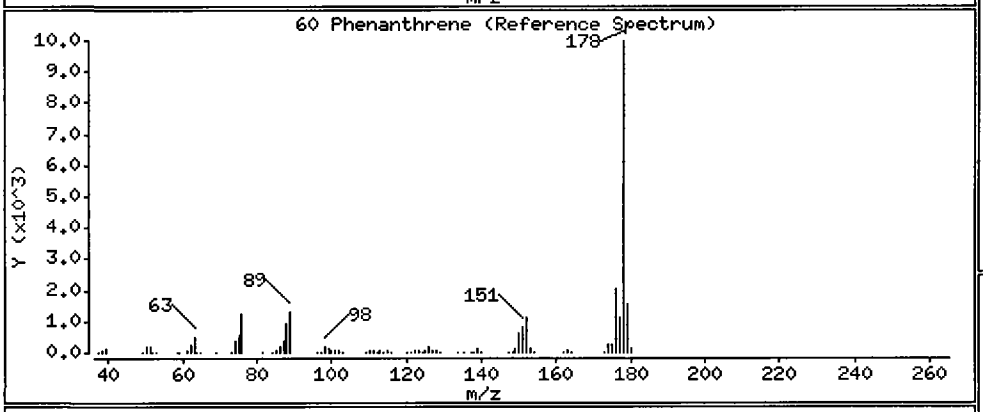
Concentration: 183.9 ug/kg

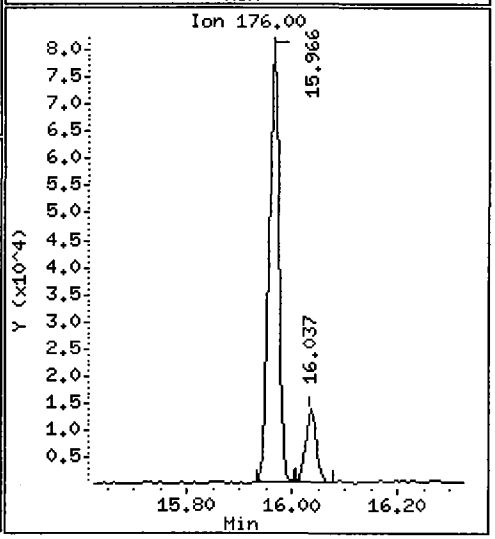


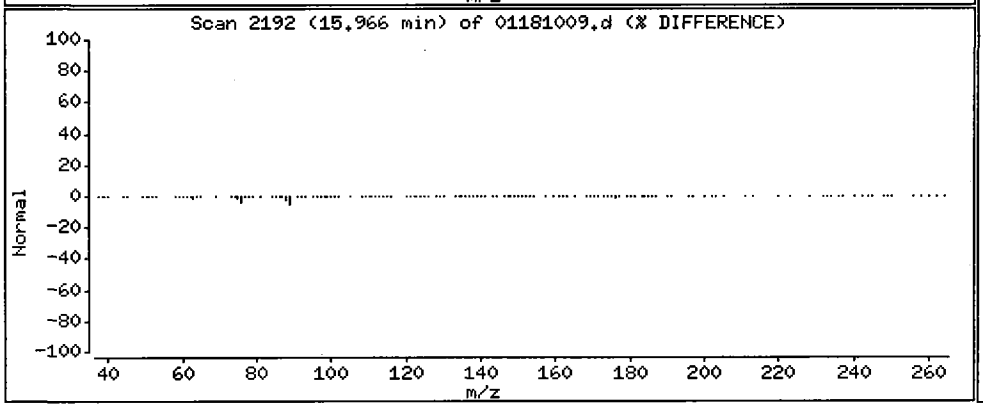












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

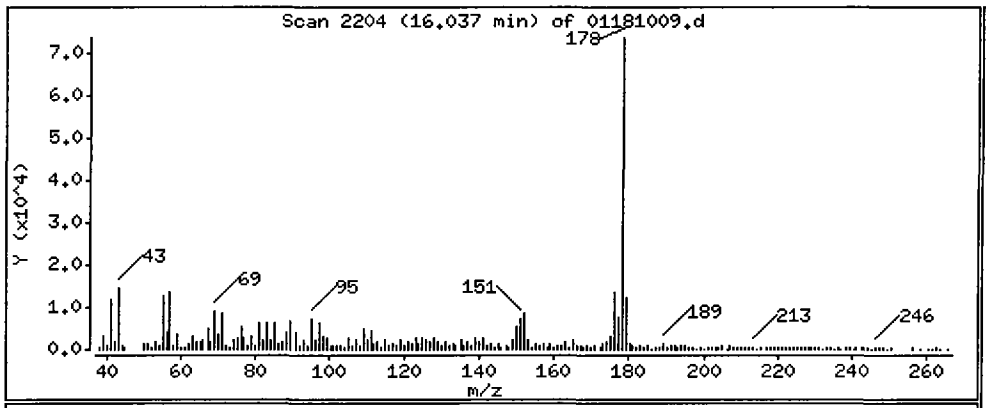
Operator: JZ

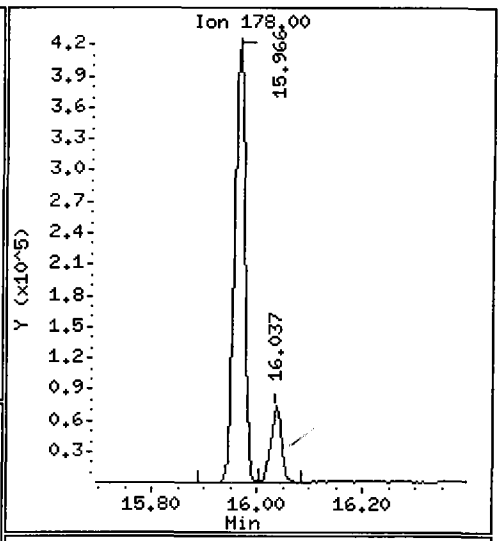
Column phase: ZB-5msi

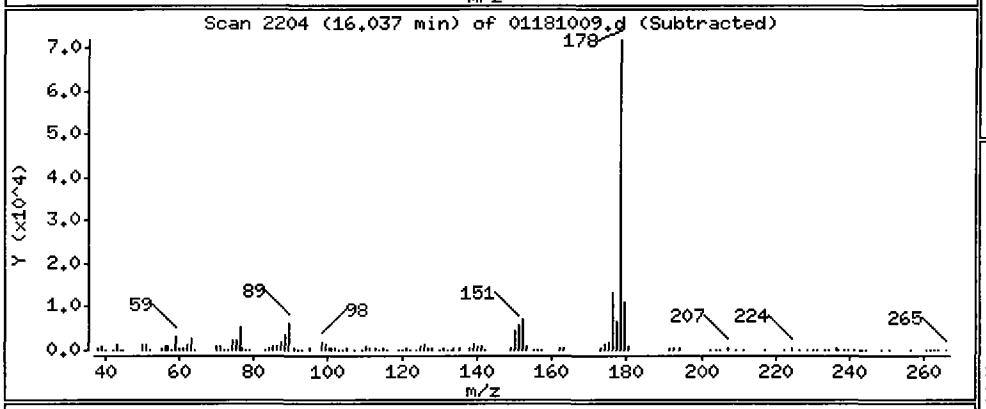
Column diameter: 0.32

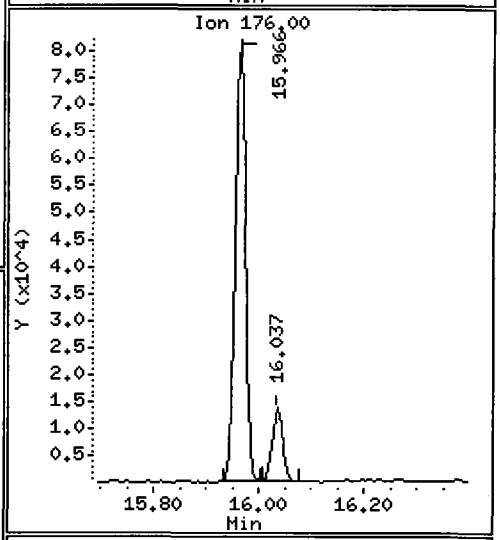
61 Anthracene

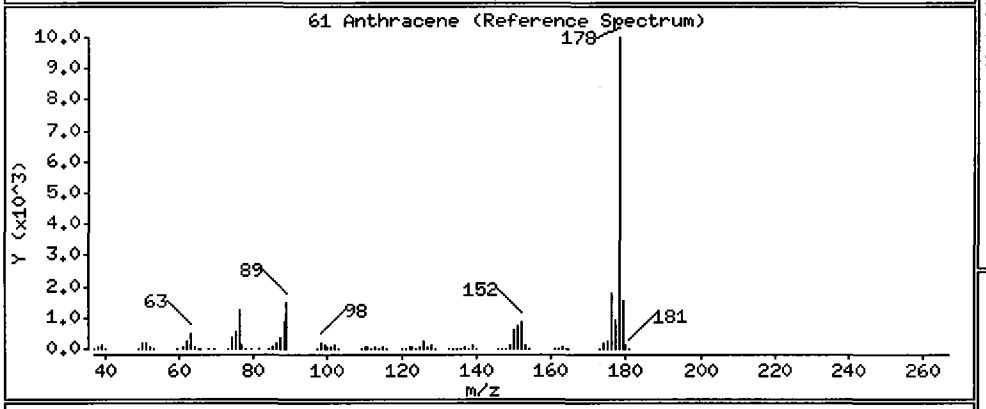
Concentration: 33.87 ug/kg

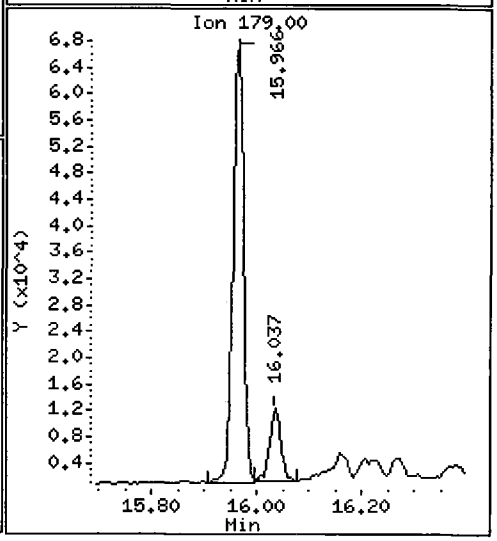


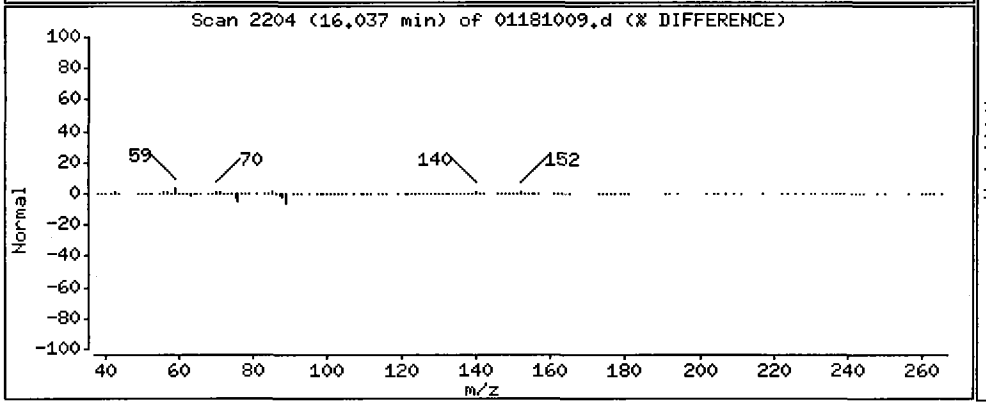












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

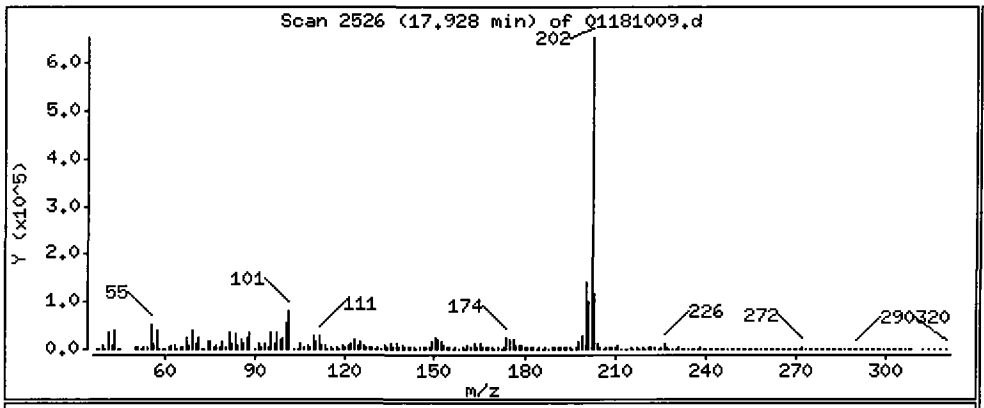
Operator: JZ

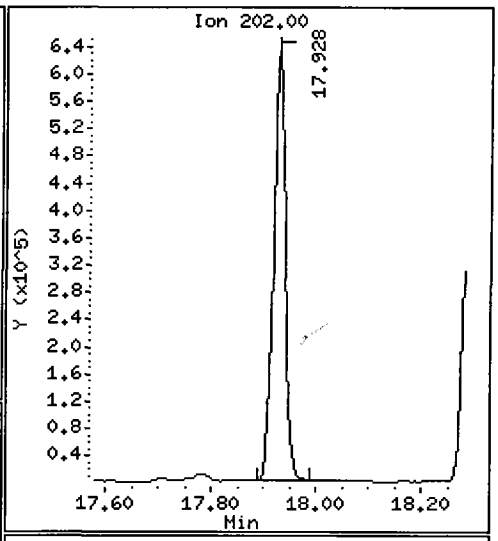
Column phase: ZB-5msi

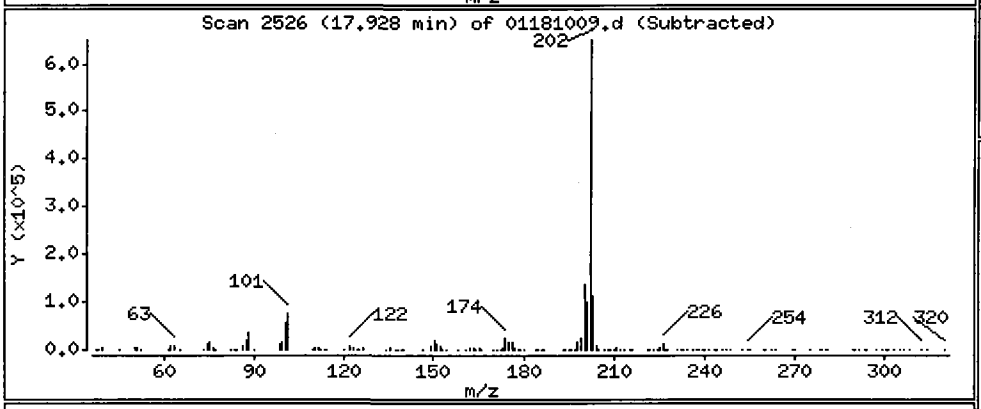
Column diameter: 0.32

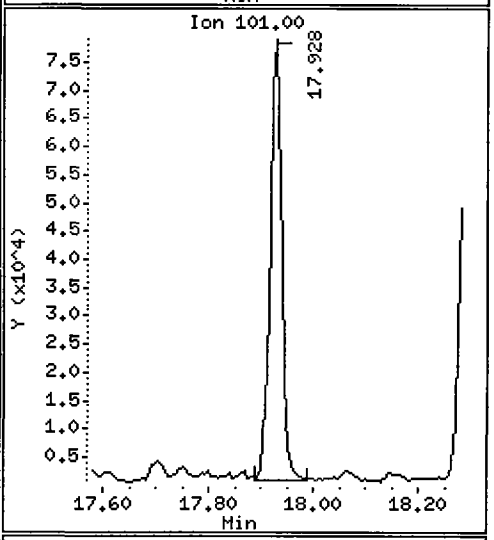
64 Fluoranthene

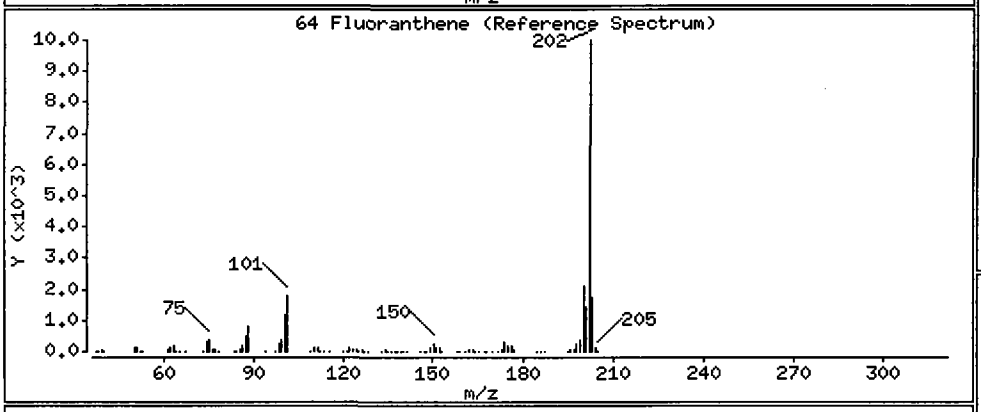
Concentration: 343.1 ug/kg

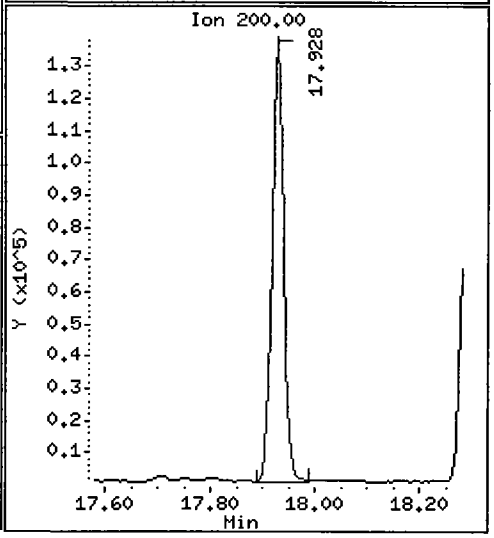


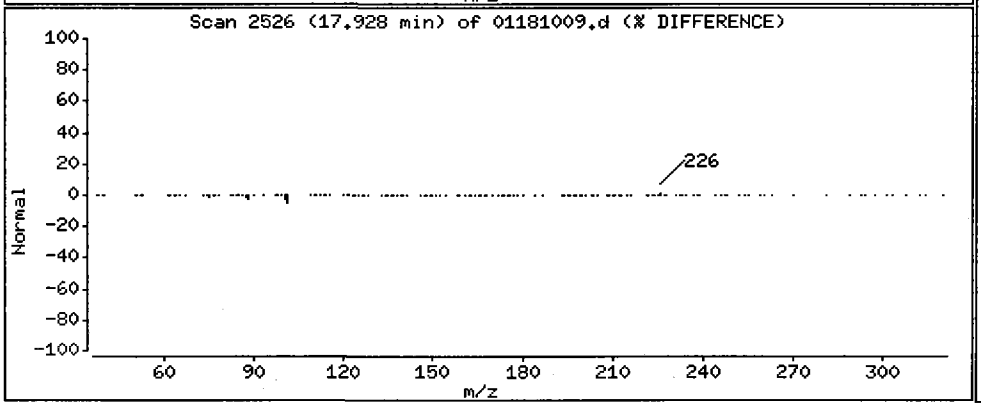












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

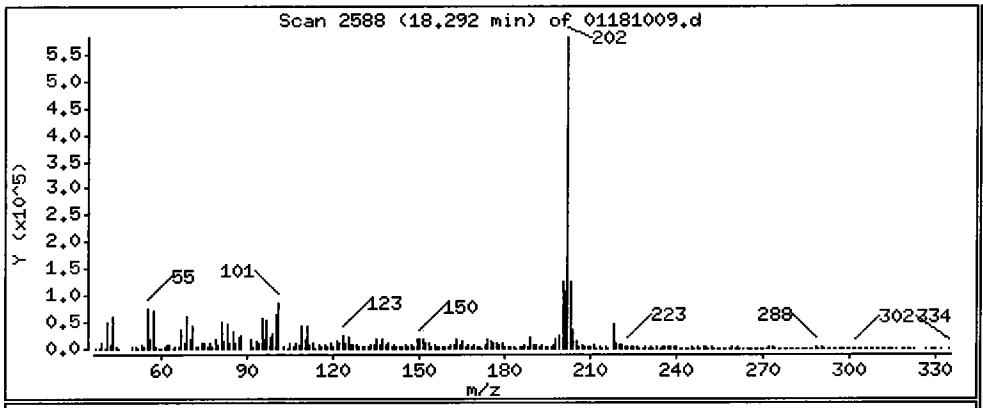
Operator: JZ

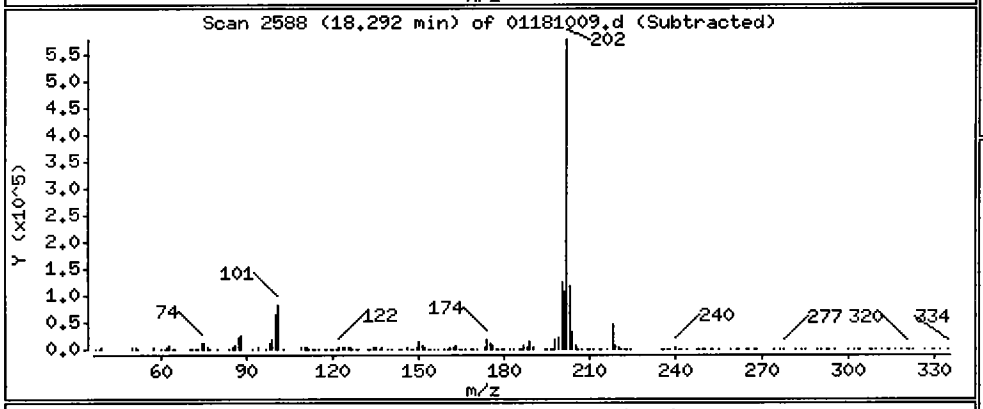
Column phase: ZB-5msi

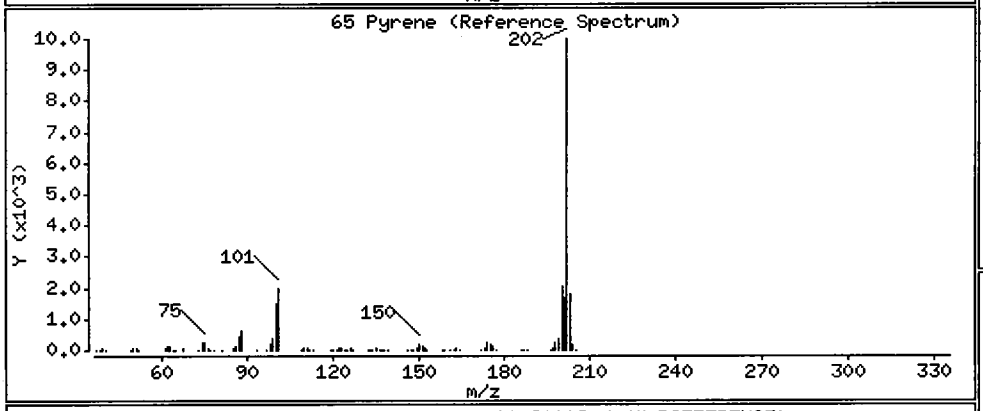
Column diameter: 0.32

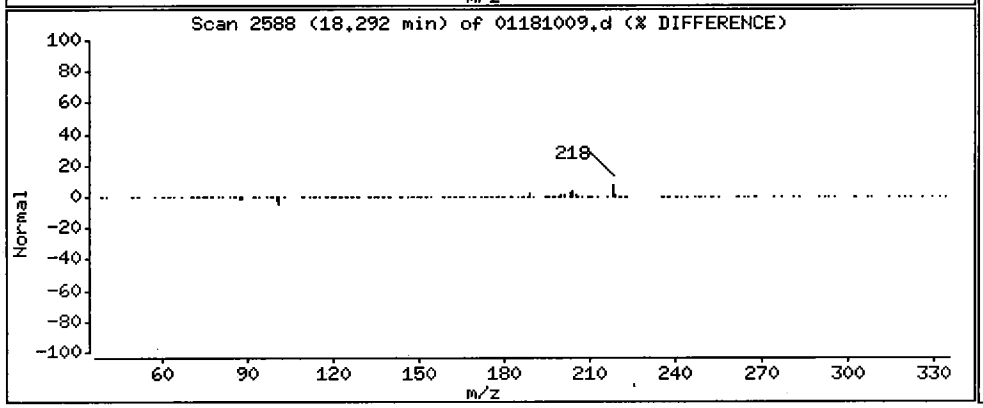
65 Pyrene

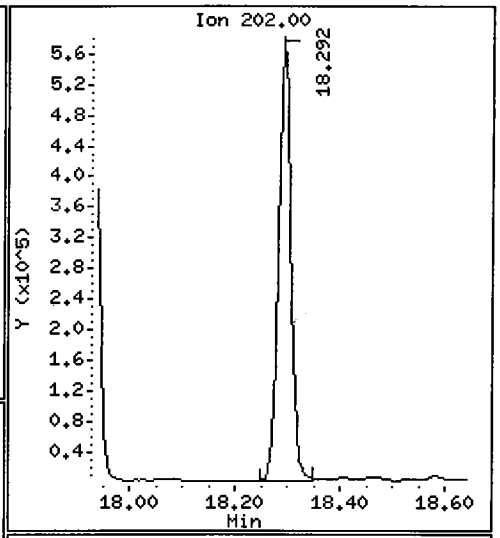
Concentration: 272.3 ug/kg

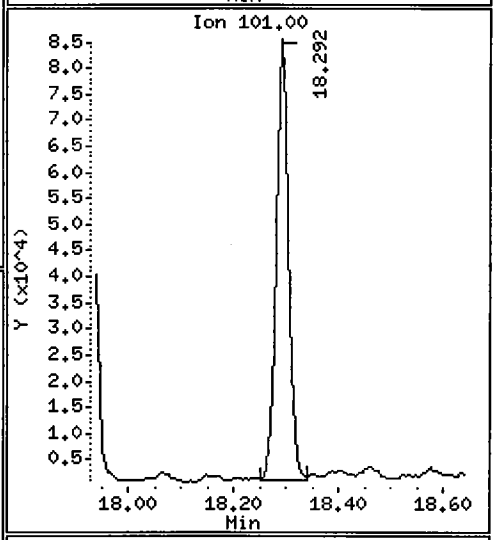


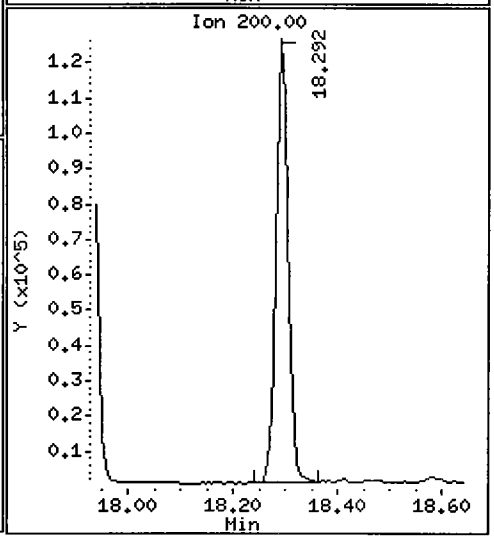












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

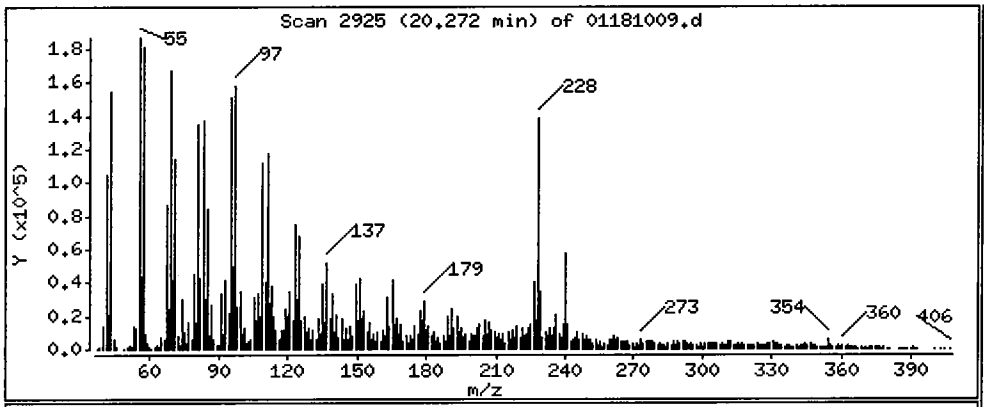
Operator: JZ

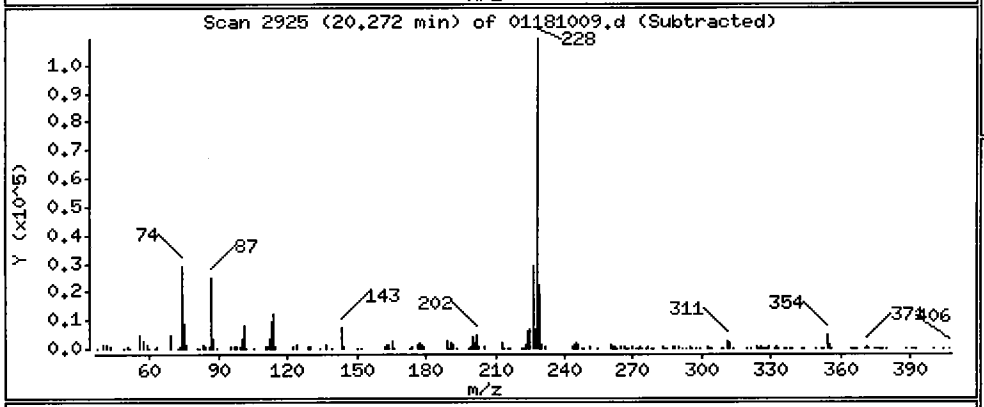
Column phase: ZB-5msi

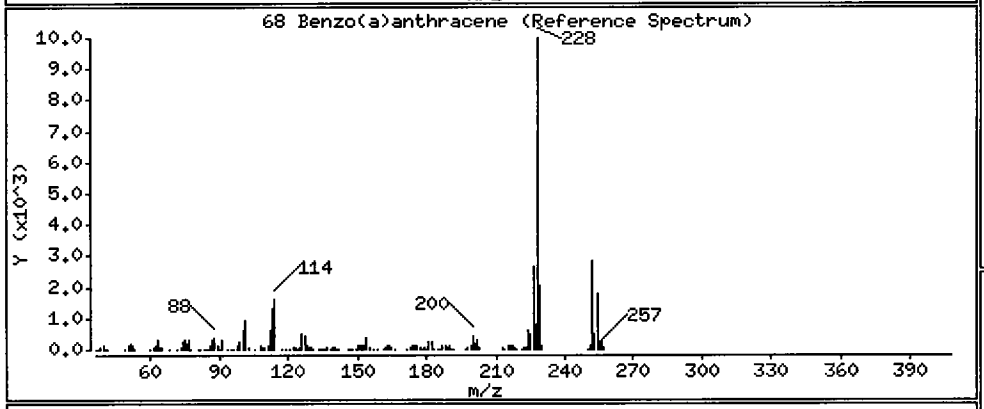
Column diameter: 0.32

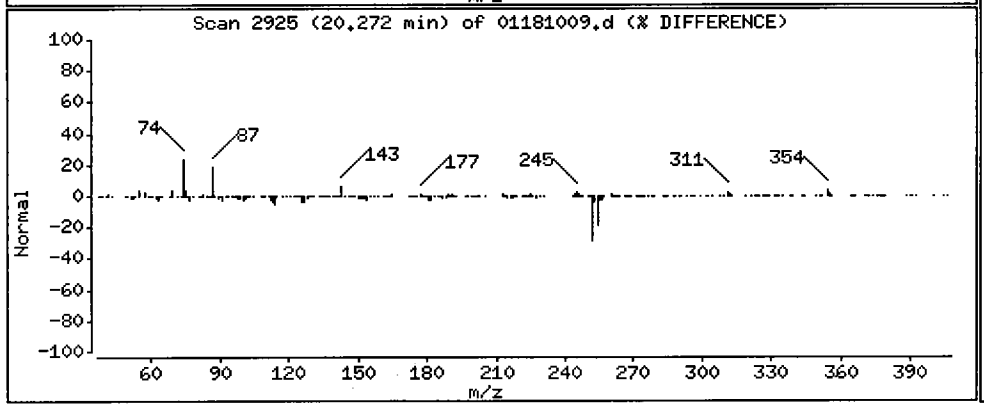
68 Benzo(a)anthracene

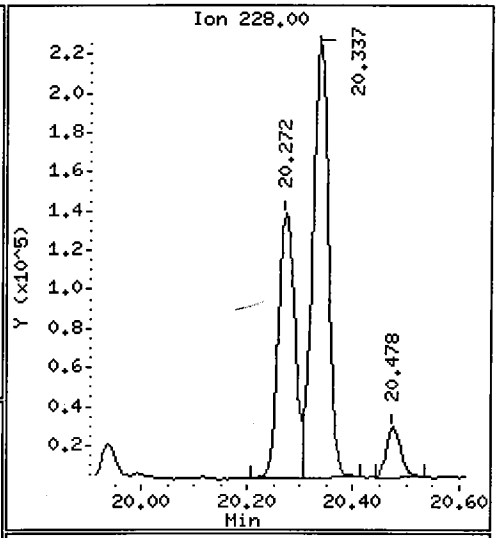
Concentration: 95.18 ug/kg

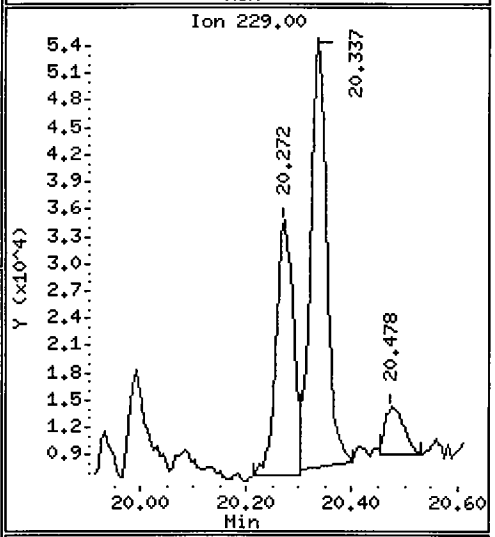


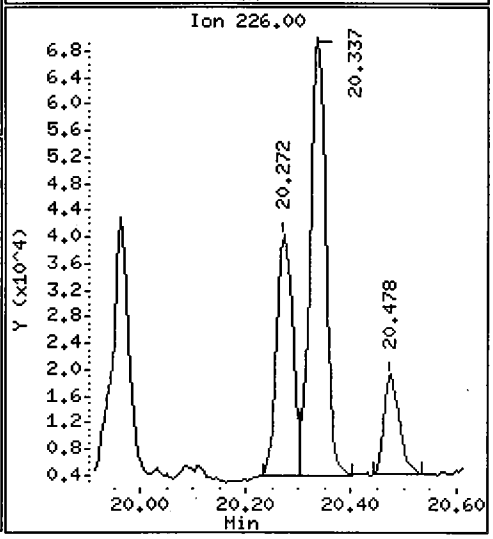












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

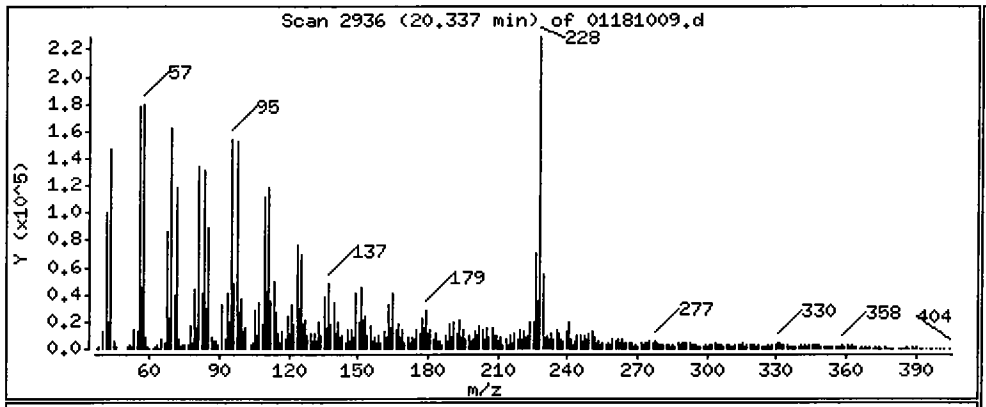
Operator: JZ

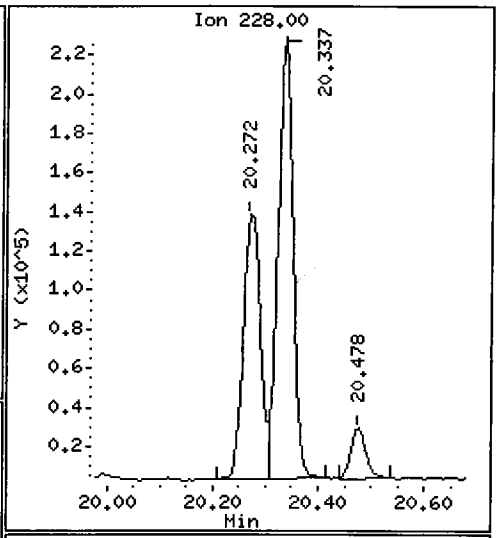
Column phase: ZB-5msi

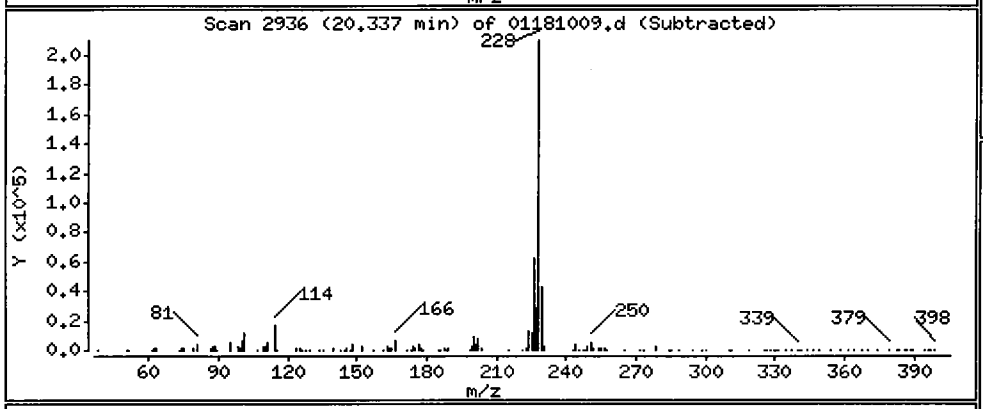
Column diameter: 0.32

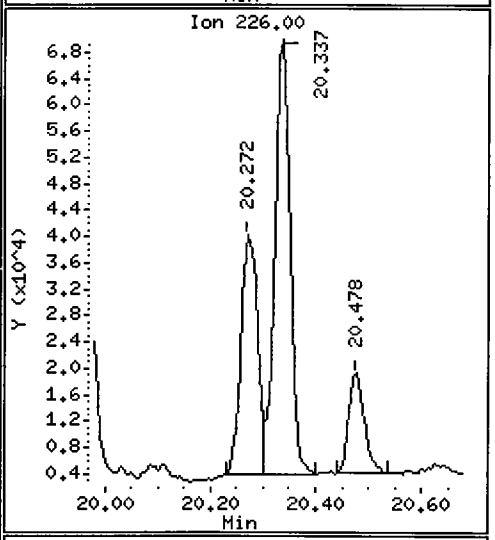
71 Chrysene

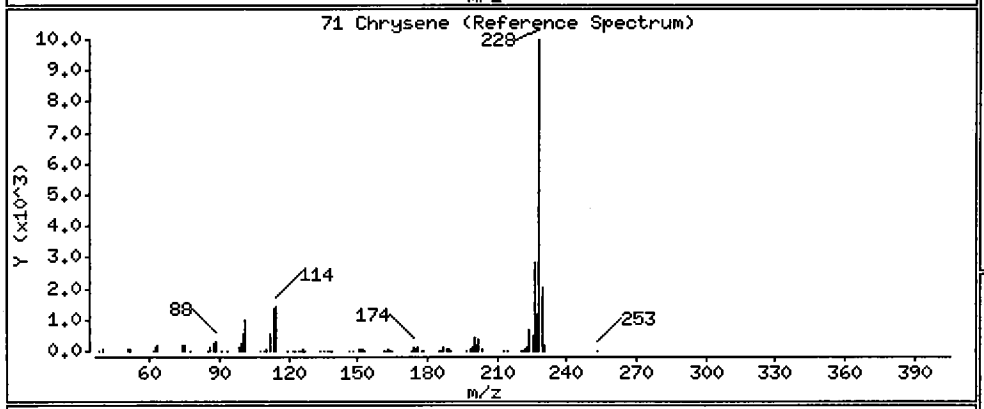
Concentration: 147.9 ug/kg

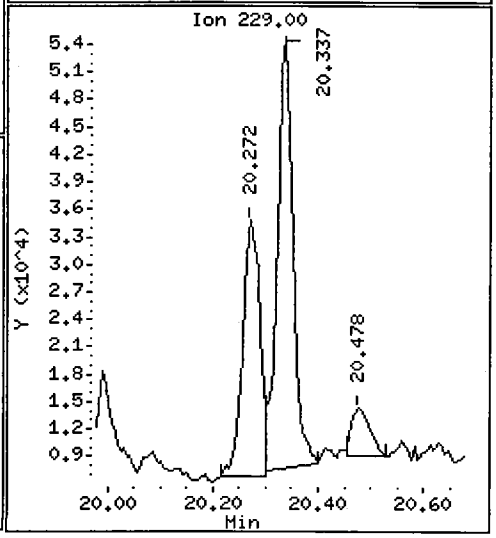


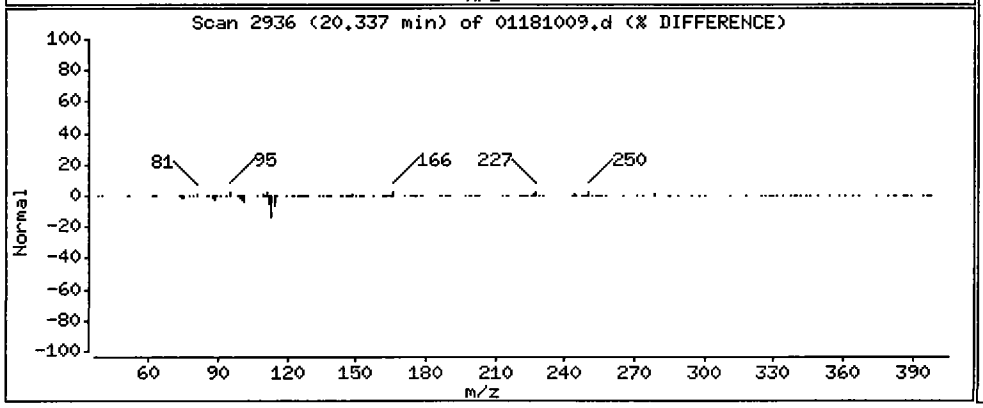












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

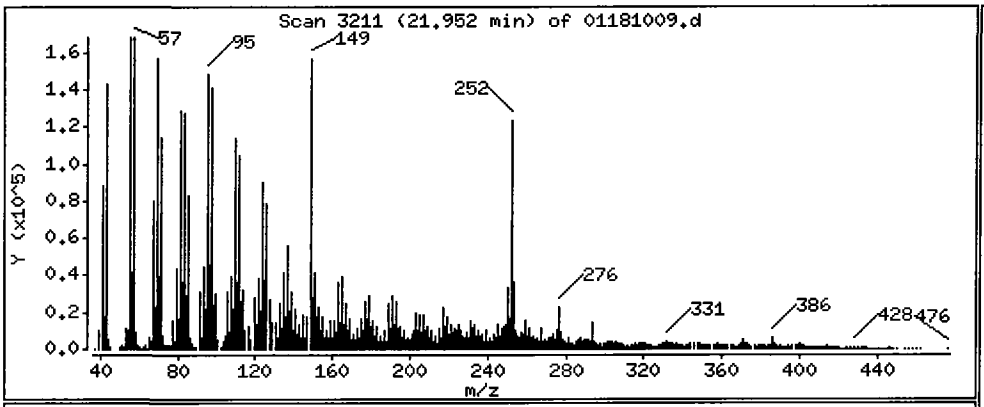
Operator: JZ

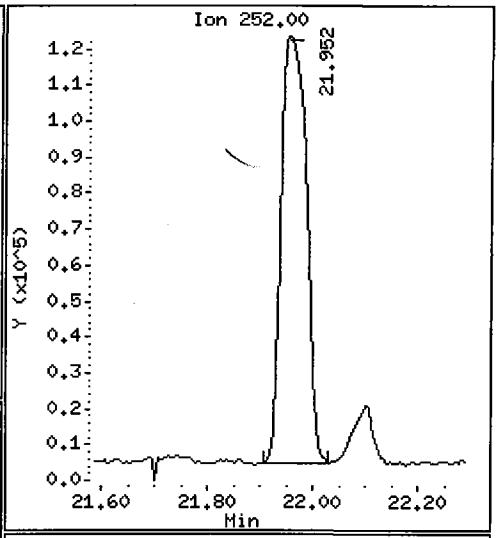
Column phase: ZB-5msi

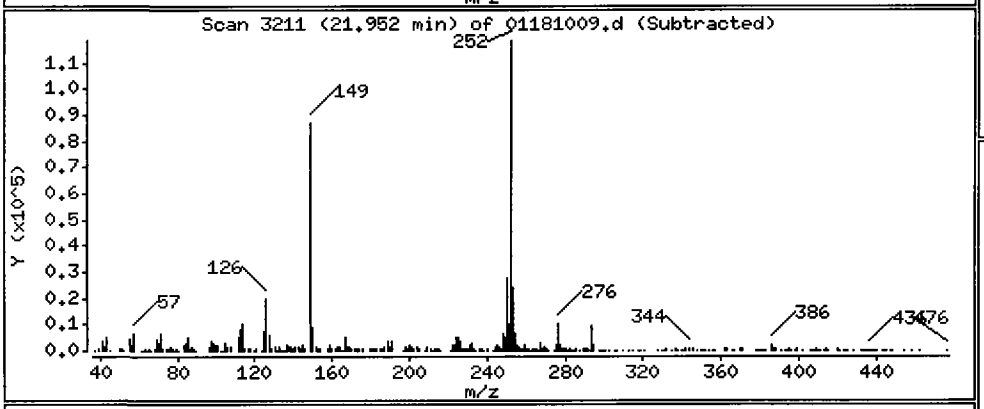
Column diameter: 0.32

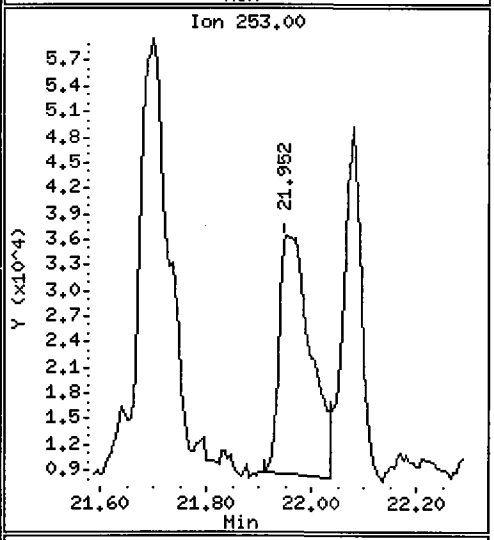
74 Benzo(b)fluoranthene

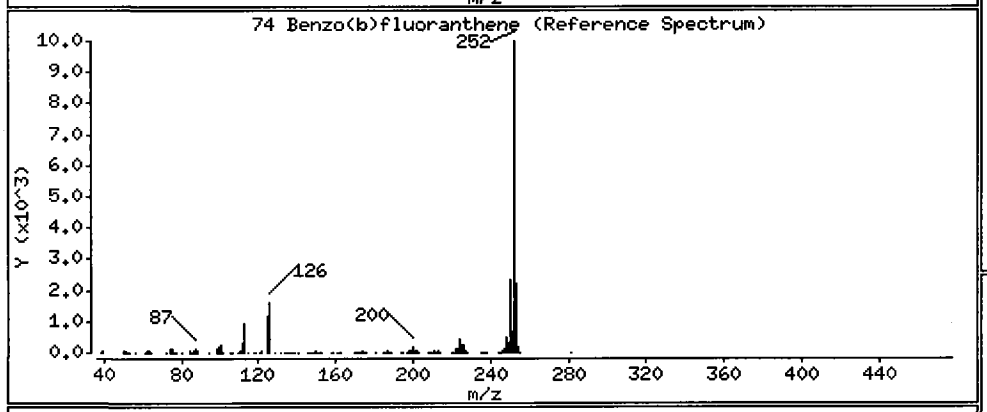
Concentration: 271.7 ug/kg

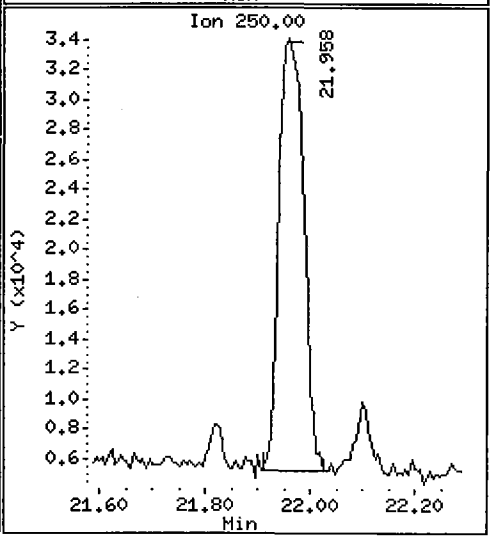


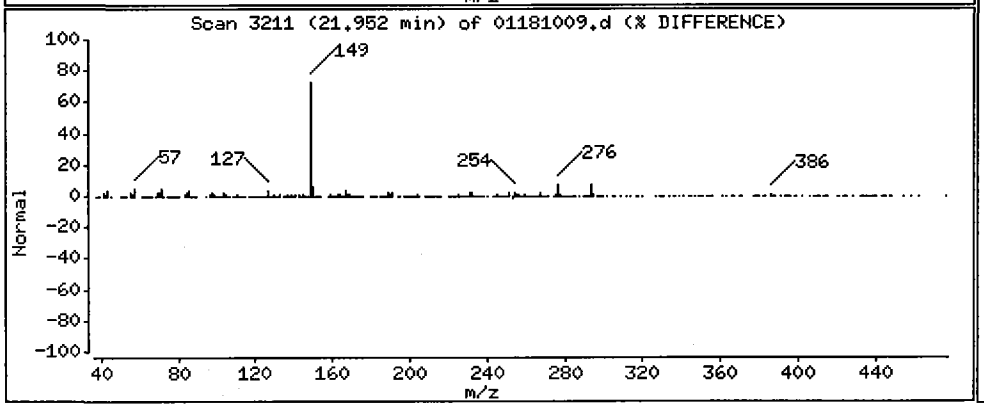












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

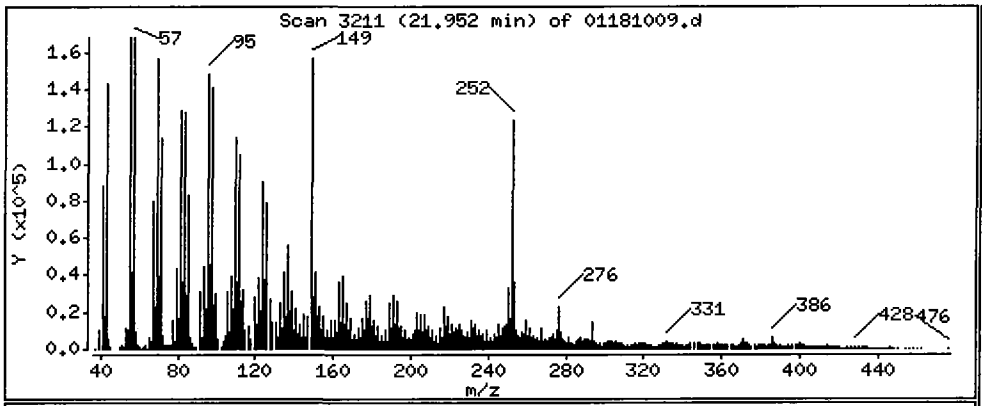
Operator: JZ

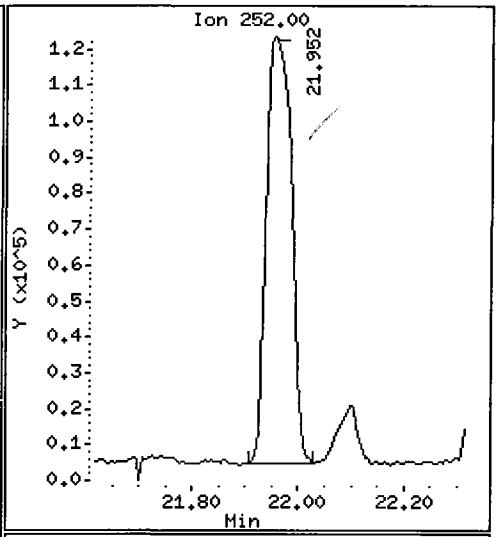
Column phase: ZB-5msi

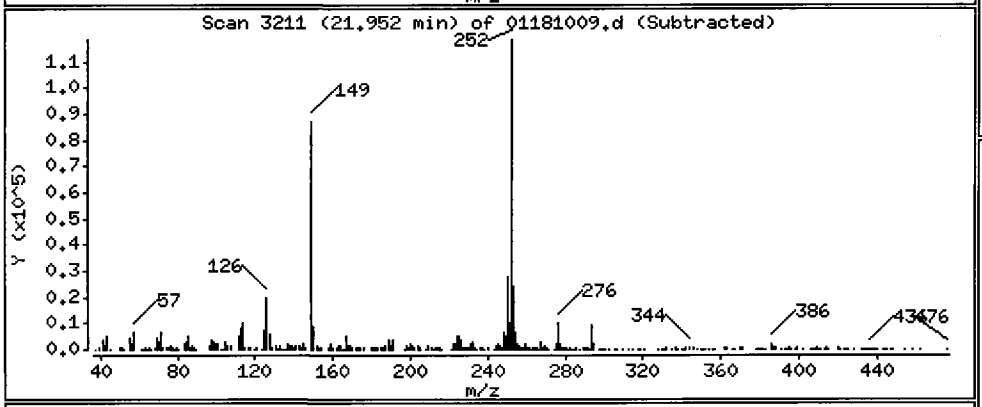
Column diameter: 0.32

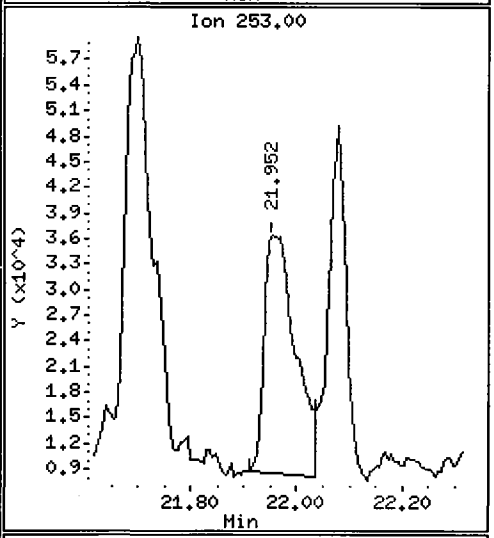
75 Benzo(k)fluoranthene

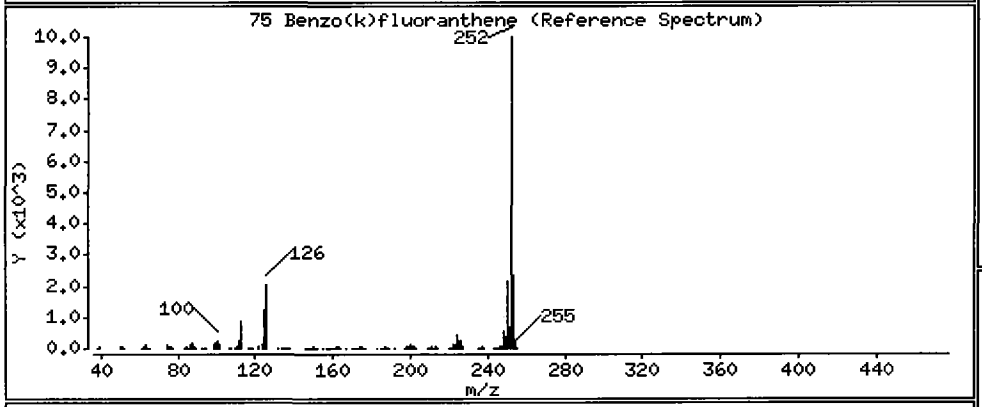
Concentration: 273.5 ug/kg

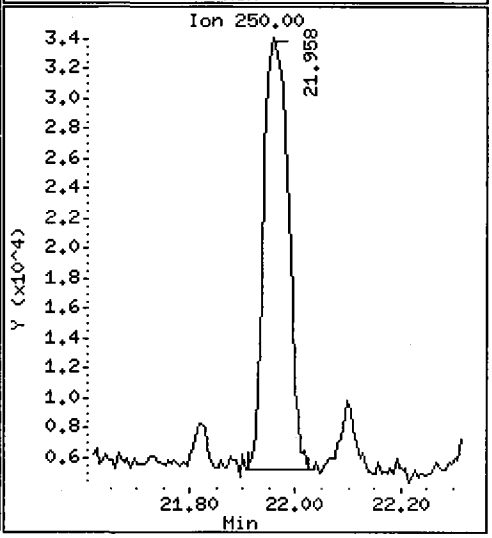


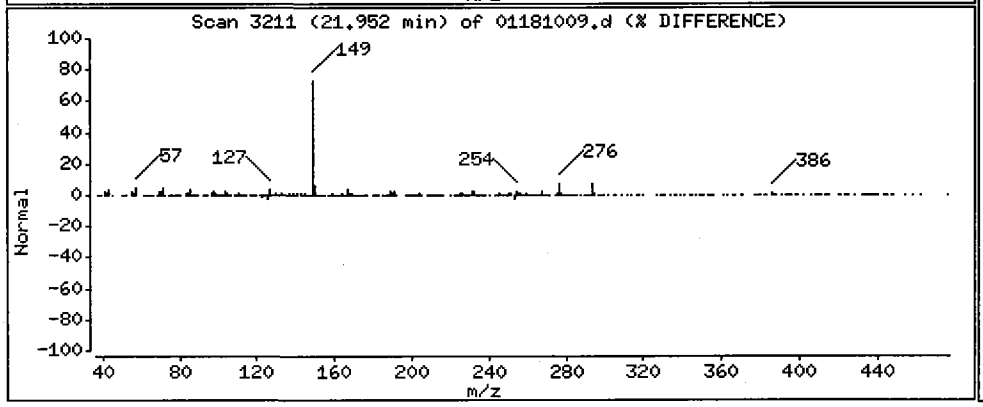












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

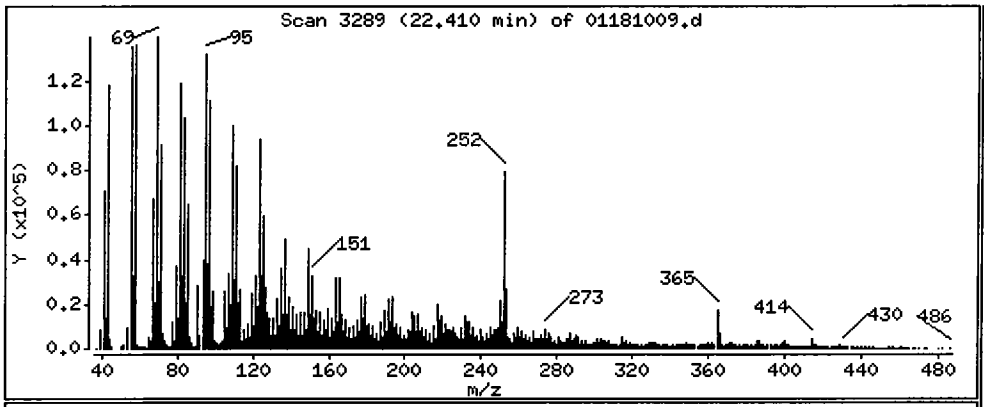
Operator: JZ

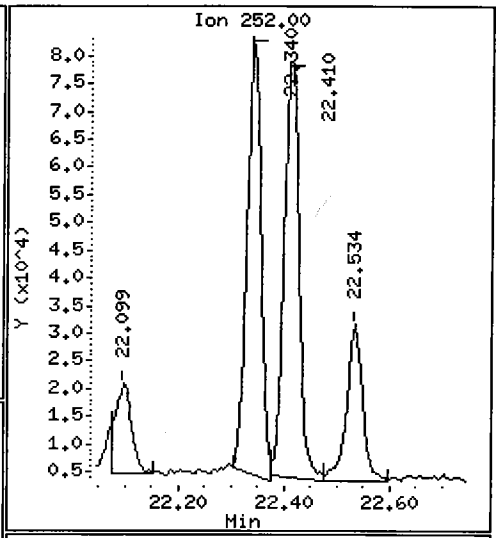
Column phase: ZB-5msi

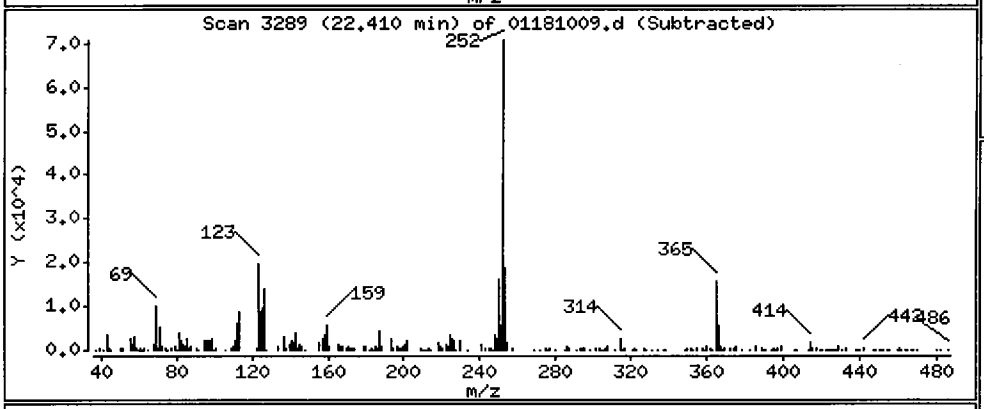
Column diameter: 0.32

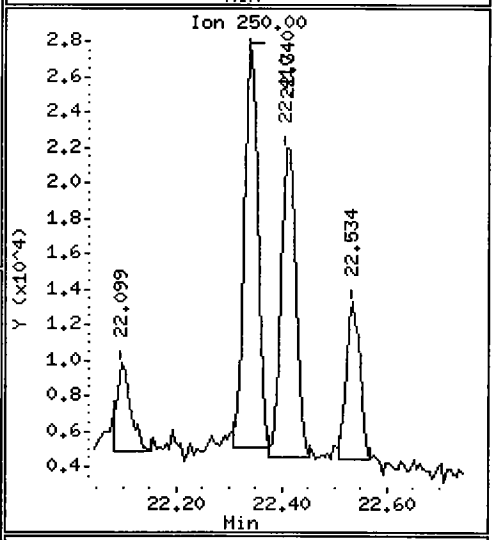
76 Benzo(a)pyrene

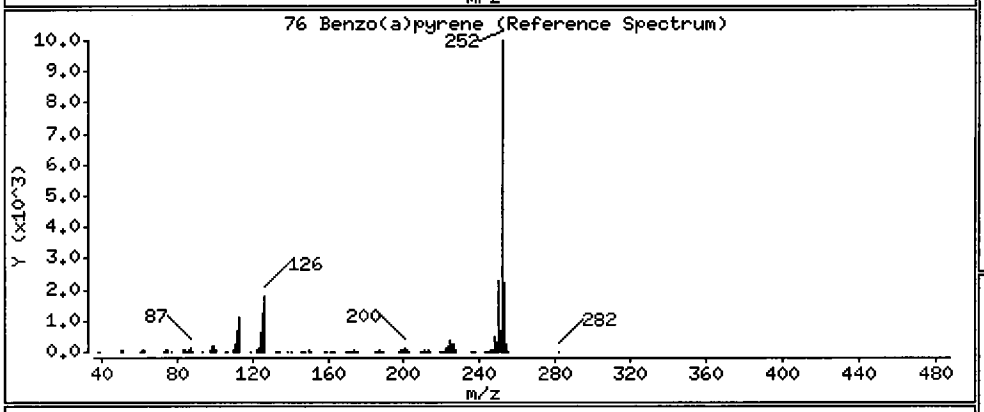
Concentration: 114.1 ug/kg

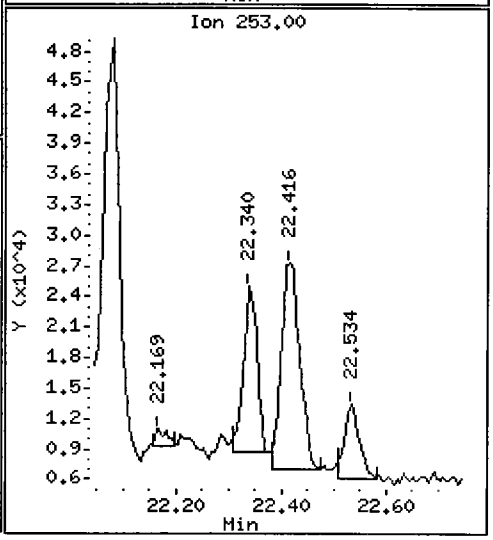


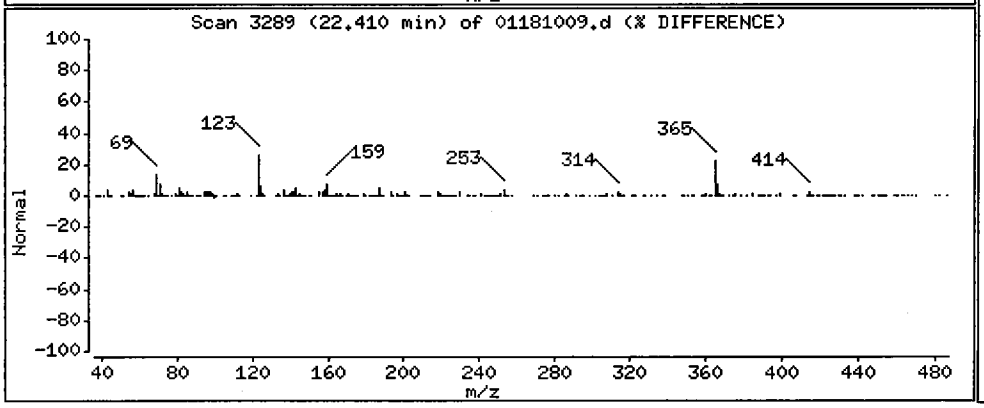












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

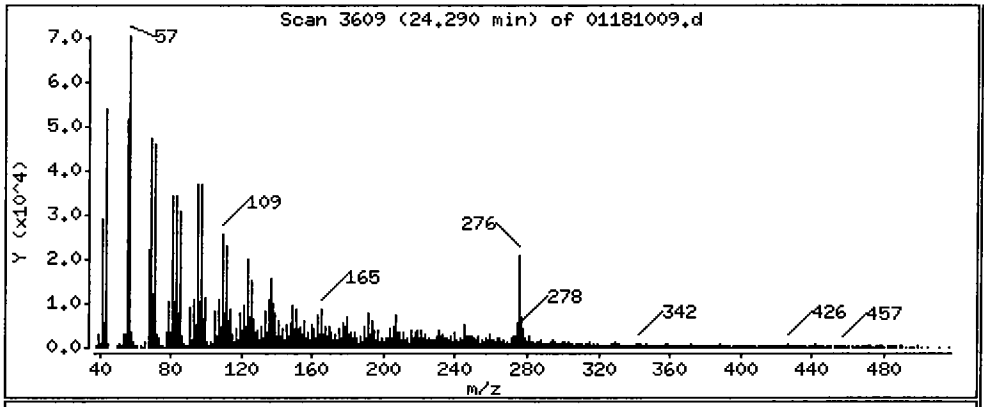
Operator: JZ

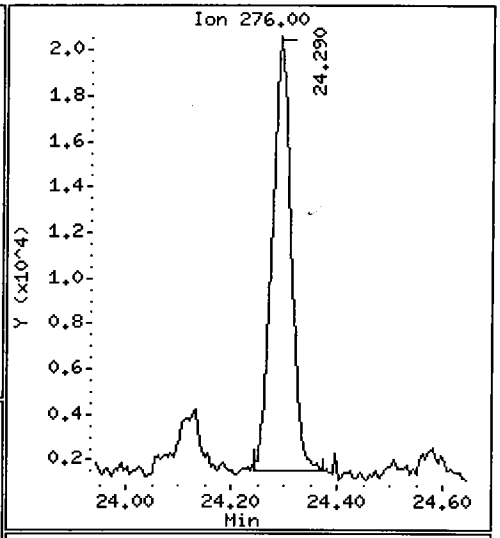
Column phase: ZB-5msi

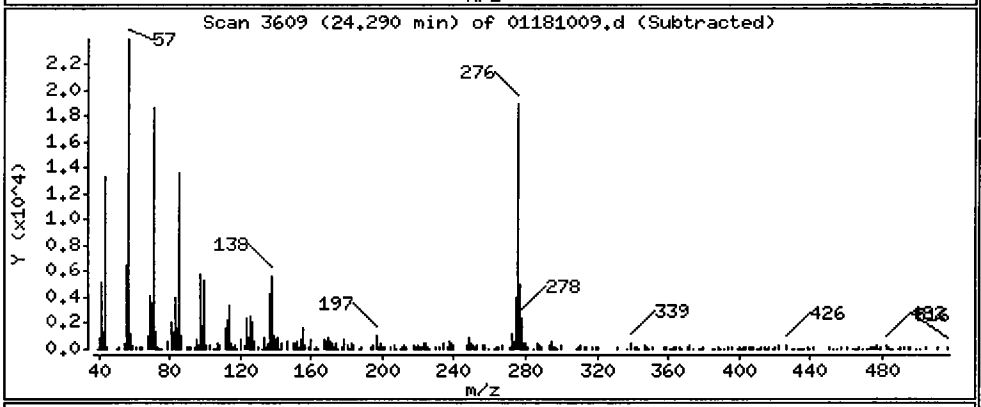
Column diameter: 0.32

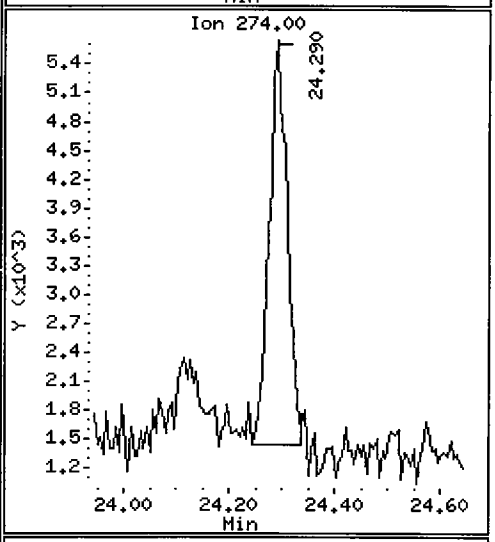
78 Indeno(1,2,3-cd)pyrene

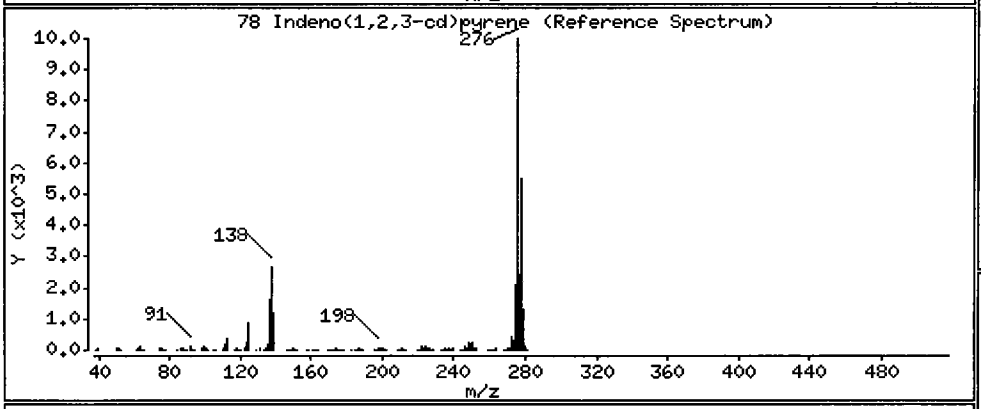
Concentration: 31.91 ug/kg

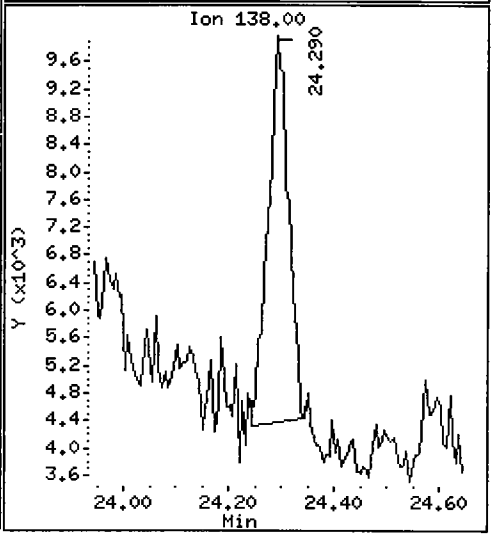


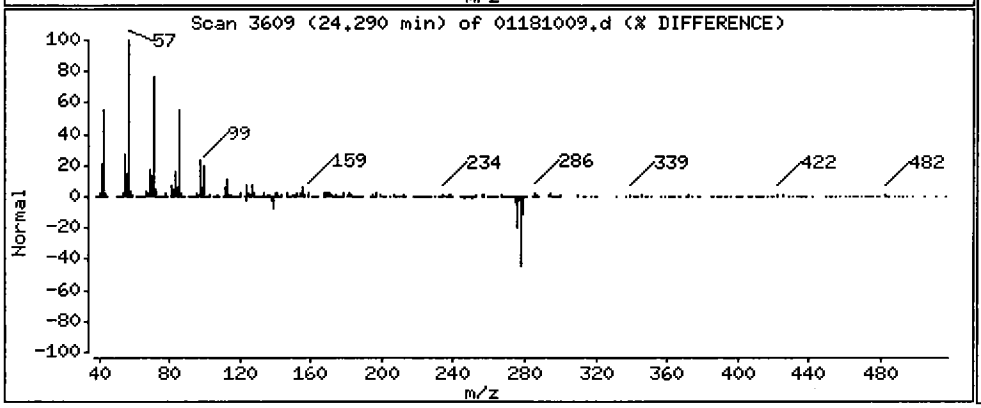












Data File: /chem3/nt4.i/20100118.b/01181009.d

Date : 18-JAN-2010 18:45

Client ID: CB31A011110SED

Instrument: nt4.i

Sample Info: QF10A

Volume Injected (uL): 1.0

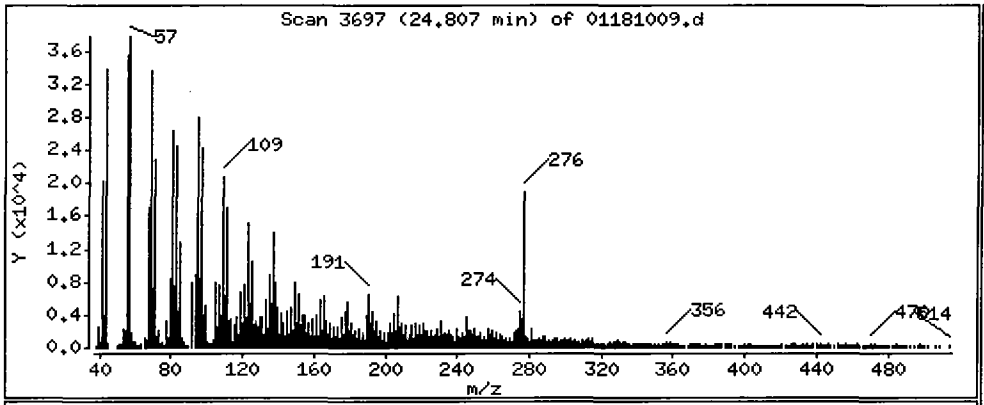
Operator: JZ

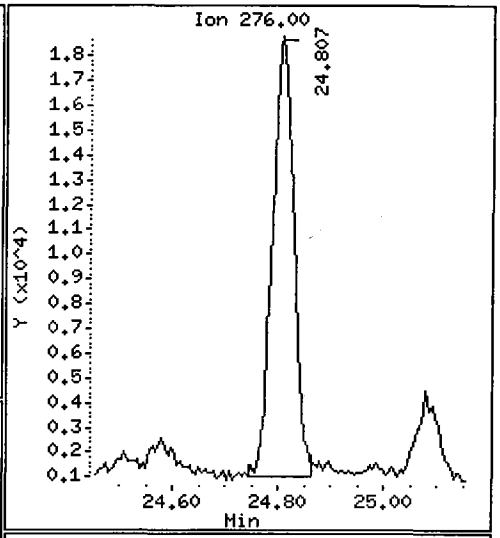
Column phase: ZB-5msi

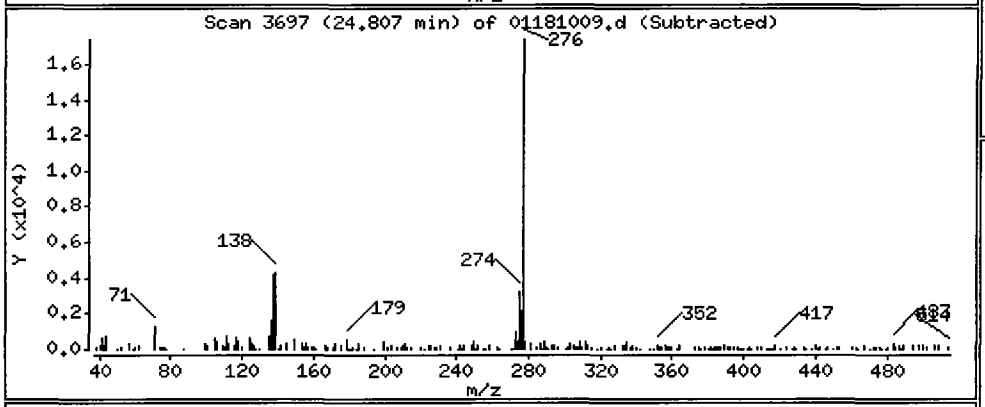
Column diameter: 0.32

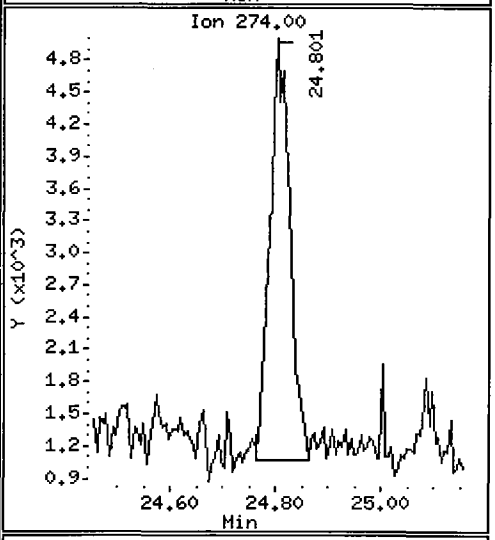
80 Benzo(g,h,i)perylene

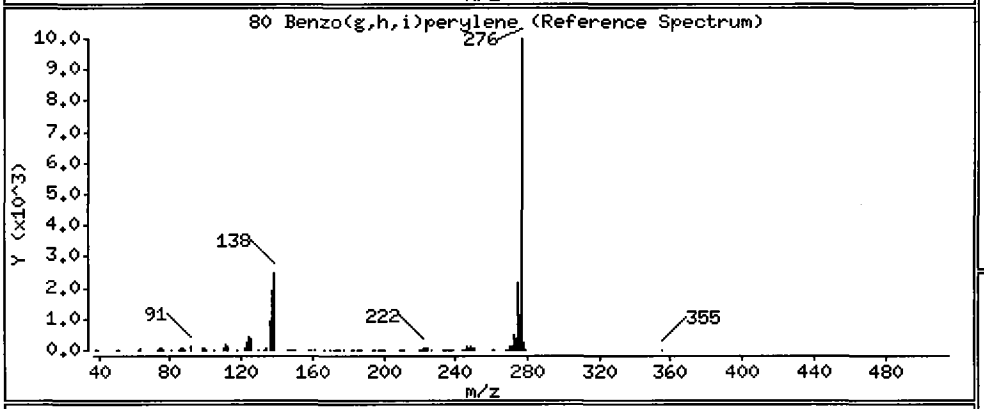
Concentration: 37.31 ug/kg

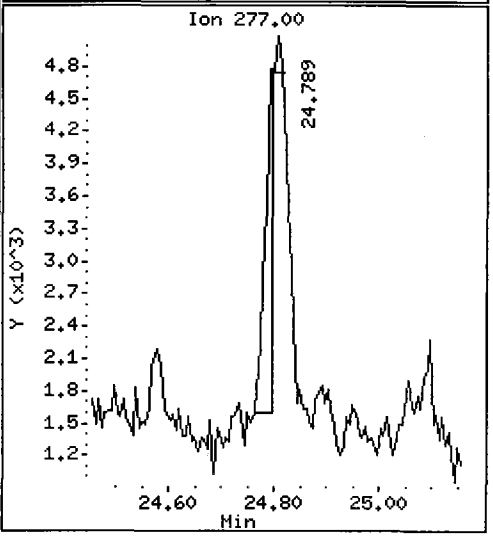


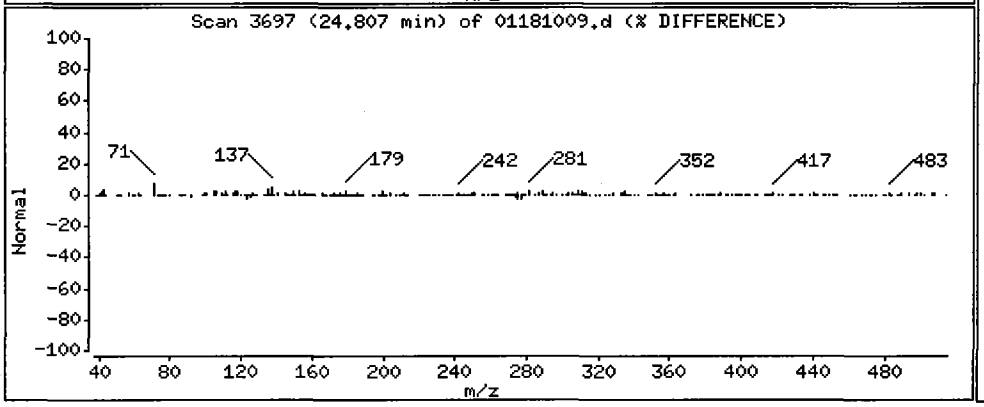




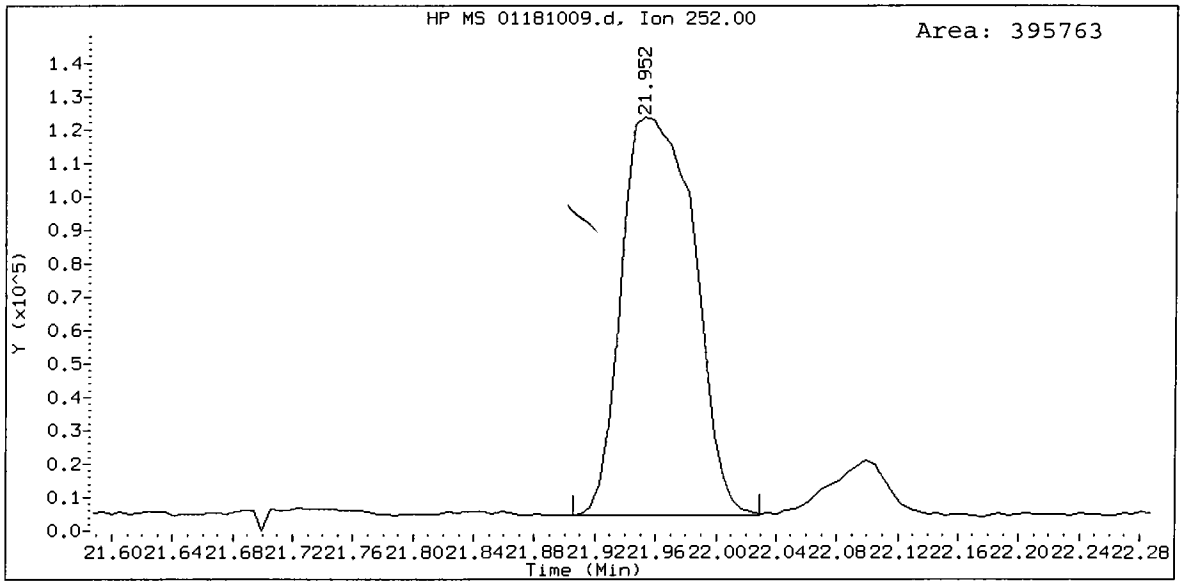


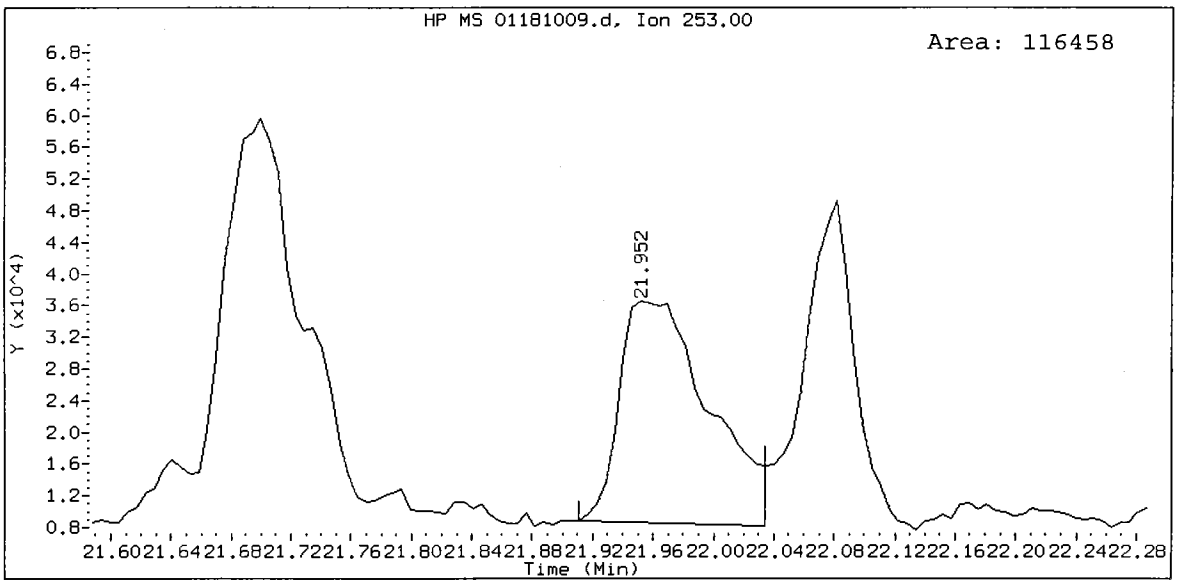


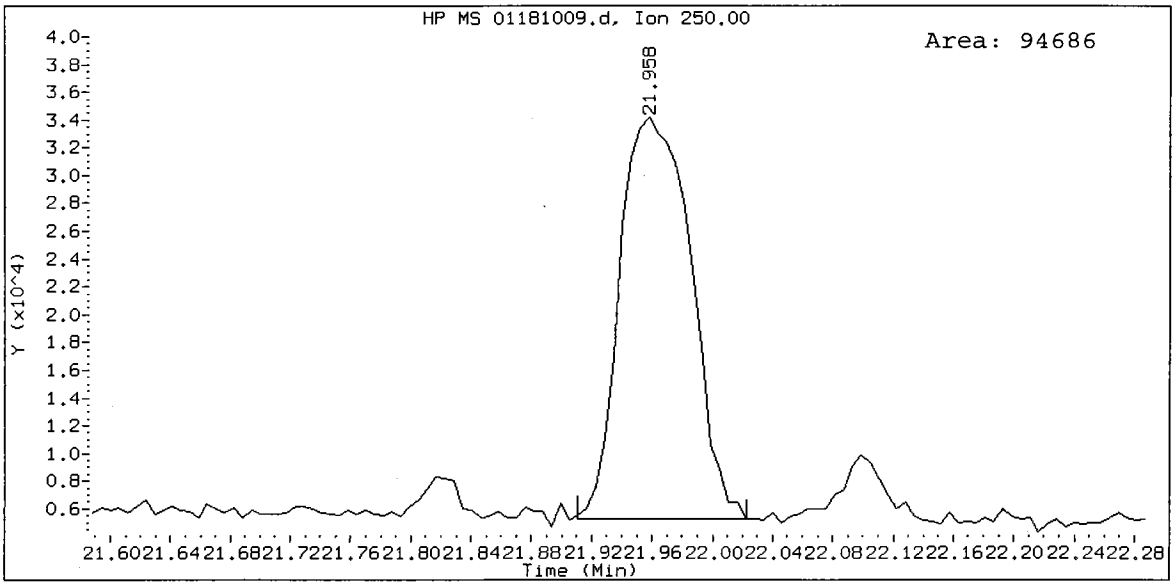




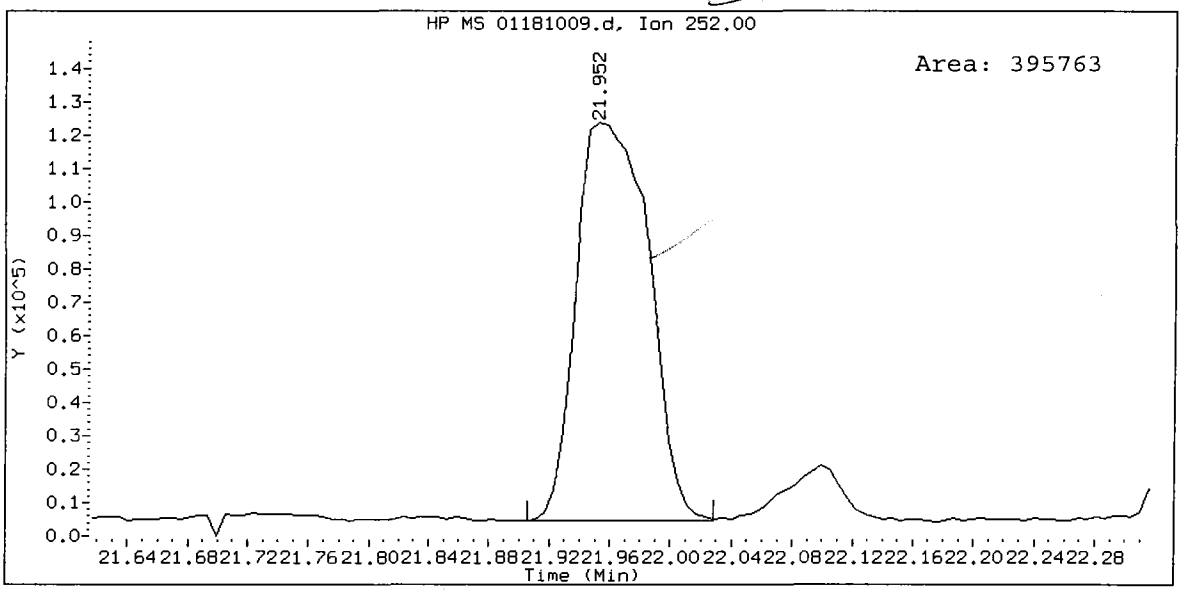
QF10A, /chem3/nt4.i/20100118.b/01181009.d
Benzo(b)fluoranthene Amount: 13.80

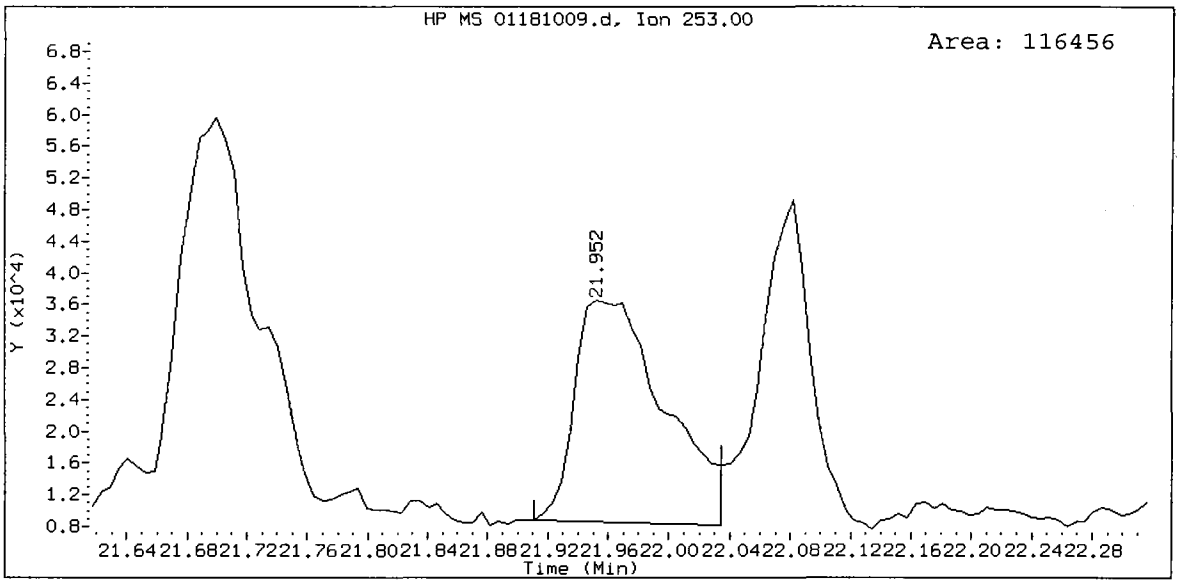


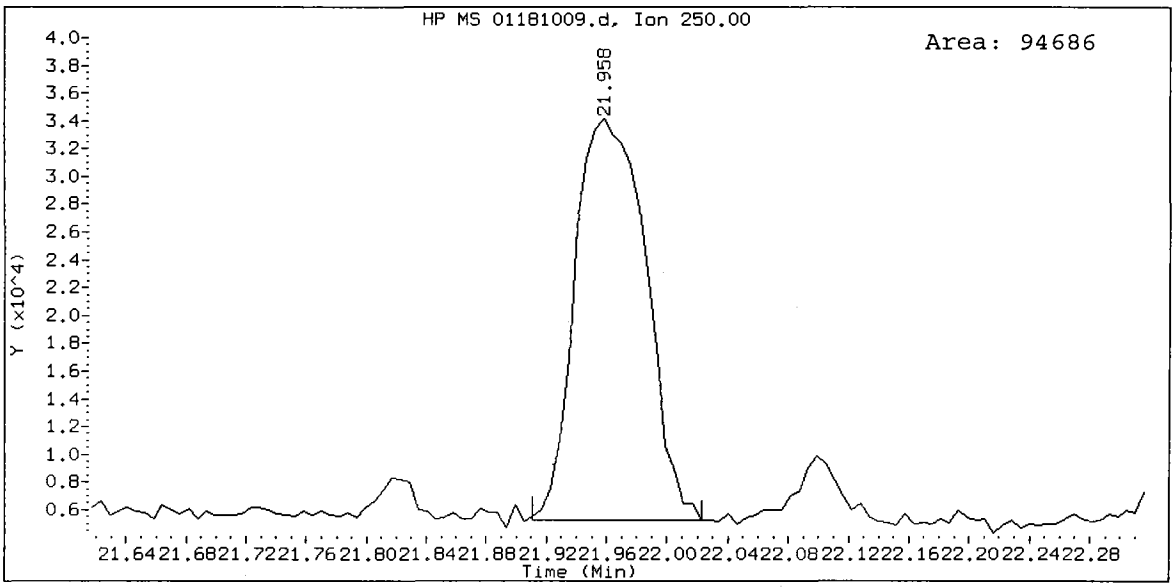




QF10A, /chem3/nt4.i/20100118.b/01181009.d
Benzo(k)fluoranthene Amount: 13.89







ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB99011110SED
SAMPLE

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 14:01
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 18.1%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
86-73-7	Fluorene	20	< 20 U
85-01-8	**Phenanthrene**	**20**	**43**
120-12-7	Anthracene	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**130**
129-00-0	**Pyrene**	**20**	**96**
56-55-3	**Benzo(a)anthracene**	**20**	**36**
218-01-9	**Chrysene**	**20**	**85**
205-99-2	**Benzo(b)fluoranthene**	**20**	**48**
207-08-9	**Benzo(k)fluoranthene**	**20**	**48**
50-32-8	**Benzo(a)pyrene**	**20**	**43**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**20**	**37**
53-70-3	**Dibenz(a,h)anthracene**	**20**	**19 J**
191-24-2	**Benzo(g,h,i)perylene**	**20**	**54**
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	80.8%
2-Fluorobiphenyl	78.4%

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100119.b/01191004.d
Lab Smp Id: QF10B Client Smp ID: CB99011110SED
Inj Date : 19-JAN-2010 14:01
Operator : JZ Inst ID: nt4.i
Smp Info : QF10B
Misc Info : 10-691
Comment : 1ul Injection
Method : /chem3/nt4.i/20100119.b/SW846100107.m
Meth Date : 19-Jan-2010 16:19 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	31.00000	Weight of sample extracted (g)
M	18.10000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.639	10.631	(1.000)	1192791	20.0000	
28 Naphthalene	128	Compound Not Detected.					
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
$ 36 2-Fluorobiphenyl	172	12.430	12.422	(0.919)	815005	19.6265	386.5
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	13.523	13.515	(1.000)	719314	20.0000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	15.931	15.912	(1.000)	1220847	20.0000	
60 Phenanthrene	178	15.961	15.953	(1.002)	138554	2.18249	42.98
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	17.929	17.909	(1.125)	406253	6.51186	128.2
65 Pyrene	202	18.293	18.273	(0.901)	413566	4.87676	96.04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	66 Terphenyl-d14	244	18.581	18.555	(0.915)	996746	20.1834	397.5
	68 Benzo(a)anthracene	228	20.278	20.241	(0.999)	145053	1.84634	36.36
*	69 Chrysene-d12	240	20.308	20.271	(1.000)	1331661	20.0000	
	71 Chrysene	228	20.343	20.312	(1.002)	321915	4.31445	84.97
	74 Benzo(b)fluoranthene	252	21.994	21.915	(0.975)	392797	4.88133	96.13(M) 2.44
	75 Benzo(k)fluoranthene	252	21.994	21.951	(0.975)	392797	4.91388	96.77(M) 2.45
	76 Benzo(a)pyrene	252	22.464	22.379	(0.996)	160204	2.20307	43.39
*	77 Perylene-d12	264	22.552	22.456	(1.000)	1307072	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.373	24.265	(1.081)	156996	1.87909	37.01(M)
	79 Dibenzo(a,h)anthracene	278	24.379	24.277	(1.081)	67821	0.97047	19.11(M)
	80 Benzo(g,h,i)perylene	276	24.896	24.776	(1.104)	204103	2.73558	53.87(M)

QC Flag Legend

M - Compound response manually integrated.

01/19/10

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01191004.d
Lab Smp Id: QF10B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-691

Calibration Date: 19-JAN-2010
Calibration Time: 12:17
Client Smp ID: CB99011110SED
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	1192791	15.18
42 Acenaphthene-d10	594267	297134	1188534	719314	21.04
59 Phenanthrene-d10	951721	475860	1903442	1220847	28.28
69 Chrysene-d12	794862	397431	1589724	1331661	67.53
77 Perylene-d12	826094	413047	1652188	1307072	58.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.63	10.13	11.13	10.64	0.07
42 Acenaphthene-d10	13.52	13.02	14.02	13.52	0.06
59 Phenanthrene-d10	15.91	15.41	16.41	15.93	0.12
69 Chrysene-d12	20.27	19.77	20.77	20.31	0.18
77 Perylene-d12	22.46	21.96	22.96	22.55	0.43

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

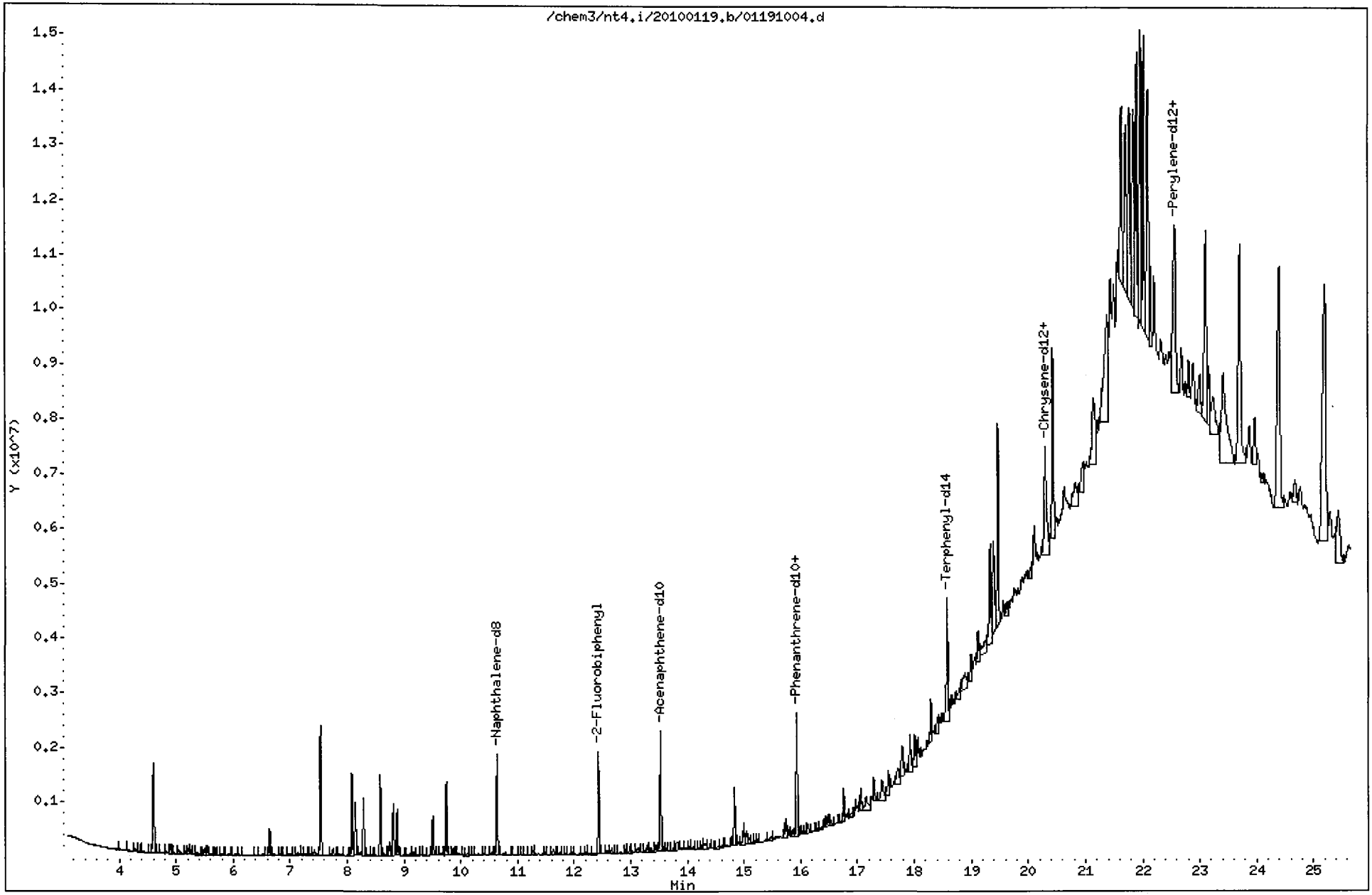
Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: QF10B
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-691

Client SDG: QF10
Fraction: SV
Client Smp ID: CB99011110SED
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	492.3	386.5	78.51	34-100
$ 66 Terphenyl-d14	492.3	397.5	80.73	35-112

Data File: /chem3/nt4.i/20100119.b/01191004.d
Date : 19-JAN-2010 14:01
Client ID: CB99011110SED
Sample Info: QF10B
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt4.i
Operator: JZ
Column diameter: 0.32



Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

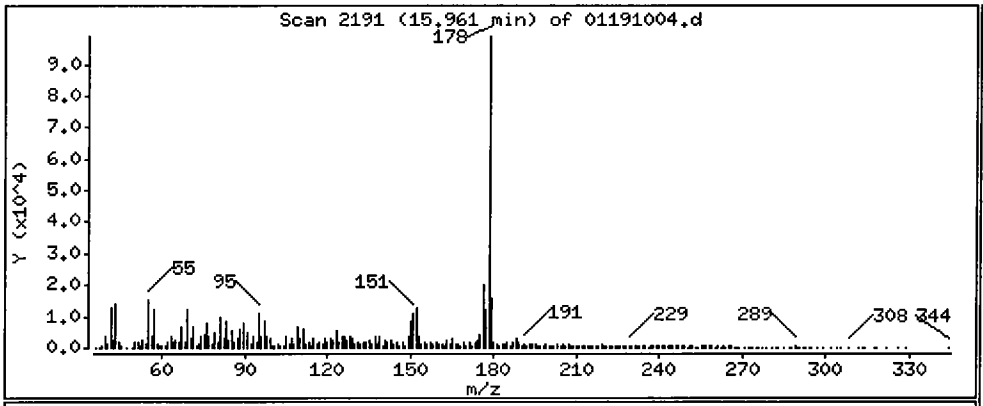
Operator: JZ

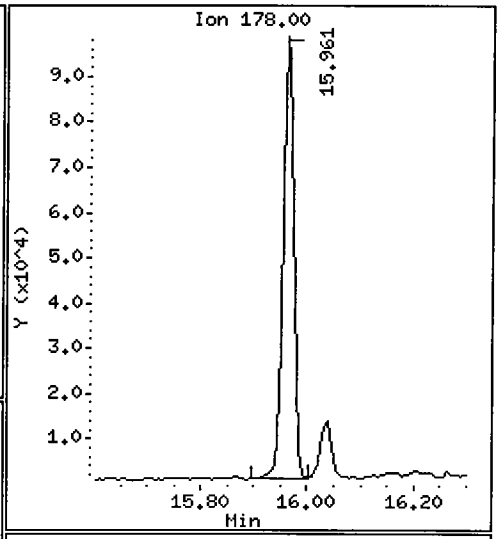
Column phase: ZB-5msi

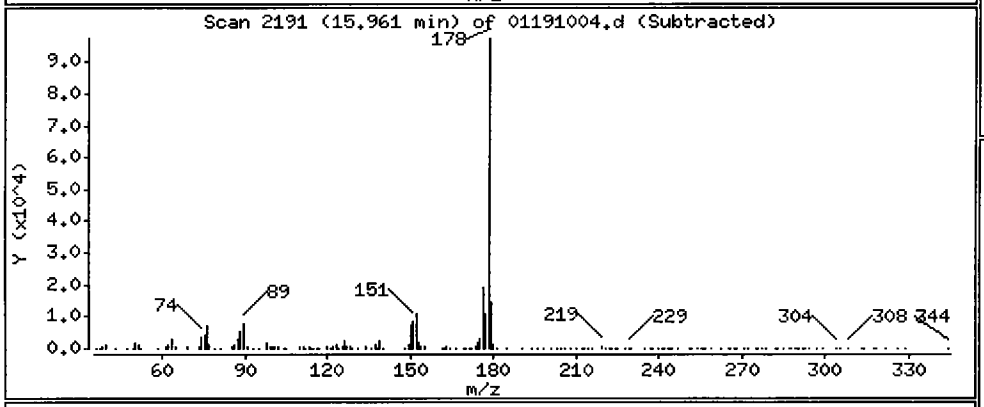
Column diameter: 0.32

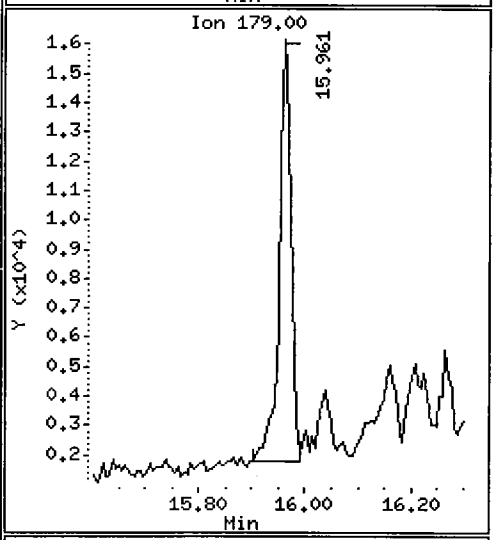
60 Phenanthrene

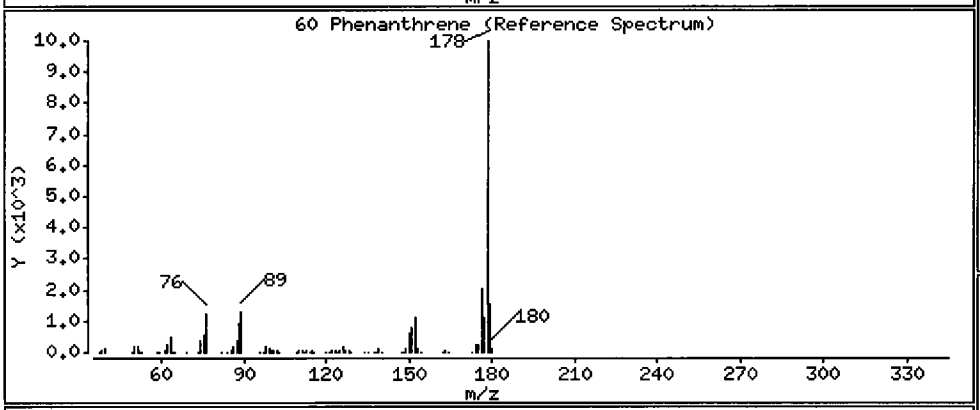
Concentration: 42.98 ug/kg

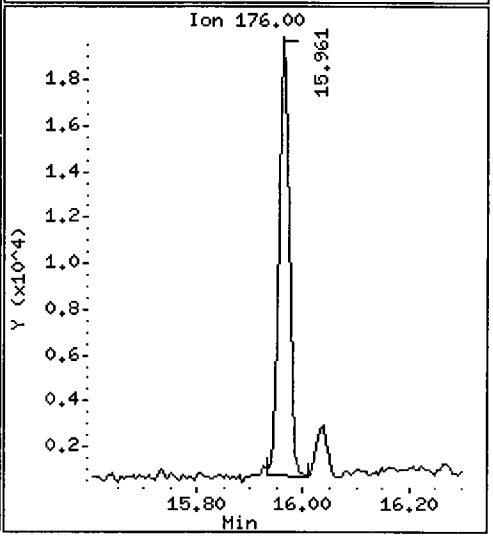


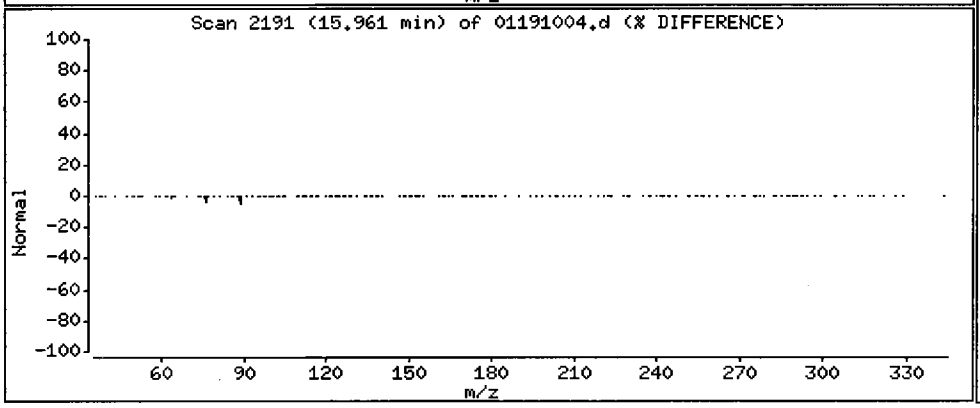












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

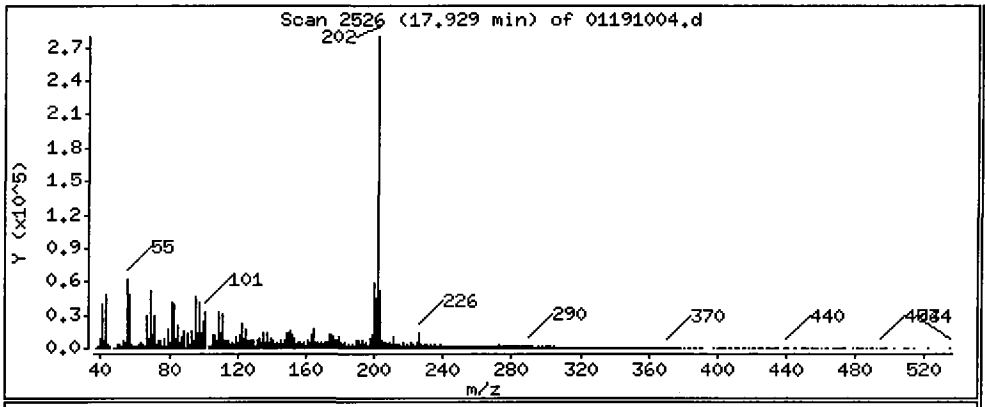
Operator: JZ

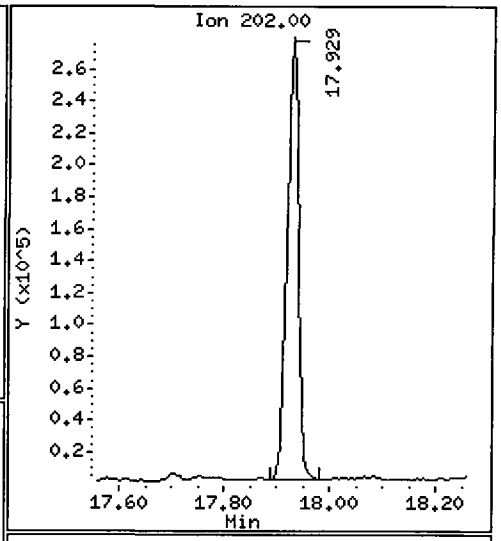
Column phase: ZB-5msi

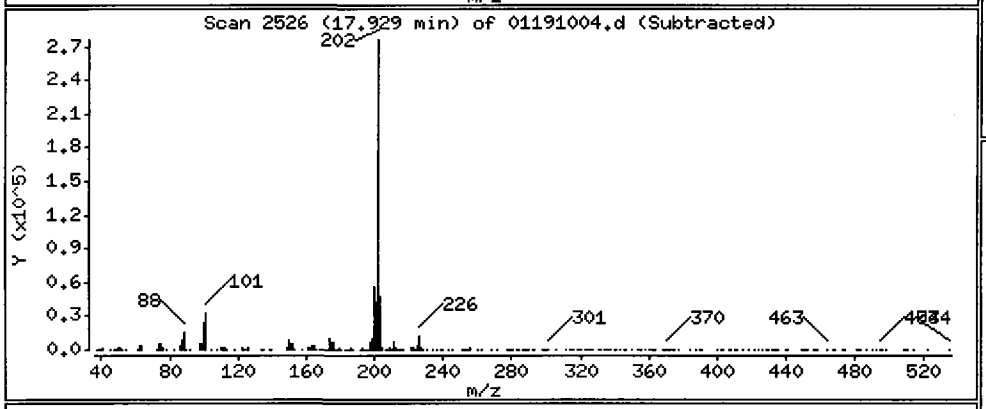
Column diameter: 0.32

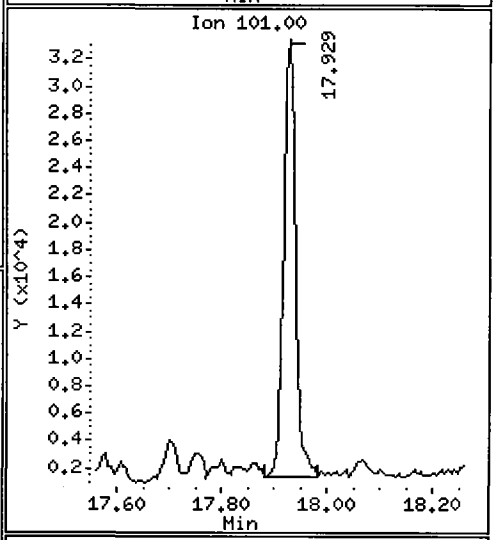
64 Fluoranthene

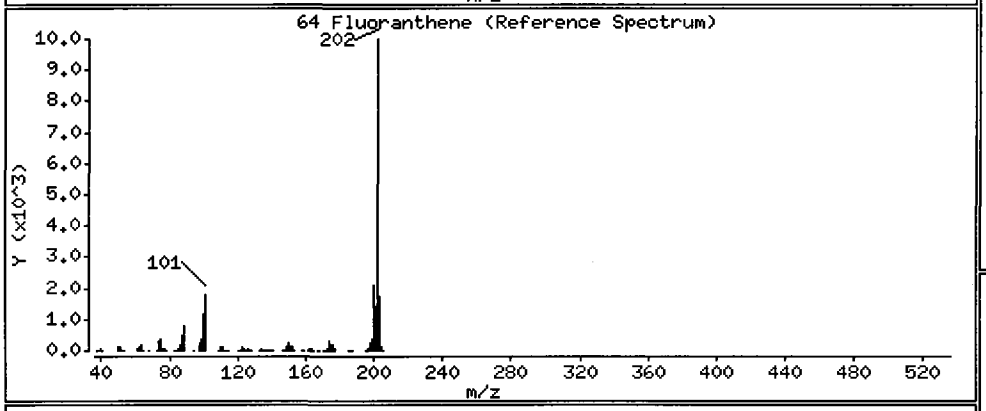
Concentration: 128.2 ug/kg

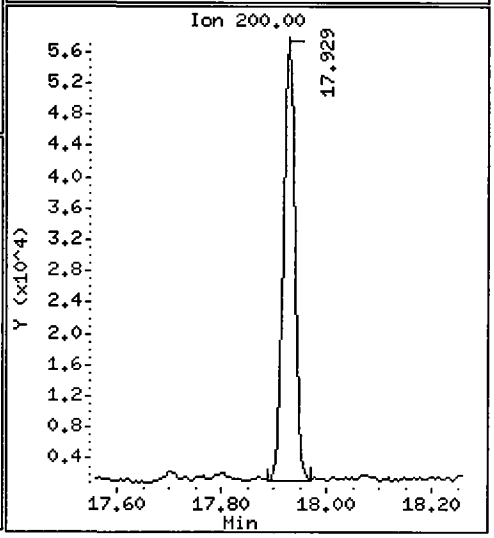


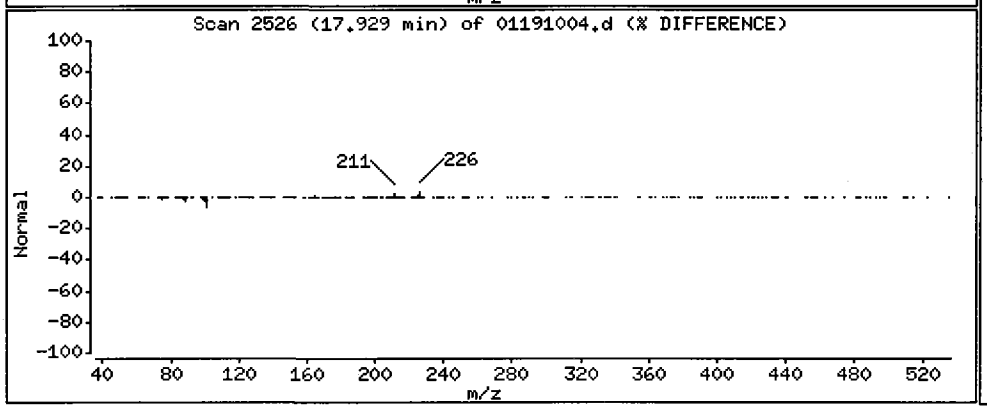












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

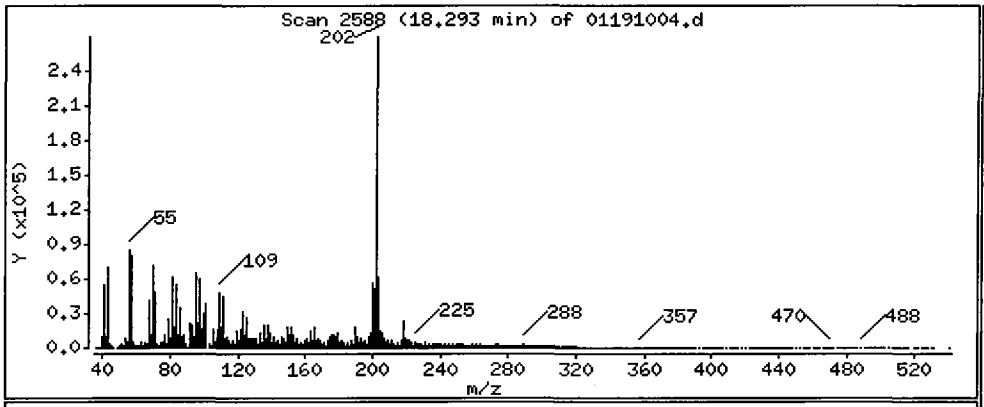
Operator: JZ

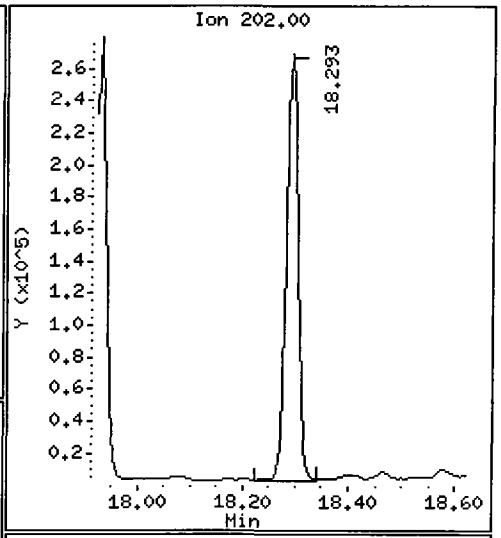
Column phase: ZB-5msi

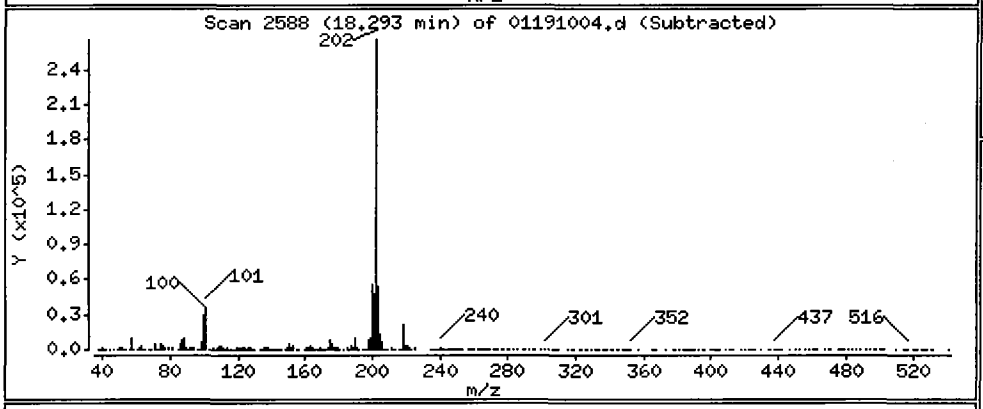
Column diameter: 0.32

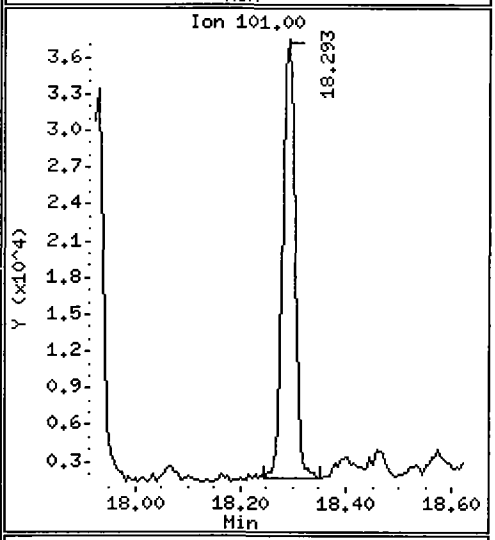
65 Pyrene

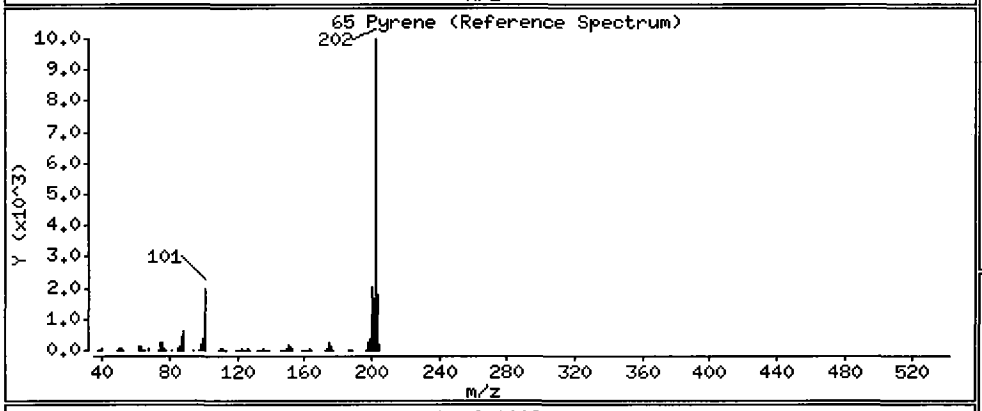
Concentration: 96.04 ug/kg

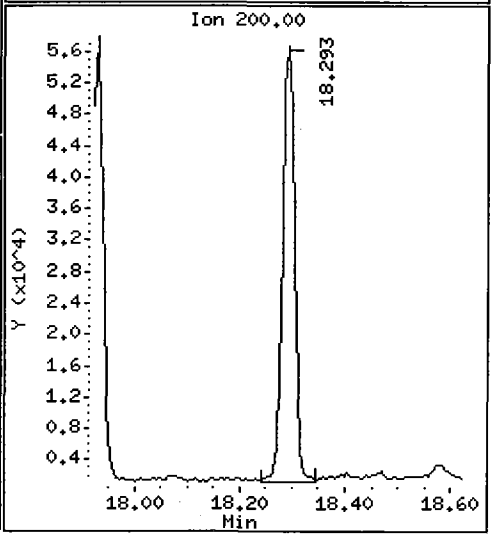


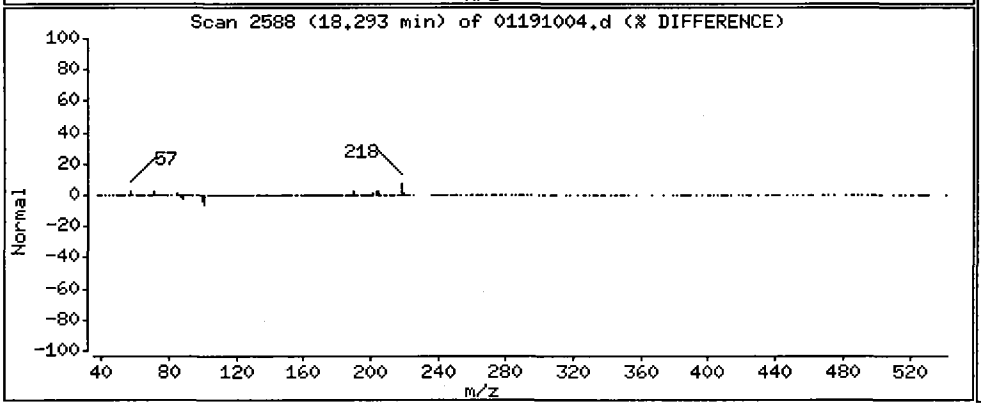












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

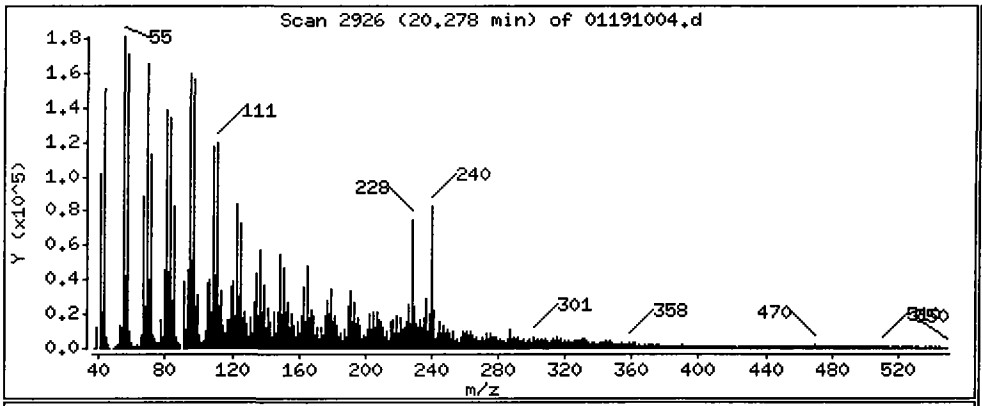
Operator: JZ

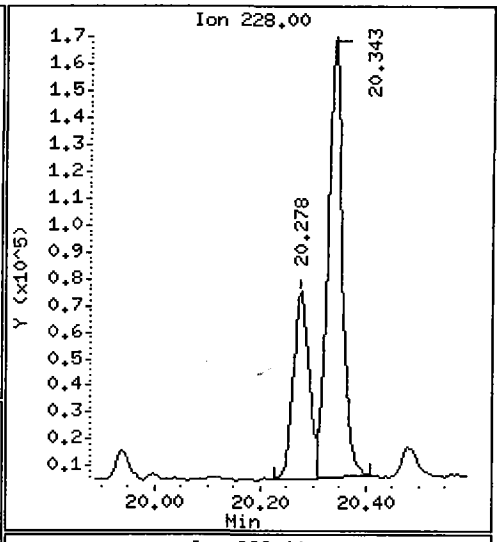
Column phase: ZB-5msi

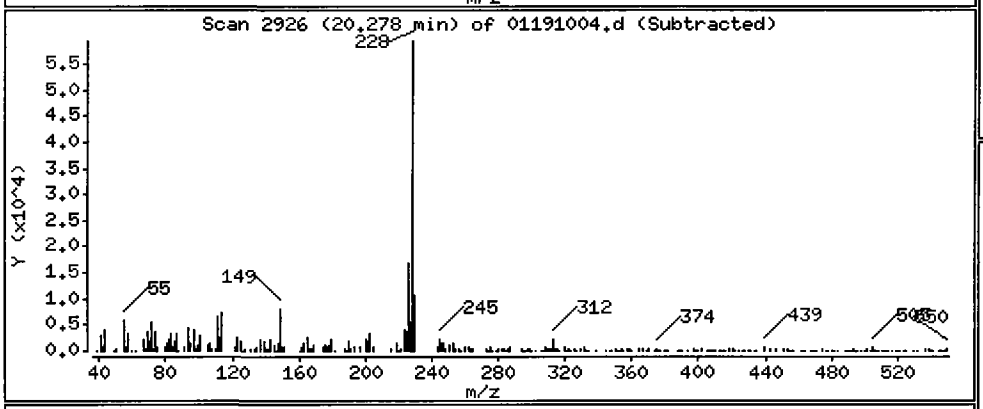
Column diameter: 0.32

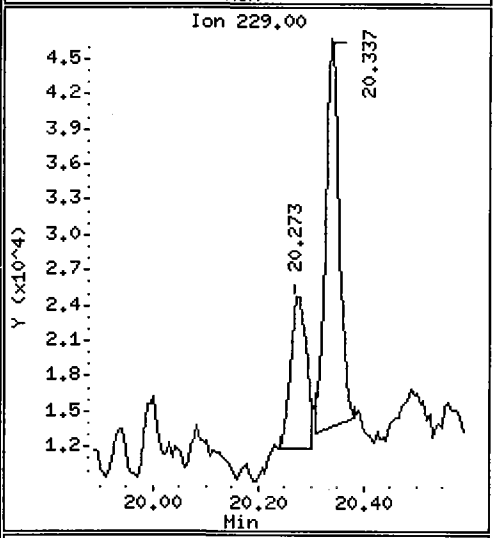
68 Benzo(a)anthracene

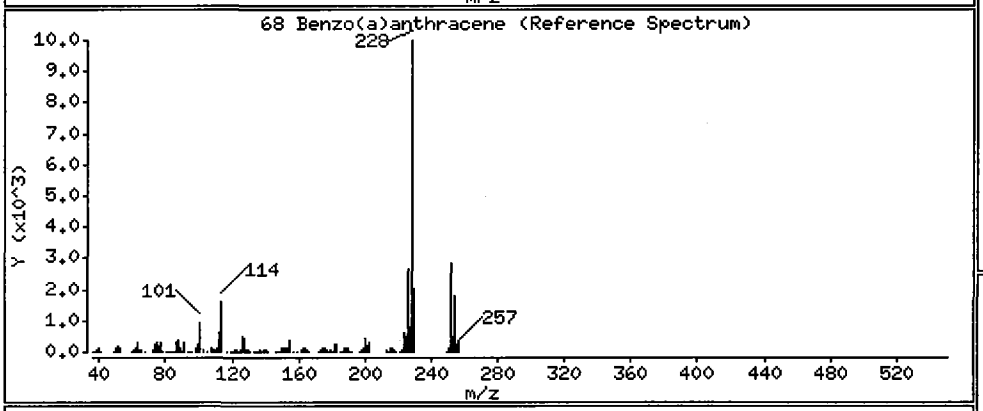
Concentration: 36.36 ug/kg

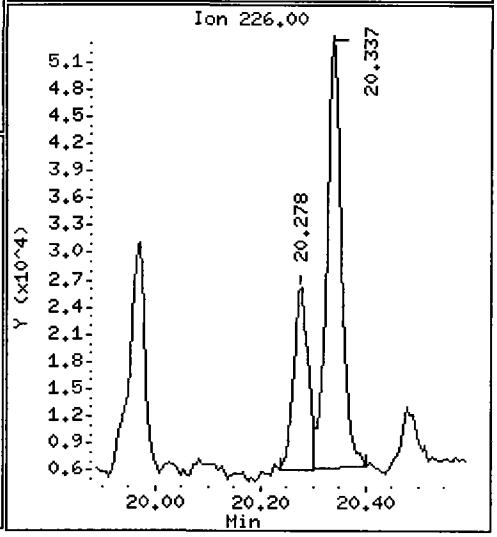


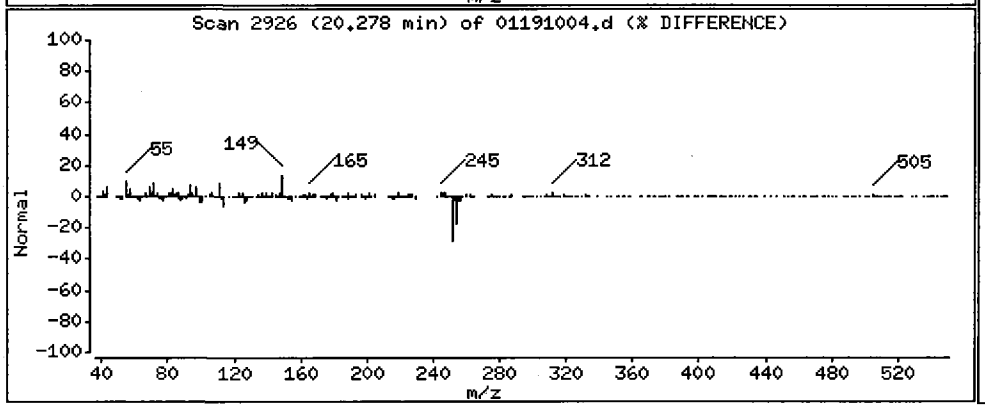












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

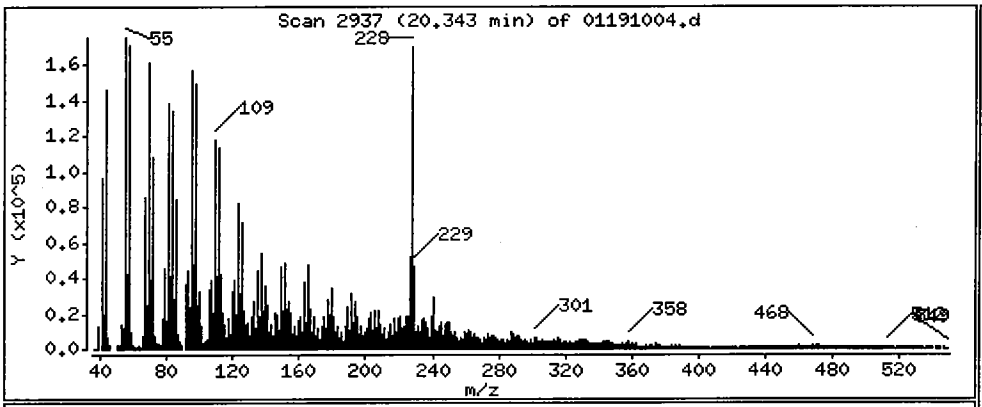
Operator: JZ

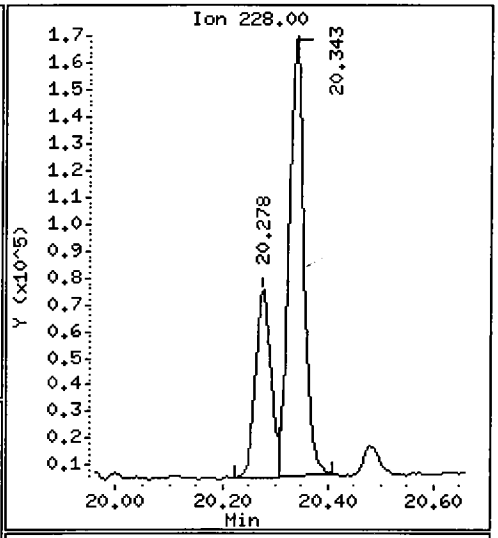
Column phase: ZB-5msi

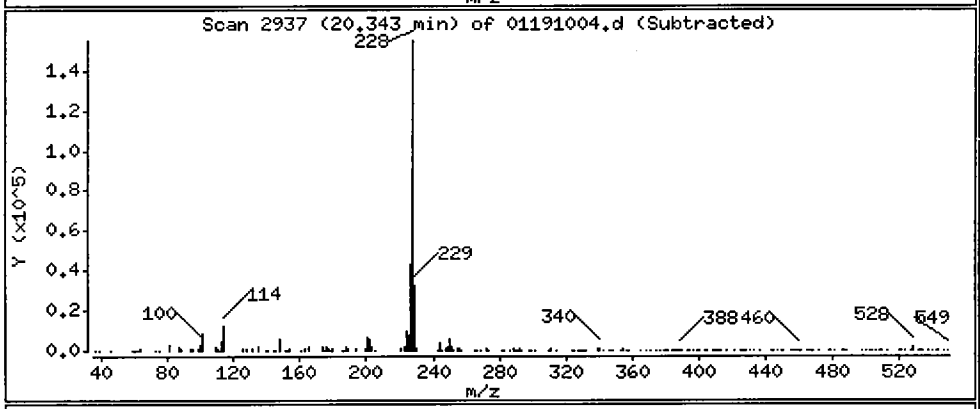
Column diameter: 0.32

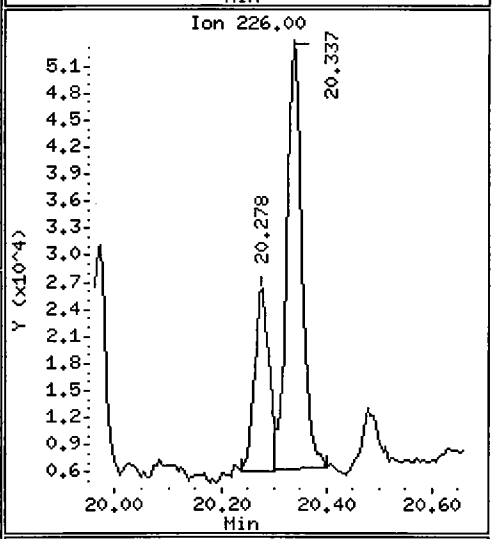
71 Chrysene

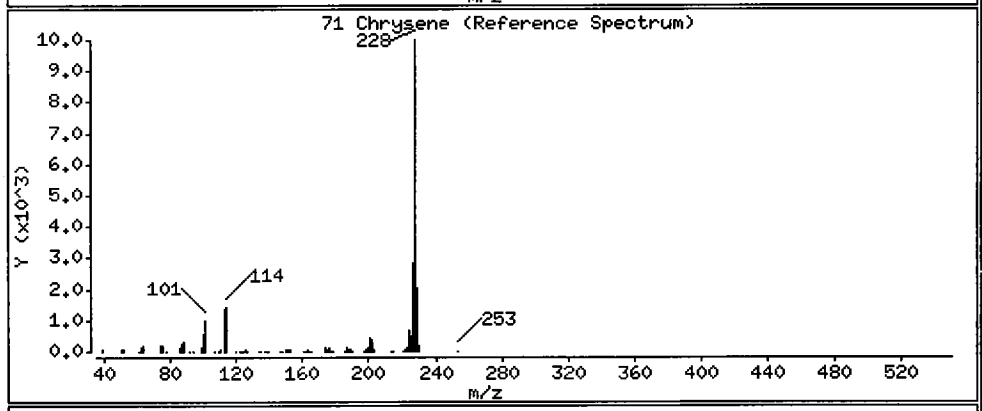
Concentration: 84.97 ug/kg

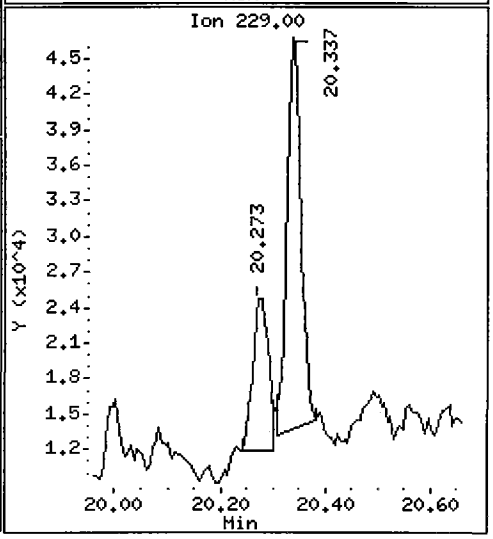


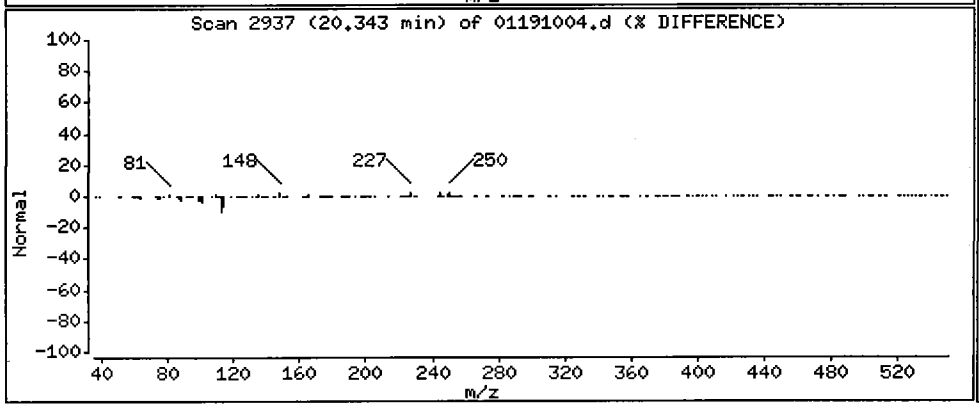












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

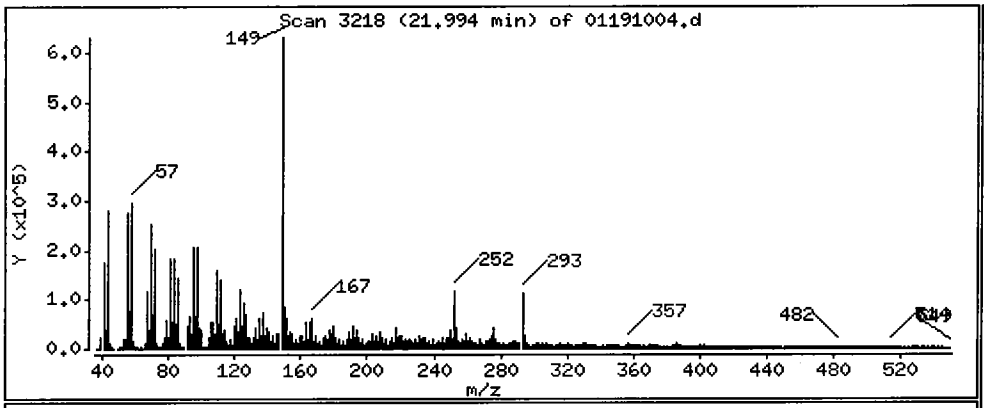
Operator: JZ

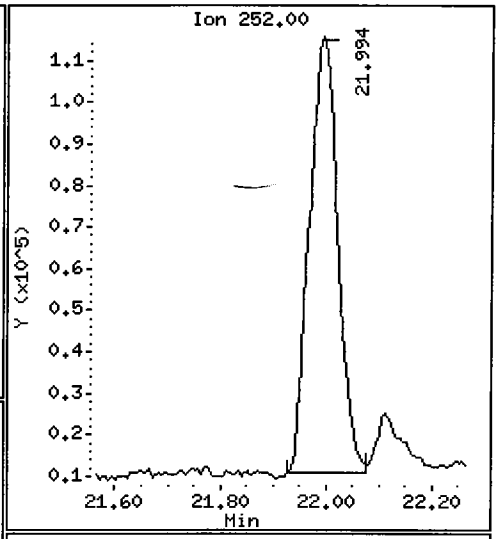
Column phase: ZB-5msi

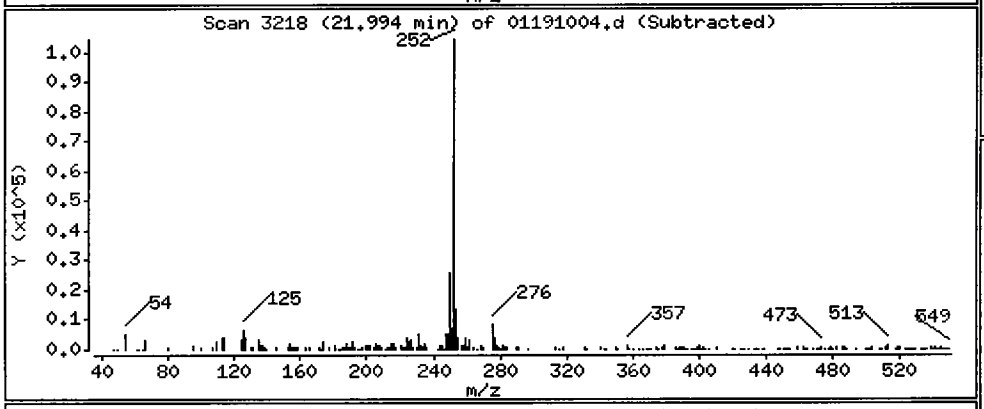
Column diameter: 0.32

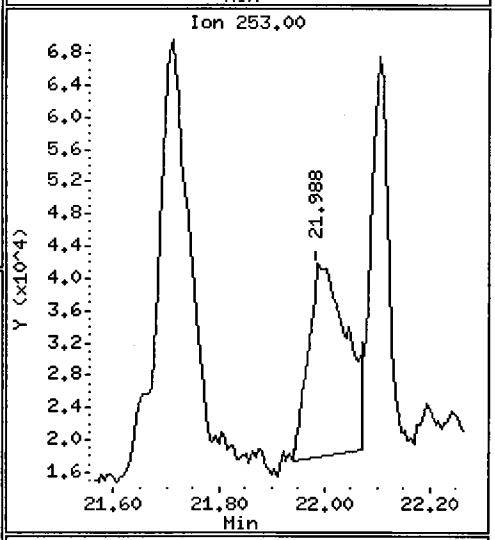
74 Benzo(b)fluoranthene

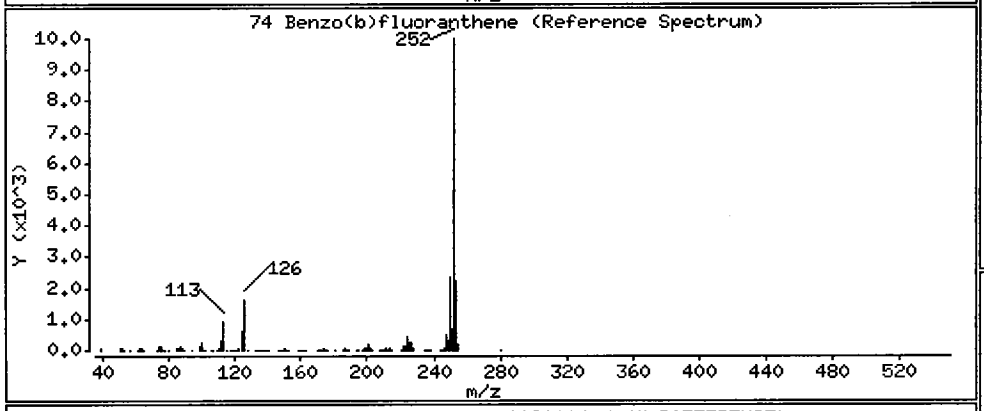
Concentration: 96.13 ug/kg

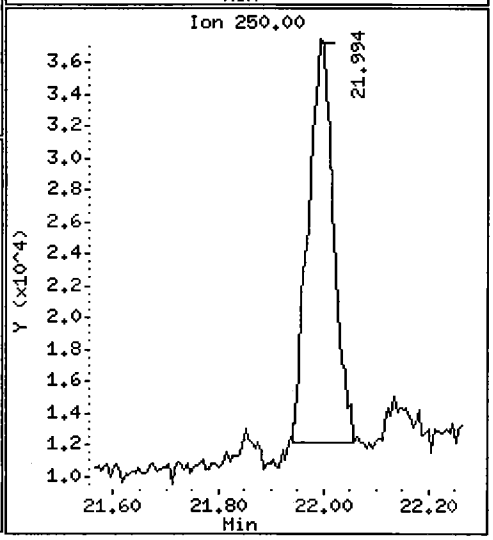


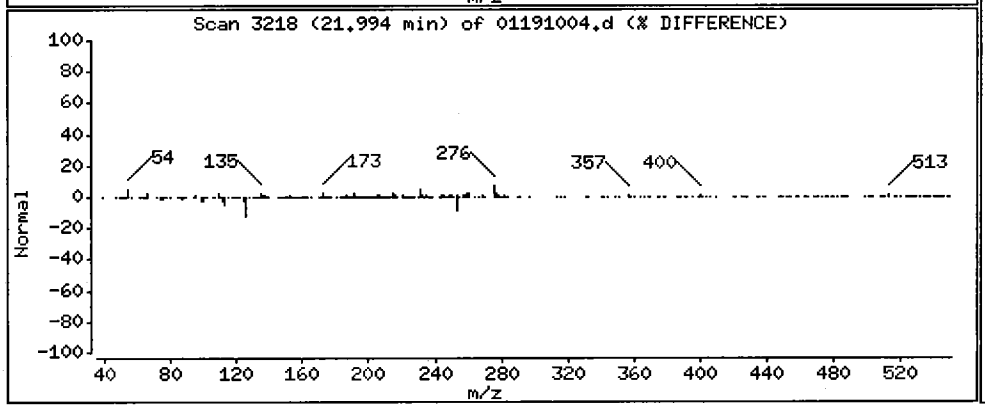












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

Operator: JZ

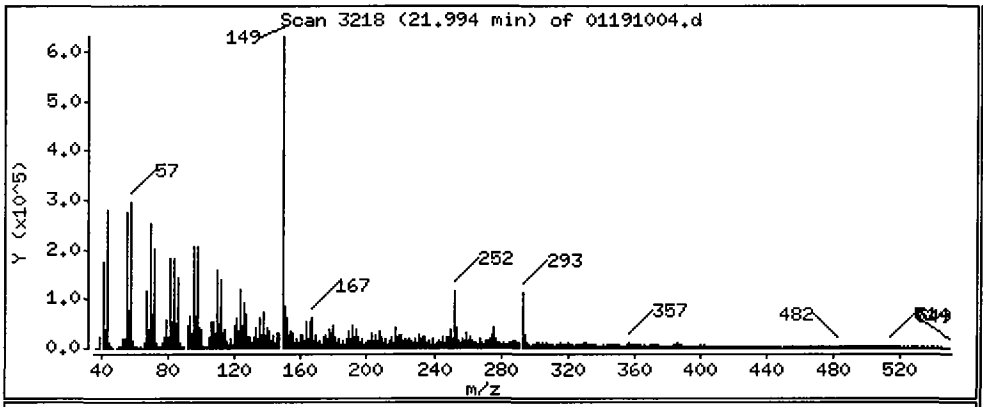
Column phase: ZB-5msi

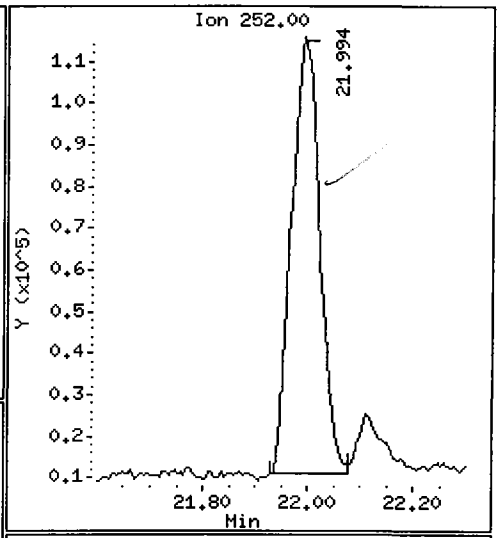
Column diameter: 0.32

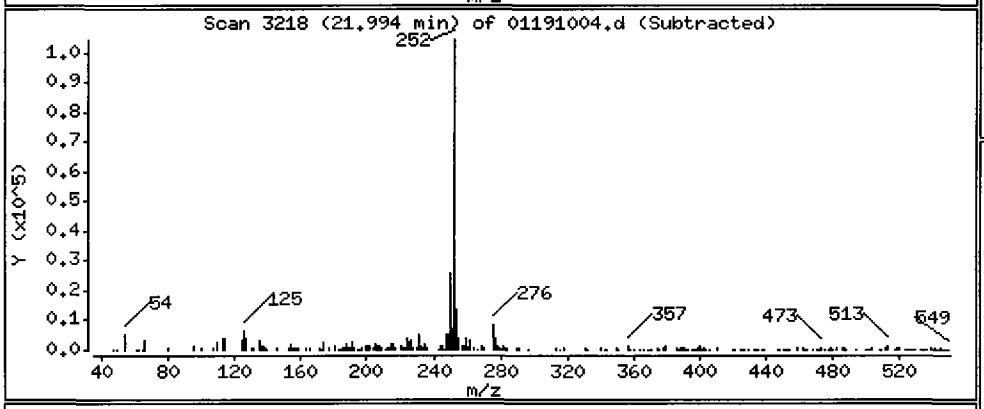
11C

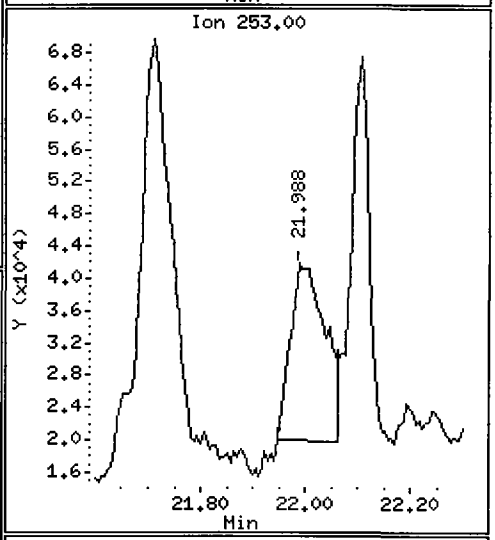
75 Benzo(k)fluoranthene

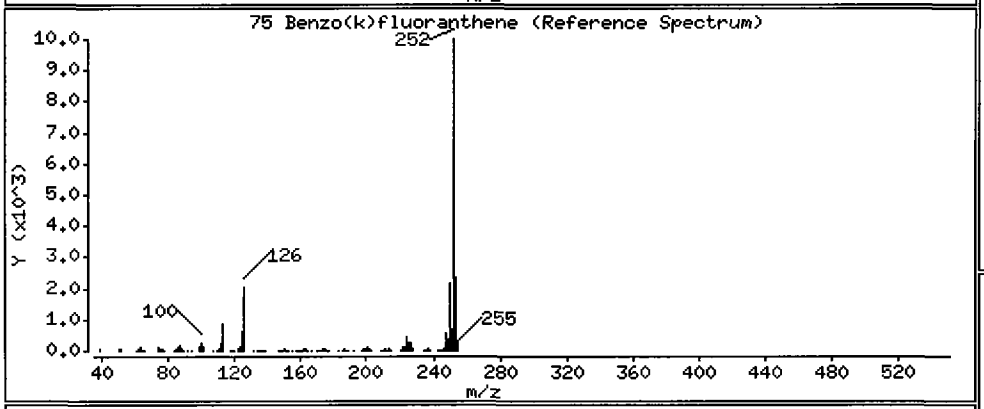
Concentration: 96.77 ug/kg

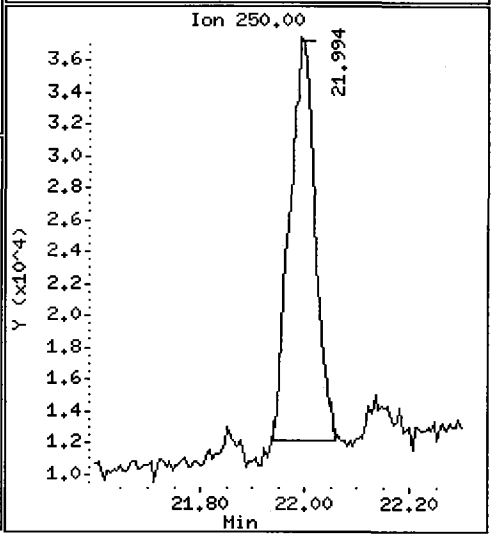


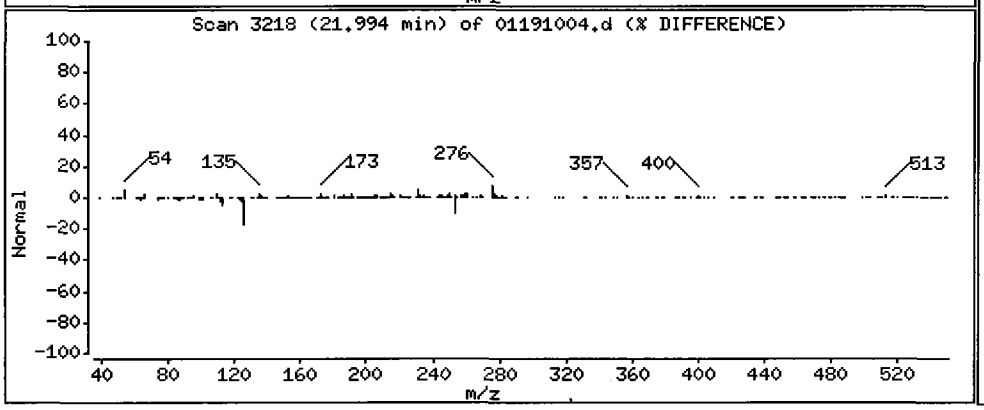












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

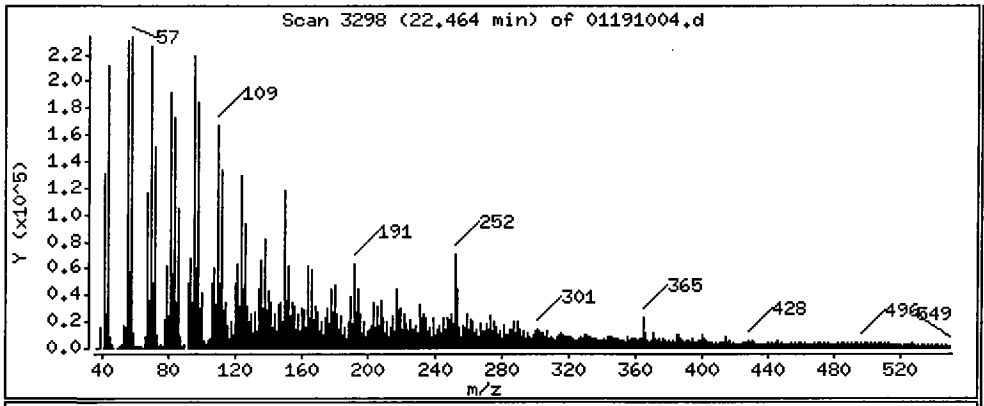
Operator: JZ

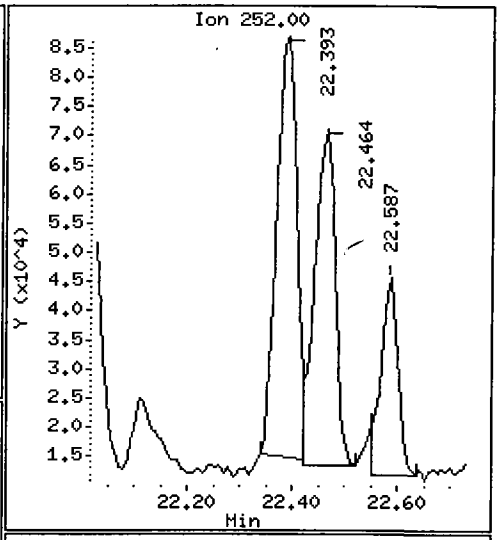
Column phase: ZB-5msi

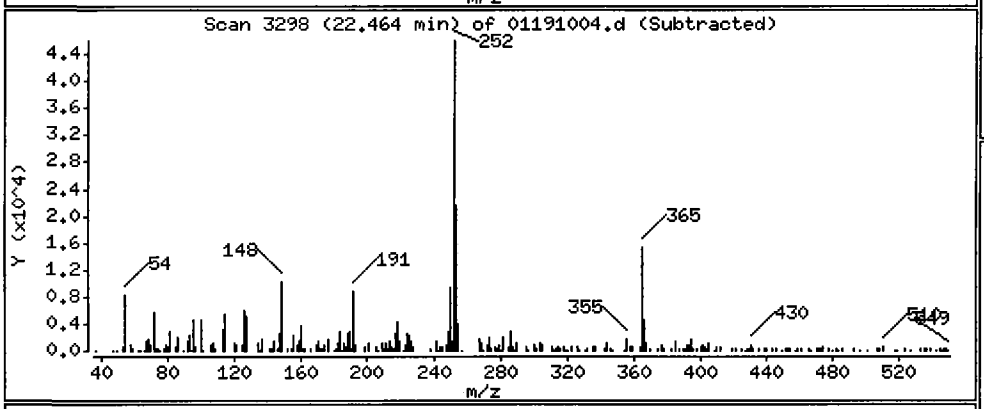
Column diameter: 0.32

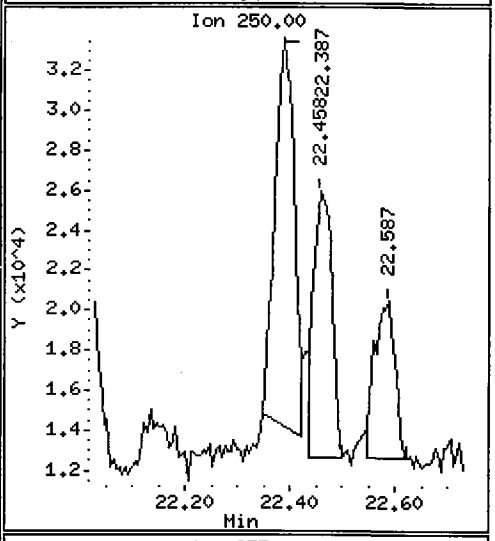
76 Benzo(a)pyrene

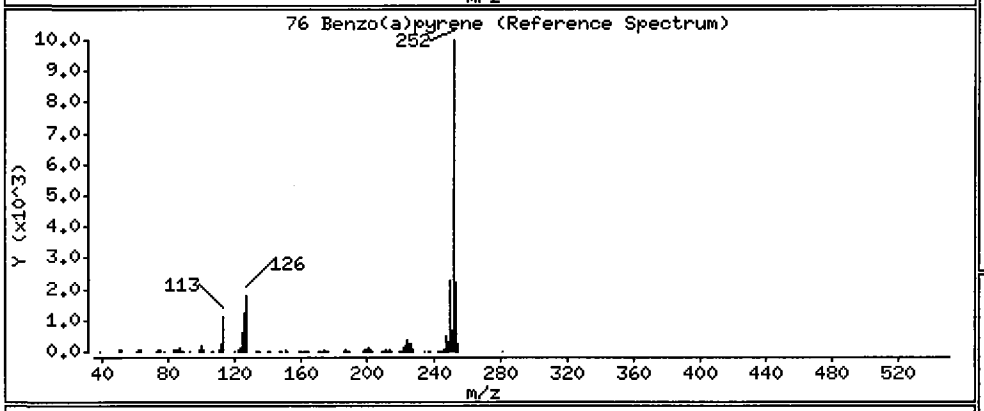
Concentration: 43.39 ug/kg

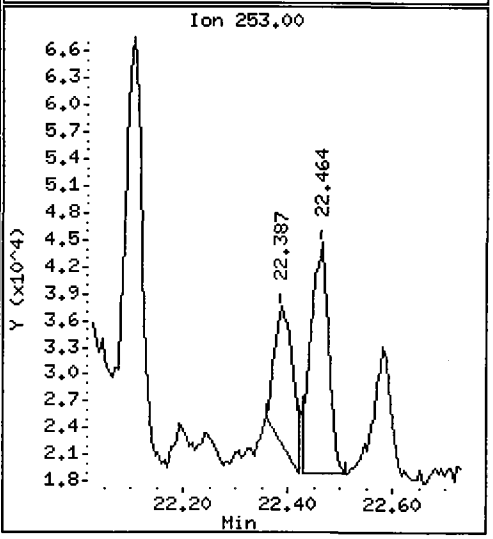


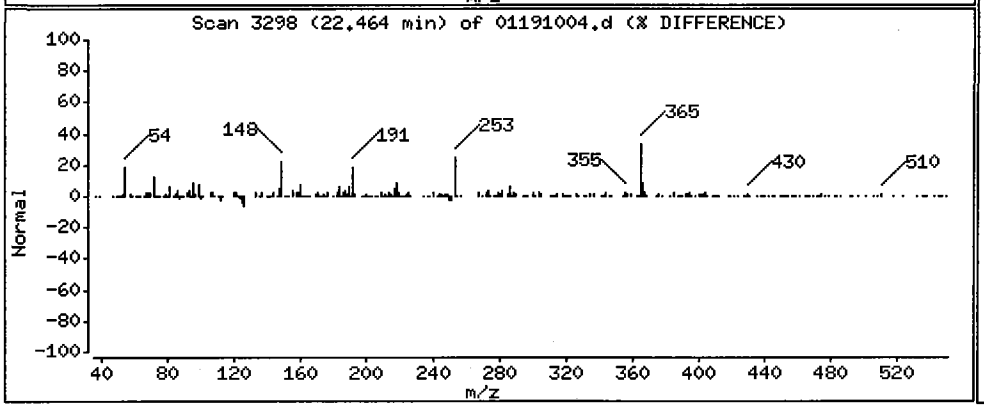












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

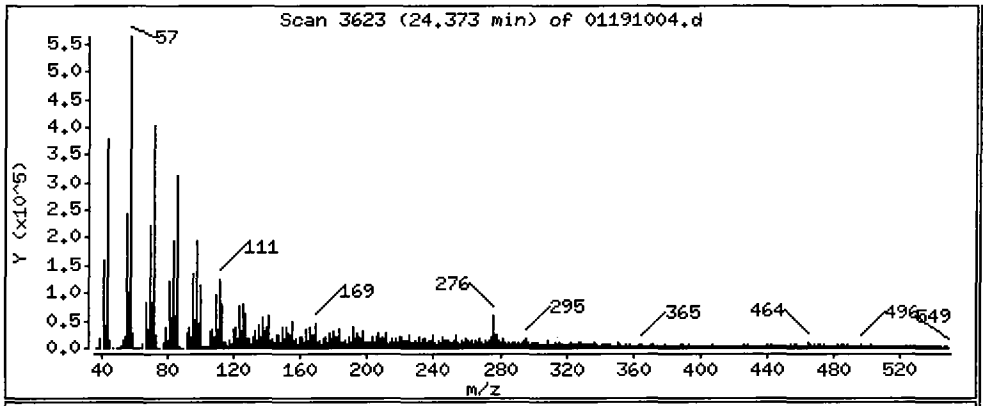
Operator: JZ

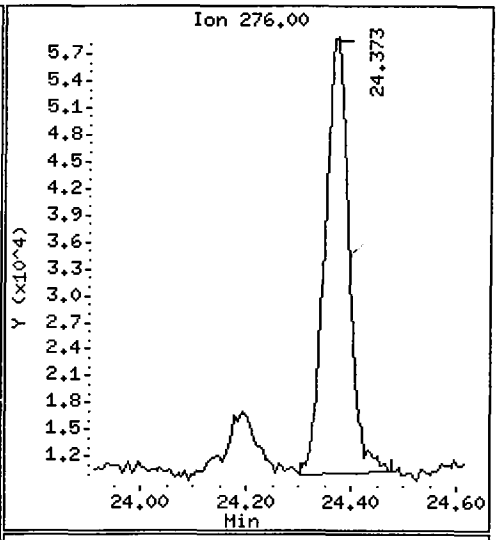
Column phase: ZB-5msi

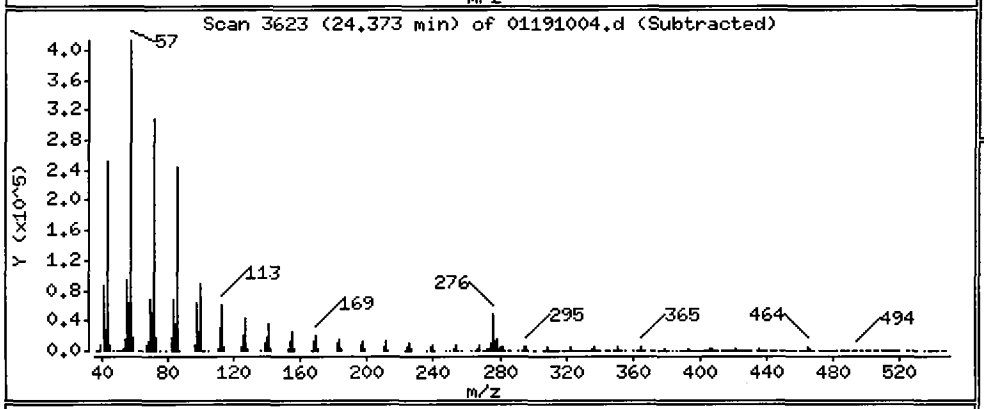
Column diameter: 0.32

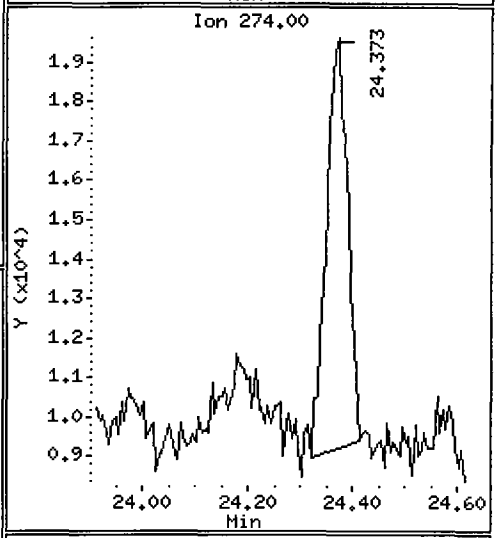
78 Indeno(1,2,3-cd)pyrene

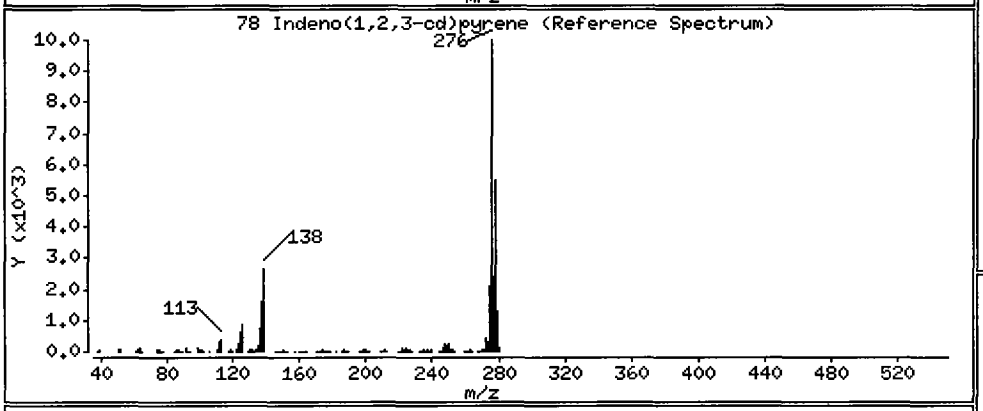
Concentration: 37.01 ug/kg

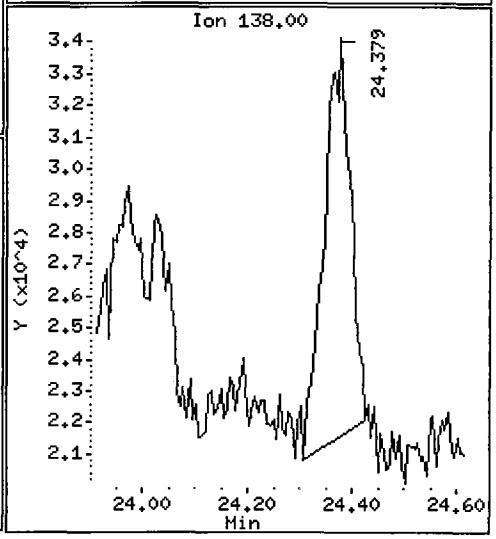


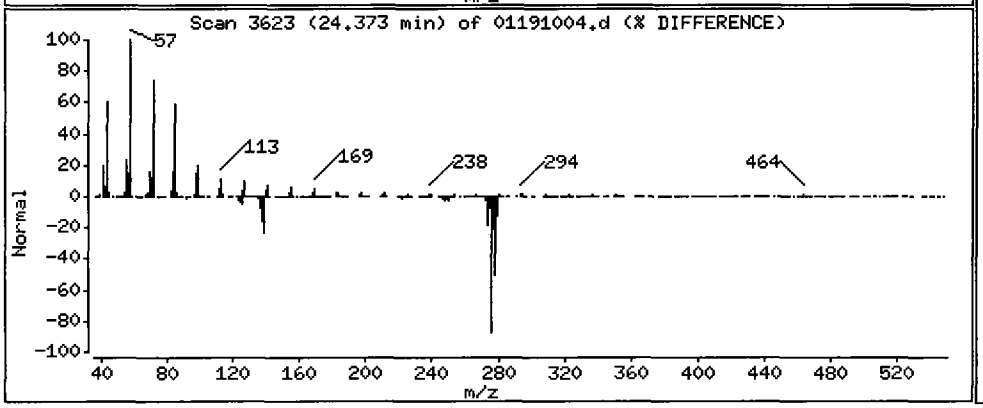












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

Operator: JZ

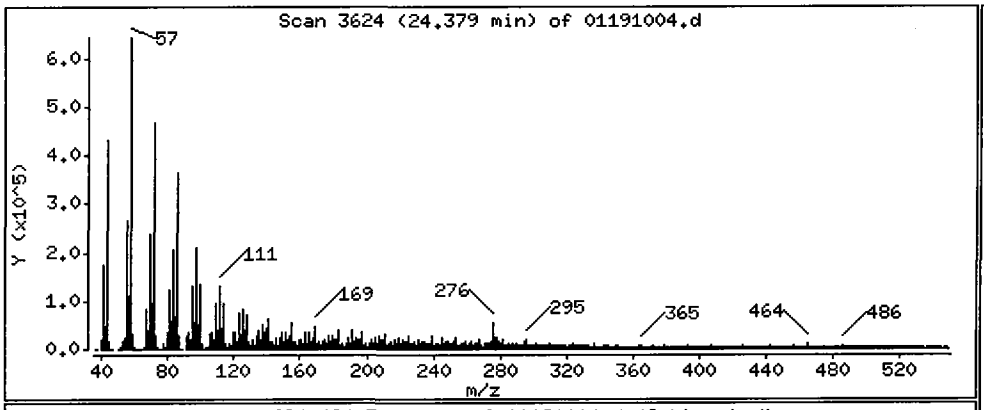
Column phase: ZB-5msi

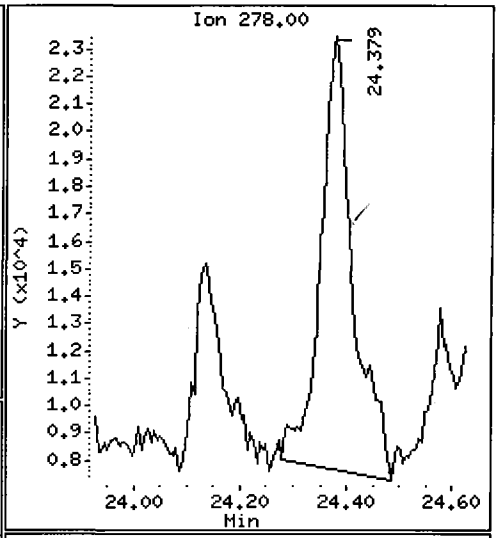
Column diameter: 0.32

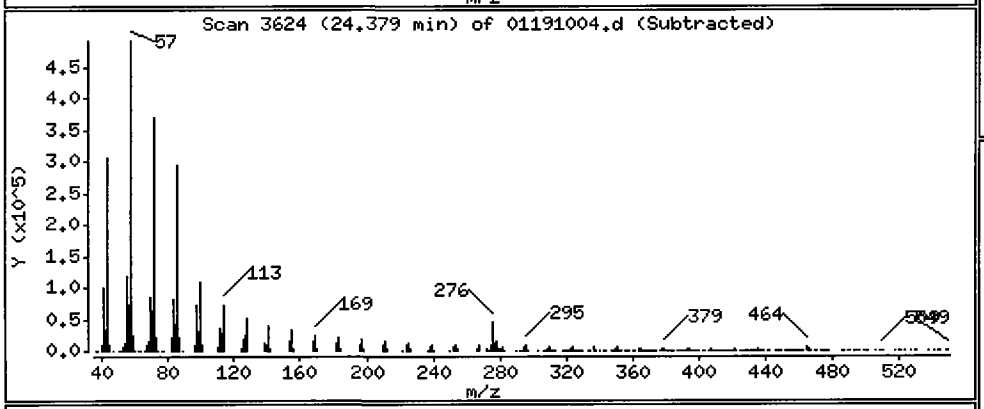
JCRL

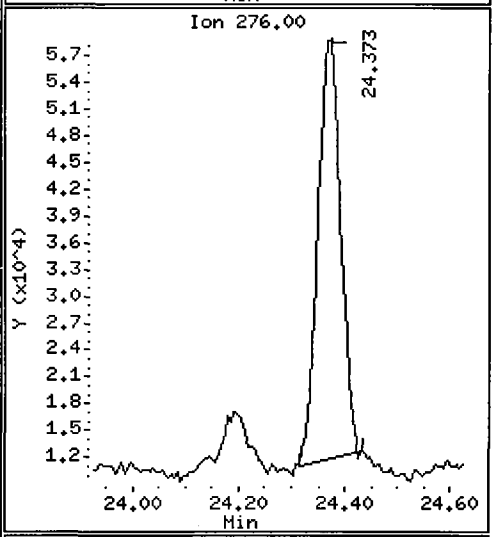
79 Dibenzo(a,h)anthracene

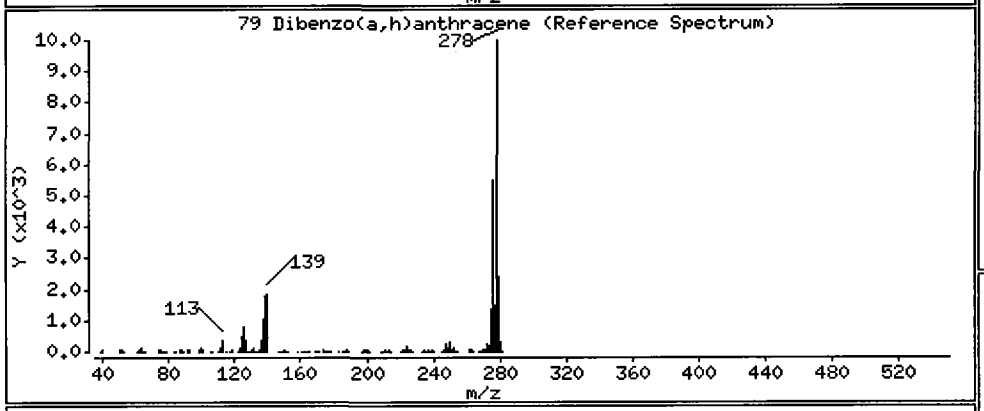
Concentration: 19.11 ug/kg

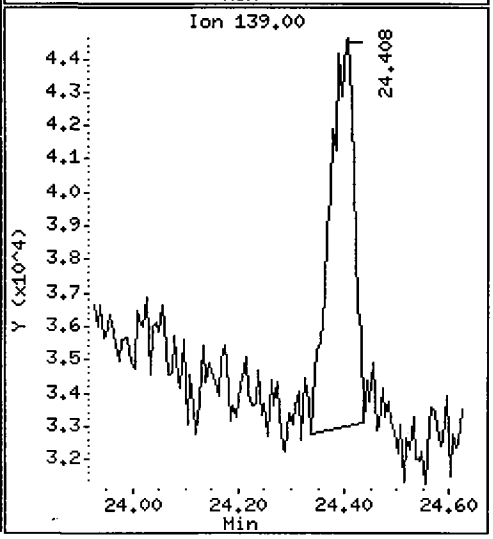


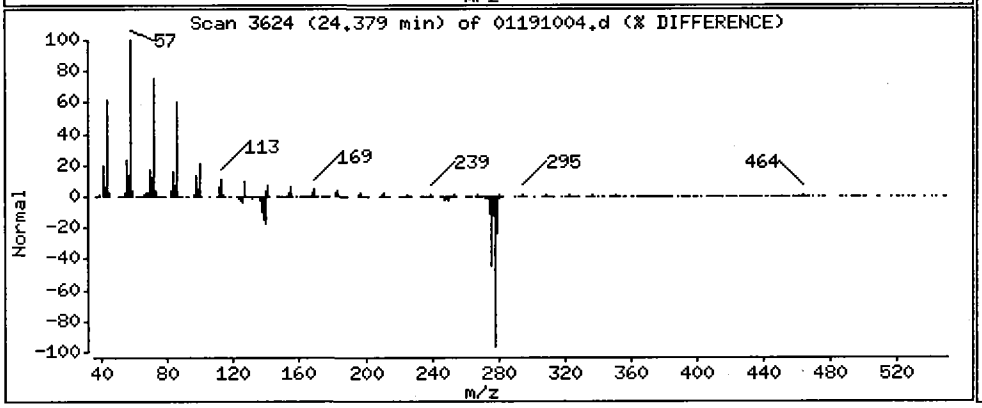












Data File: /chem3/nt4.i/20100119.b/01191004.d

Date : 19-JAN-2010 14:01

Client ID: CB99011110SED

Instrument: nt4.i

Sample Info: QF10B

Volume Injected (uL): 1.0

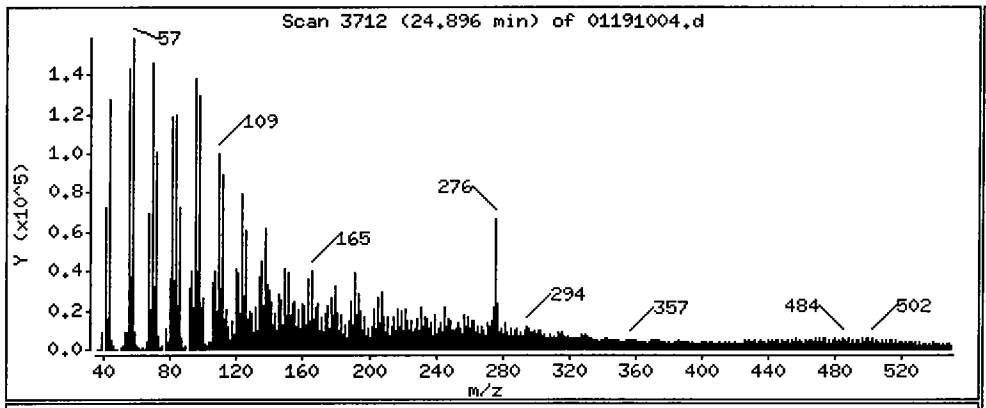
Operator: JZ

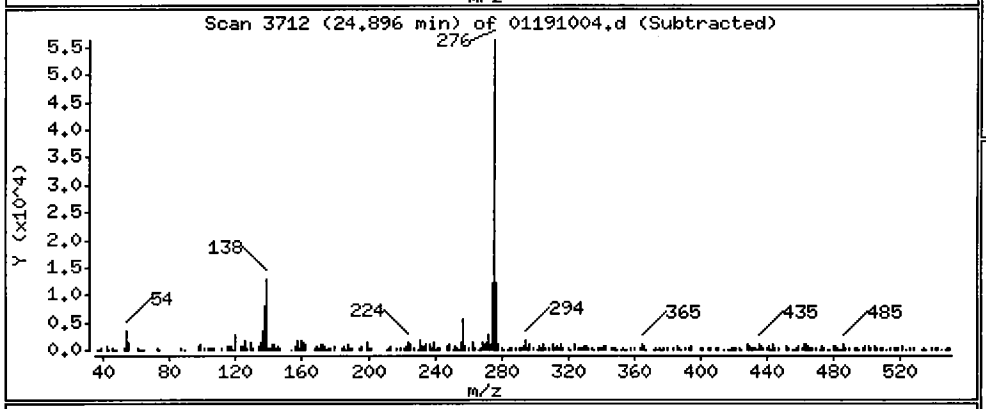
Column phase: ZB-5msi

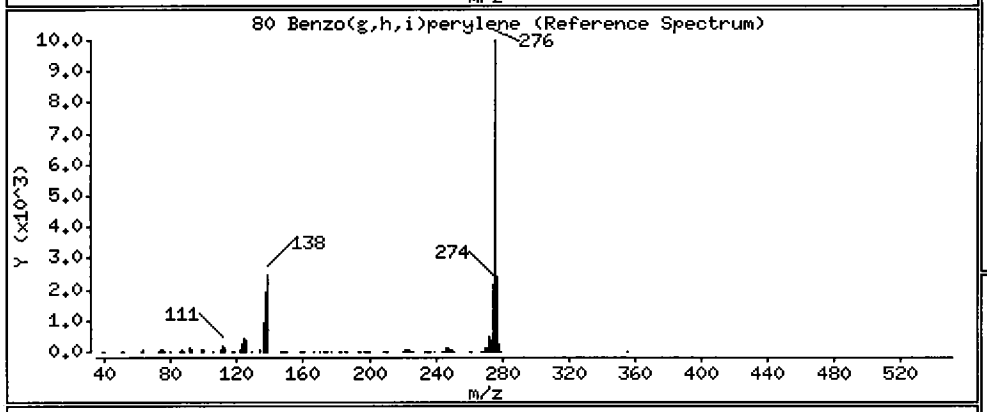
Column diameter: 0.32

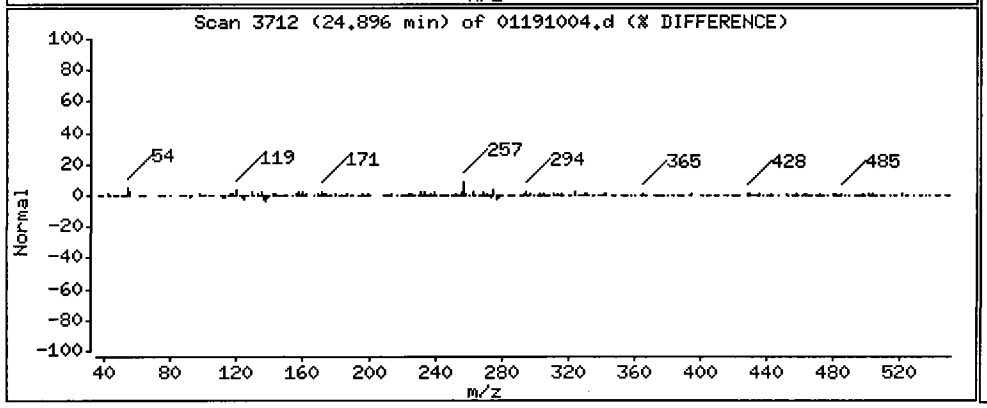
80 Benzo(g,h,i)perylene

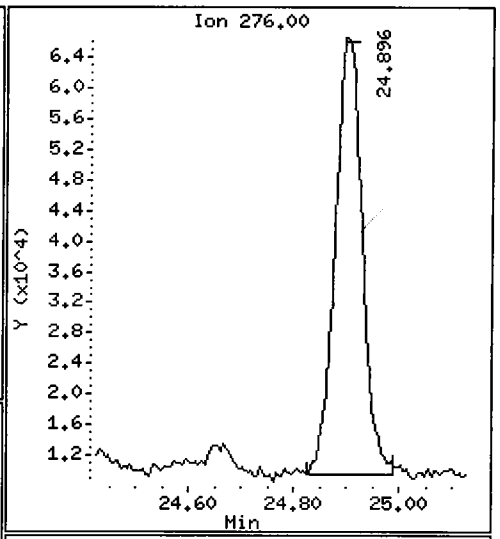
Concentration: 53.87 ug/kg

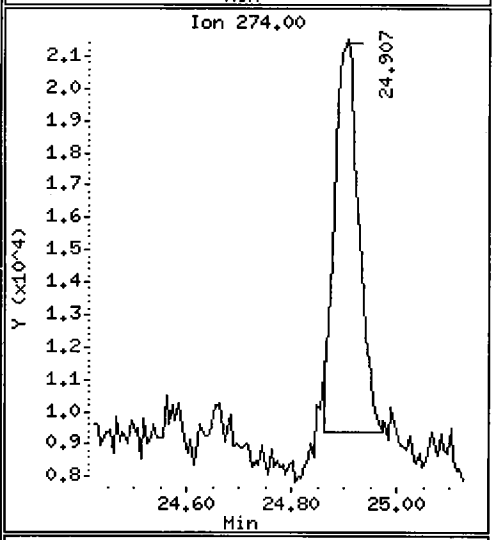


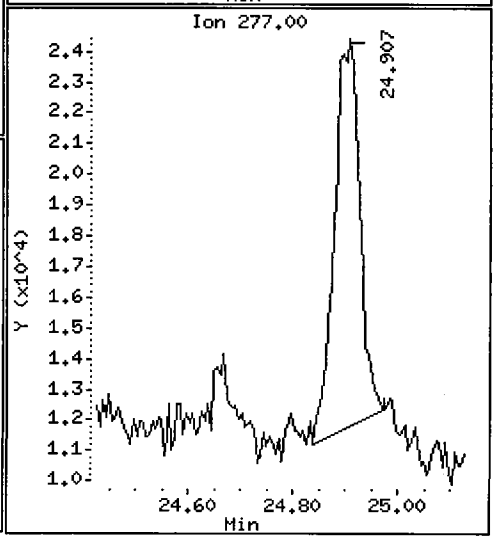




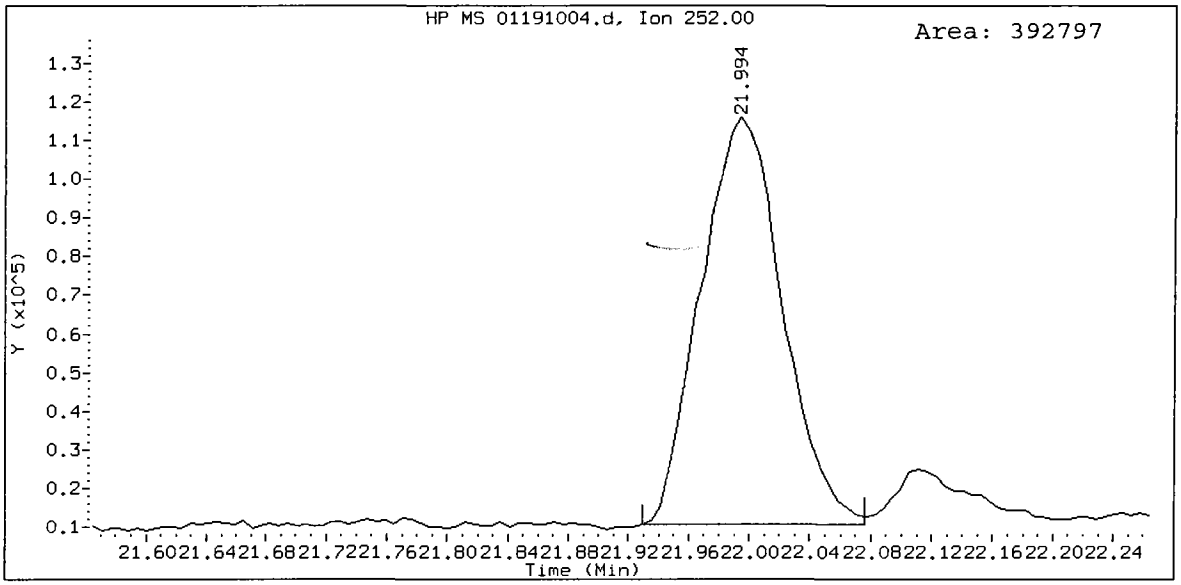


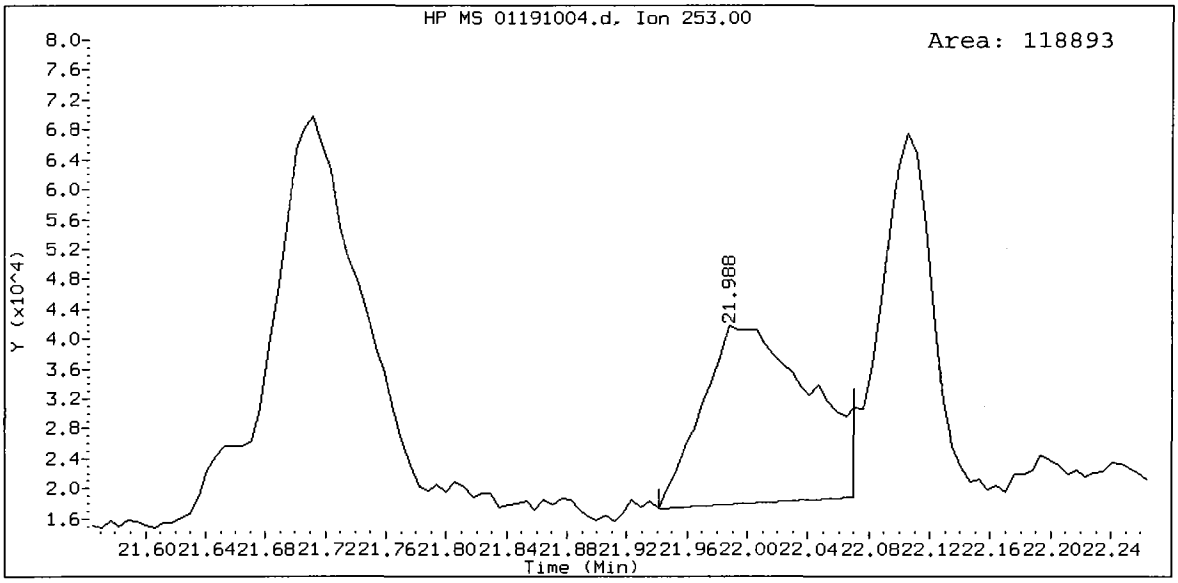


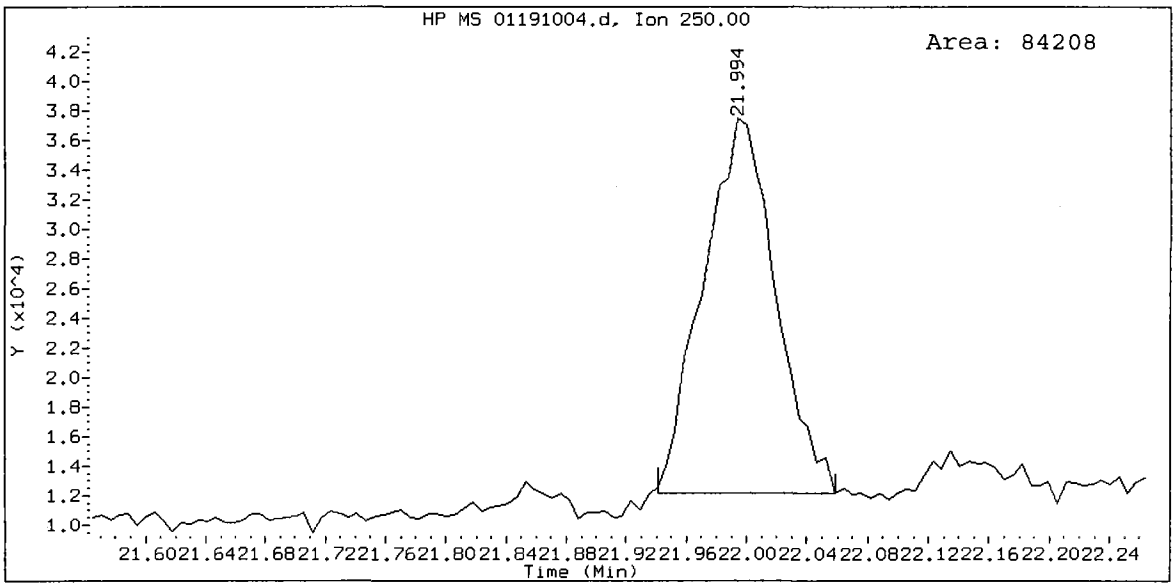




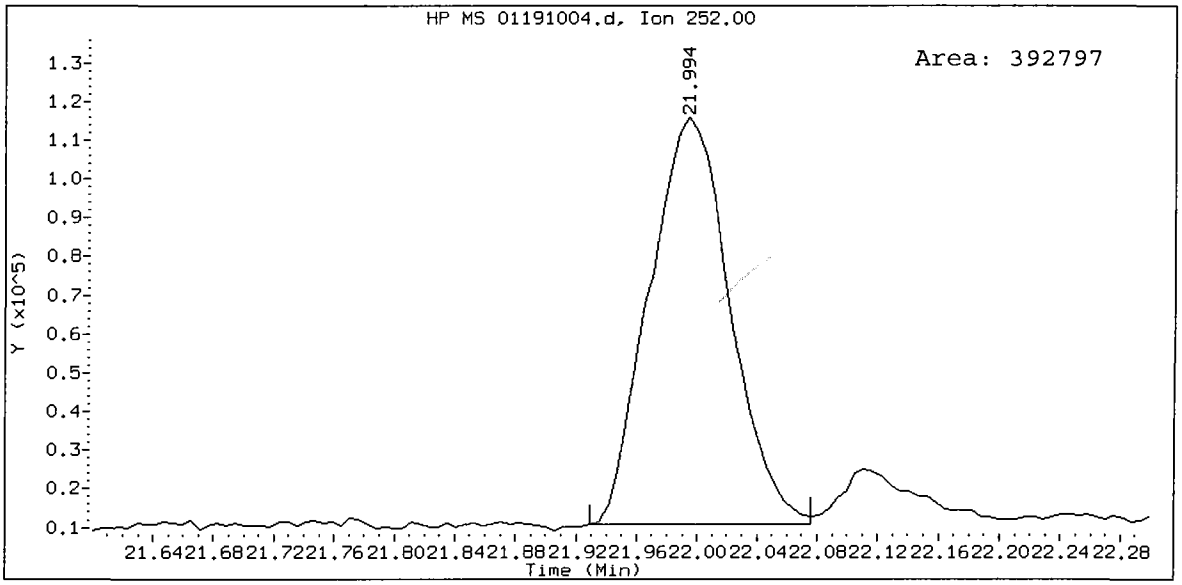
QF10B, /chem3/nt4.i/20100119.b/01191004.d
Benzo(b)fluoranthene Amount: 4.88

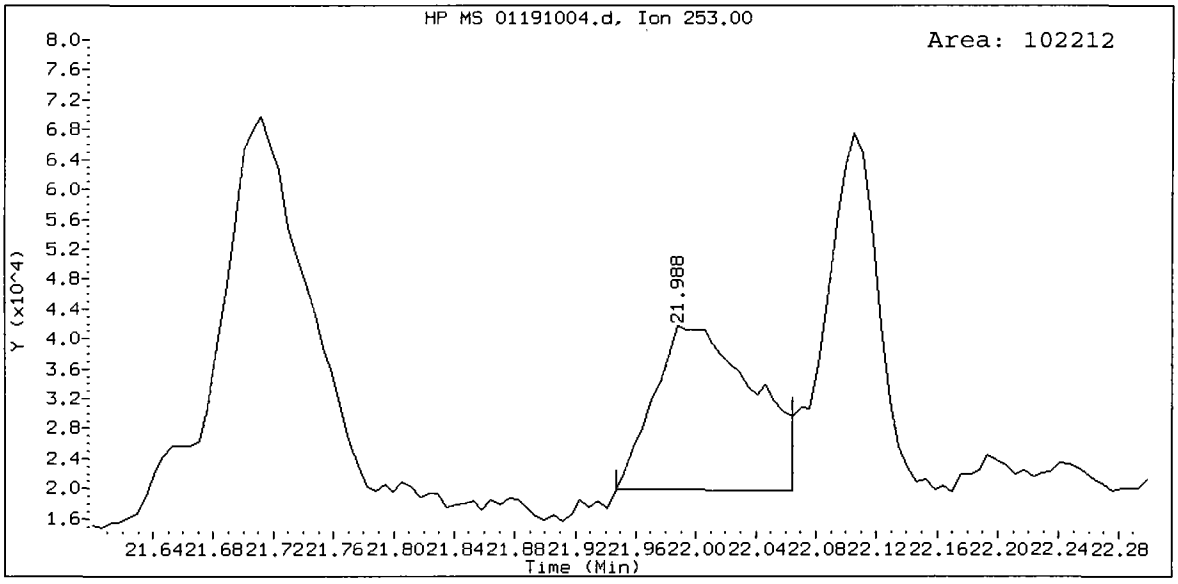


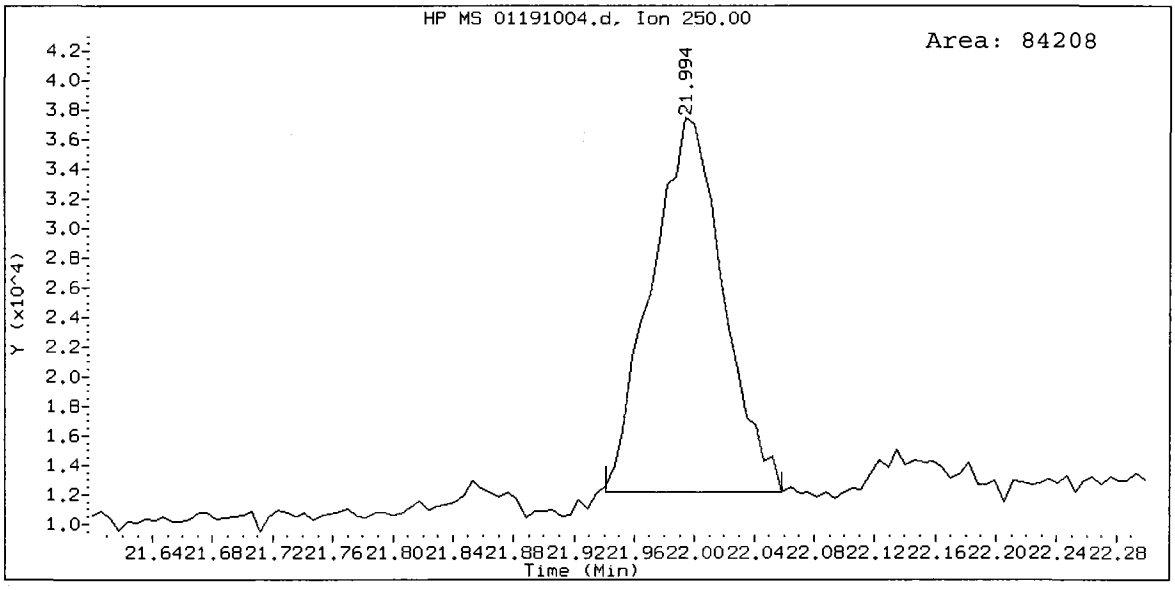




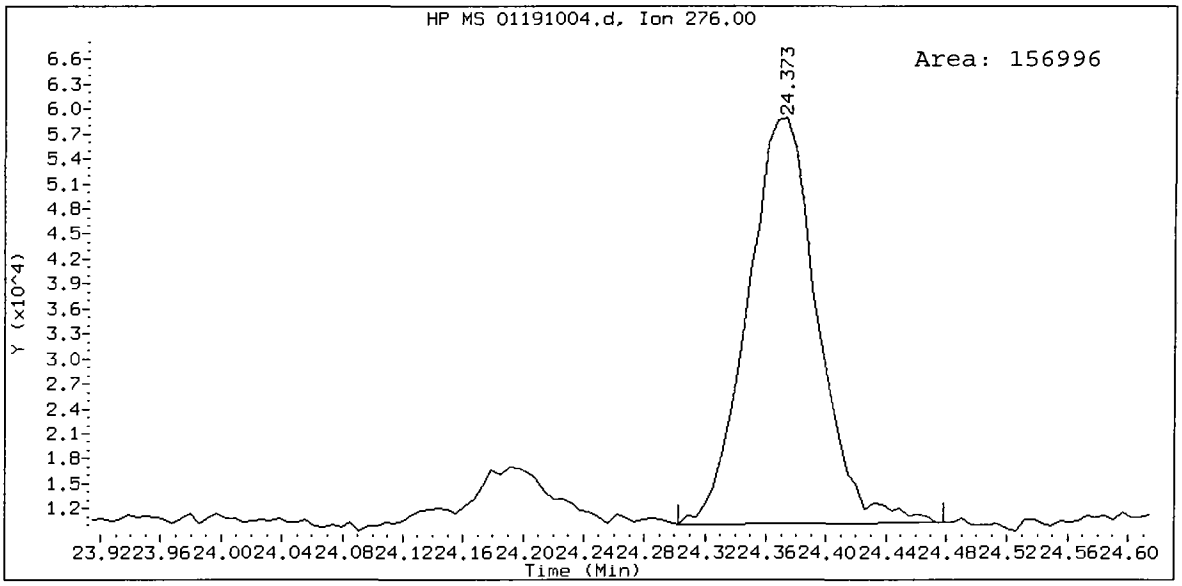
QF10B, /chem3/nt4.i/20100119.b/01191004.d
Benzo(k)fluoranthene Amount: 4.91

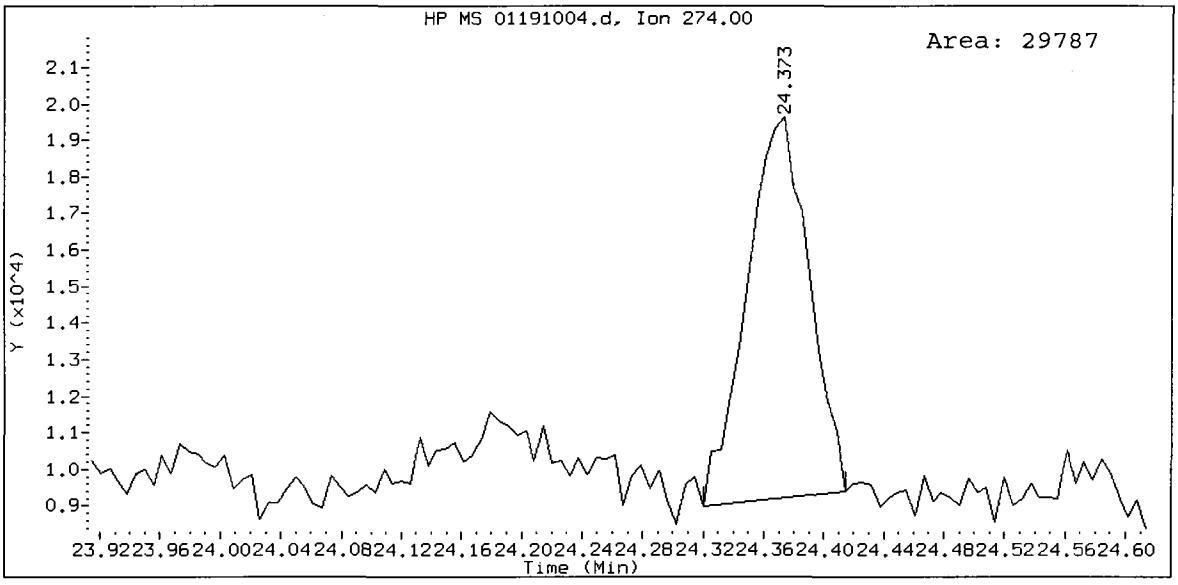


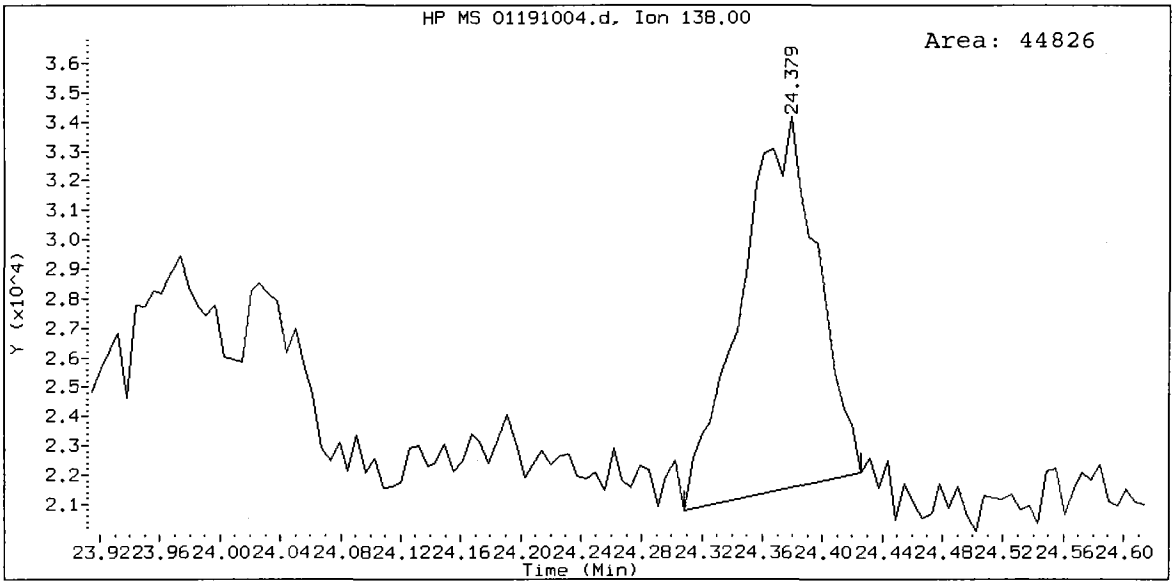




QF10B, /chem3/nt4.i/20100119.b/01191004.d
Indeno(1,2,3-cd)pyrene Amount: 1.88

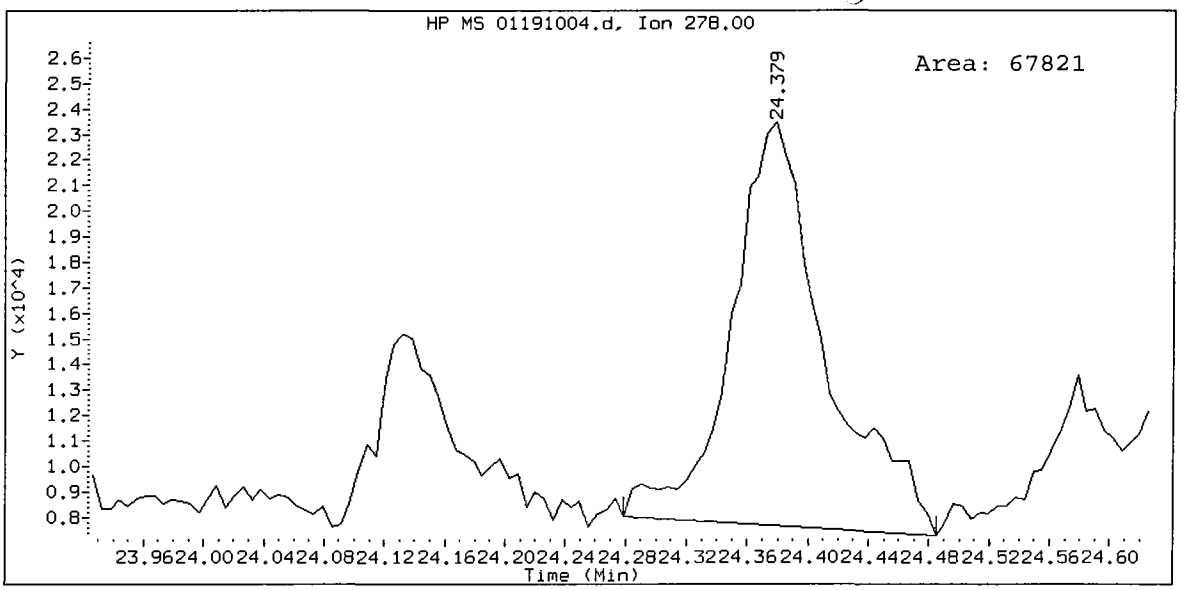


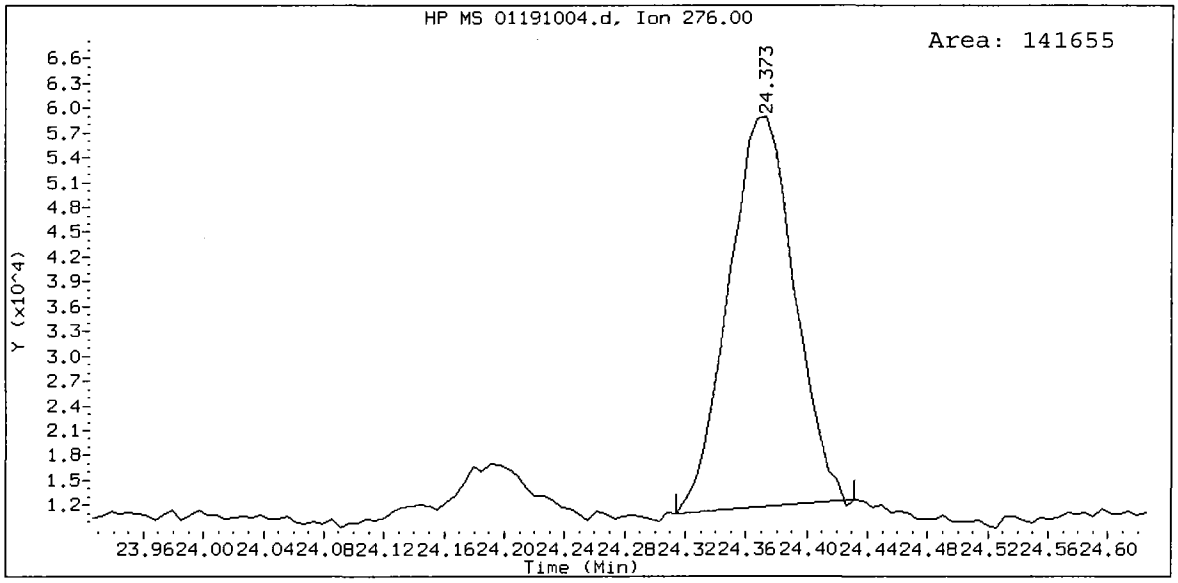


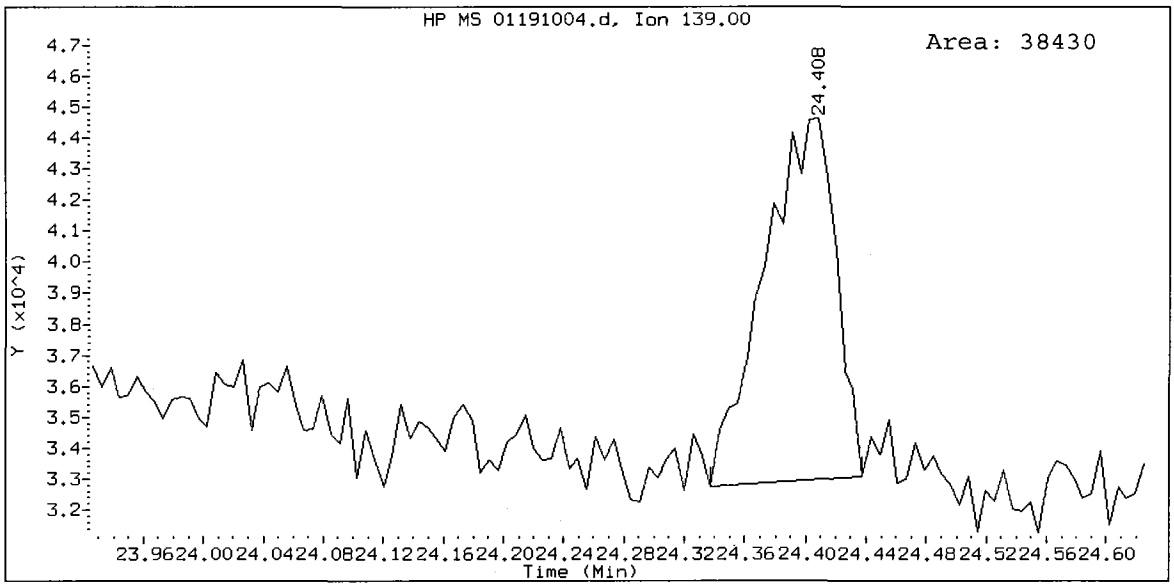


QF10B, /chem3/nt4.i/20100119.b/01191004.d
Dibenzo(a,h)anthracene Amount: 0.97

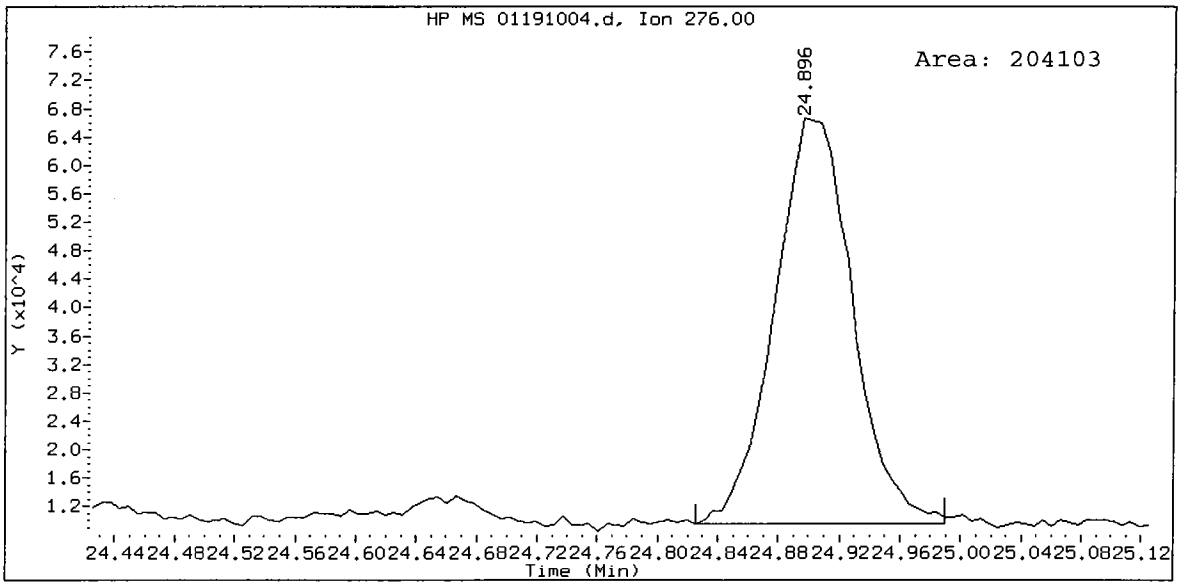
5 CAL

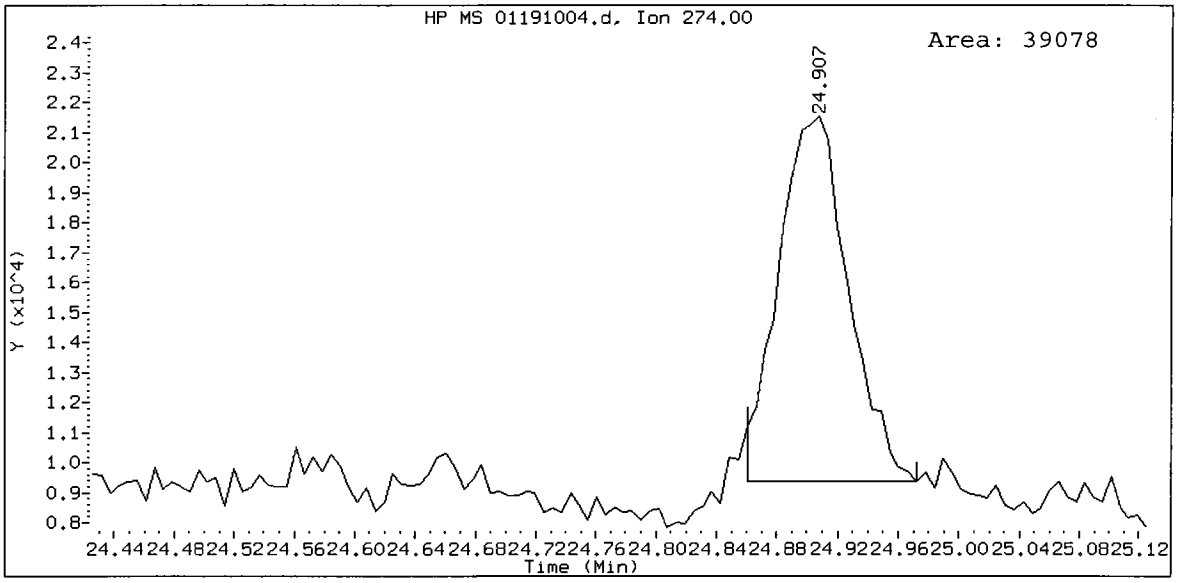


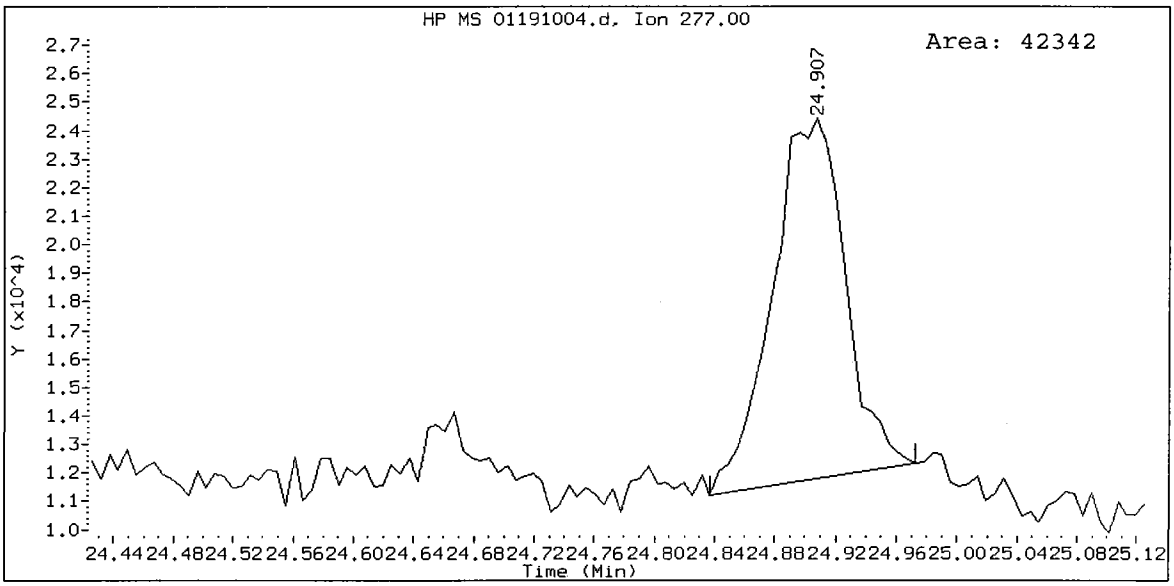




QF10B, /chem3/nt4.i/20100119.b/01191004.d
Benzo(g,h,i)perylene Amount: 2.74







Semivolatile PAH Analysis
Standard Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUN

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTER

Instrument ID: NT4 Calibration Date: 01/07/10

LAB FILE ID: RRF1 =01071002 RRF5 =01071003 RRF10 =01071004
RRF25 =01071005 RRF40 =01071006 RRF60 =01071007
RRF80 =01071008

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	$\overline{RRF}$	%RSD /R^2
Naphthalene	1.169	1.096	0.935	0.982	0.902	0.814	0.739	0.948	15.9
2-Methylnaphthalene	0.628	0.555	0.529	0.559	0.530	0.487	0.470	0.537	9.7
Acenaphthylene	1.887	1.800	1.561	1.650	1.550	1.419	1.328	1.599	12.4
Acenaphthene	1.230	1.142	0.996	1.084	1.034	0.982	0.921	1.056	9.9
Dibenzofuran	1.721	1.499	1.415	1.477	1.421	1.318	1.213	1.438	11.0
Fluorene	1.410	1.328	1.139	1.225	1.151	1.051	0.933	1.177	13.7
Phenanthrene	1.261	1.155	0.990	1.050	1.007	0.936	0.881	1.040	12.5
Anthracene	1.228	1.141	0.999	1.040	0.990	0.914	0.857	1.024	12.4
Fluoranthene	1.178	1.129	1.006	1.036	0.990	0.936	0.879	1.022	10.2
Pyrene	1.564	1.435	1.217	1.292	1.243	1.118	1.046	1.274	14.0
Benzo(a)anthracene	1.432	1.284	1.110	1.186	1.156	1.078	1.013	1.180	11.9
Chrysene	1.351	1.230	1.067	1.128	1.082	1.020	0.966	1.120	11.7
Benzo(b)fluoranthene	1.383	1.257	1.133	1.231	1.192	1.162	1.260	1.231	6.7
Benzo(k)fluoranthene	1.534	1.416	1.175	1.242	1.181	1.122	0.892	1.223	16.9
Benzo(a)pyrene	1.288	1.191	1.045	1.129	1.086	1.052	0.998	1.113	8.9
Indeno(1,2,3-cd)pyrene	1.494	1.439	1.200	1.326	1.311	1.298	0.880	1.278	15.7
Dibenzo(a,h)anthracene	1.220	1.165	0.974	1.055	1.040	1.029	1.001	1.069	8.4
Benzo(g,h,i)perylene	1.284	1.237	1.046	1.140	1.123	1.101	1.059	1.141	7.8
1-methylnaphthalene	0.610	0.588	0.501	0.546	0.520	0.489	0.458	0.530	10.3
Terphenyl-d14	0.895	0.745	0.735	0.754	0.739	0.674	0.648	0.741	10.6
2-Fluorobiphenyl	1.332	1.162	1.142	1.215	1.143	1.069	1.019	1.154	8.8

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

6C

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUN

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTEF

Instrument ID: NT4 Calibration Date: 01/07/10

LAB FILE ID: RRF1 =01071002 RRF5 =01071003 RRF10 =01071004
RRF25 =01071005 RRF40 =01071006 RRF60 =01071007
RRF80 =01071008

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Anthracene	1.228	1.141	0.999	1.040	0.990	0.914	0.857	1.024	12.4
Fluoranthene	1.178	1.129	1.006	1.036	0.990	0.936	0.879	1.022	10.2
Pyrene	1.564	1.435	1.217	1.292	1.243	1.118	1.046	1.274	14.0
Benzo(a)anthracene	1.432	1.284	1.110	1.186	1.156	1.078	1.013	1.180	11.9
Chrysene	1.351	1.230	1.067	1.128	1.082	1.020	0.966	1.120	11.7
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Terphenyl-d14	0.895	0.745	0.735	0.754	0.739	0.674	0.648	0.741	10.6
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<- Outside QC limits: %RSD <20% or R^2 > 0.990

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
End Cal Date : 07-JAN-2010 17:02
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:43 jianqing

Calibration File Names:
Level 1: /chem3/nt4.i/20100107.b/01071002.d
Level 2: /chem3/nt4.i/20100107.b/01071003.d
Level 3: /chem3/nt4.i/20100107.b/01071004.d
Level 4: /chem3/nt4.i/20100107.b/01071005.d
Level 5: /chem3/nt4.i/20100107.b/01071006.d
Level 6: /chem3/nt4.i/20100107.b/01071007.d
Level 7: /chem3/nt4.i/20100107.b/01071008.d

JZ 01/07/10

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
179 n-Decane	1.34032	1.22550	1.12165	1.13557	1.04225	0.95216					
	0.90508						AVRG		1.10322		13.76433
180 n-Octadecane	+++++	0.48448	0.44749	0.41867	0.38200	0.33215					
	0.32179						AVRG		0.39776		16.19746
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	80 Level 7										
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
168 Pentachlorobenzene	0.43309	0.41631	0.36037	0.39552	0.38554	0.37673					
	0.34927						AVRG		0.38812		7.64848
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

Analytical Resources, Inc.

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Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
133 Butylatedhydroxytoluene	1.16747	0.99626	0.95184	1.01684	0.96904	0.85273					
	0.76282						AVRG		0.95957		13.32689
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

Analytical Resources, Inc.

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Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
144 alpha-Terpineol	0.18344	0.15450	0.14469	0.14634	0.13466	0.11649					
	0.11137						AVRG		0.14164		17.15318
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
123 Acetophenone	0.75335	0.70134	0.62177	0.66273	0.62470	0.58016					
	0.55419						AVRG		0.64261		10.74231
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
143 1,4-Dioxane	0.50026	0.47099	0.40309	0.45806	0.44708	0.44306					
	0.42614						AVRG		0.44981		6.94602
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
120 2,3,4,6-Tetrachlorophenol	0.24901	0.18487	0.19103	0.30942	0.25753	0.25595					
	0.25366						AVRG		0.24307		17.63047
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
118 Triphenyl Phosphate	0.22708	0.19483	0.19155	0.20738	0.20665	0.19418					
	0.20161						AVRG		0.20332		5.98702
117 Butyl Diphenyl Phosphate	0.33870	0.27774	0.26854	0.28553	0.27341	0.23156					
	0.21774						AVRG		0.27046		14.51064

Analytical Resources, Inc.

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End Cal Date : 07-JAN-2010 17:02
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Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	80 Level 7										
116 Dibutyl Phenyl Phosphate	0.77860	0.67988	0.67684	0.72733	0.70554	0.64023					
	0.63830						AVRG		0.69239		7.19000
115 Tributyl Phosphate	1.16971	0.98125	0.93778	0.94242	0.88213	0.77167					
	0.72415						AVRG		0.91559		15.98889
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
113 Diphenyl Oxide	0.82713	0.72625	0.68090	0.73435	0.71527	0.67163					
	0.66090						AVRG		0.71663		7.85814
112 Biphenyl	1.53958	1.32608	1.25007	1.29076	1.21961	1.09008					
	0.98336						AVRG		1.24279		14.26364
111 Azobenzene (1,2-DP-Hydrazine)	1.40289	1.29180	1.08769	1.06448	0.94836	0.88675					
	+++++						AVRG		1.11366		17.83684
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	80 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
105 1-methylnaphthalene	0.61018	0.58857	0.50129	0.54628	0.52043	0.48860	0.45790	AVRG		0.53046		10.31124
151 1,2,4,5-Tetrachlorobenzene	0.64139	0.45876	0.46173	0.62001	0.49005	0.47223	0.45888	AVRG		0.51472		15.58319
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
161 1;2,3-Trichloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
162 1,2,3,4-Tetrachloronapthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	80 Level 7										
163 1,2,3,5,8-Pentachloronaphthal	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
164 1,2,3,4,6,7-Hexachloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
165 1,2,3,4,5,6,7-Heptachloronaph	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
3 Phenol	1.76426	1.51616	1.41630	1.56620	1.48310	1.42937					
	1.34854						AVRG		1.50342		8.99051
4 Bis(2-Chloroethyl)ether	1.31174	1.25071	1.06167	1.18675	1.12489	1.09341					
	1.05244						AVRG		1.15452		8.56477

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	80 Level 7										
6 2-Chlorophenol	1.40641	1.25265	1.19124	1.34234	1.27646	1.26936					
	1.20414						AVRG		1.27752		5.92113
7 1,3-Dichlorobenzene	1.54315	1.47610	1.28230	1.41792	1.36562	1.34175					
	1.28012						AVRG		1.38671		7.10045
9 1,4-Dichlorobenzene	1.58801	1.50673	1.29651	1.44947	1.39756	1.35470					
	1.28344						AVRG		1.41092		7.90869
11 Benzyl alcohol	0.54057	0.66806	0.73945	0.81540	0.79105	0.75983					
	0.74500						AVRG		0.72276		12.82818
12 1,2-Dichlorobenzene	1.46692	1.40998	1.22585	1.35668	1.31094	1.27121					
	1.20032						AVRG		1.32027		7.36151
13 2-Methylphenol	1.27981	1.08253	0.99644	1.11602	1.04730	1.02087					
	0.96823						AVRG		1.07303		9.69467
14 2,2'-oxybis(1-Chloropropane)	1.61196	1.53755	1.30522	1.29207	1.14090	1.01542					
	+++++						AVRG		1.31719		17.25778

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	80 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
15 4-Methylphenol	1.33457	1.10911	1.03332	1.16515	1.10003	1.07496	1.00685	AVRG		1.11772		9.72601
16 N-Nitroso-di-n-propylamine	0.99373	0.91891	0.78540	0.82936	0.78692	0.74900	0.71826	AVRG		0.82594		11.85129
17 Hexachloroethane	0.62917	0.61817	0.53731	0.60694	0.58277	0.56653	0.54010	AVRG		0.58300		6.31819
19 Nitrobenzene	0.42263	0.38904	0.33255	0.35857	0.33817	0.31805	0.29922	AVRG		0.35117		12.14061
20 Isophorone	0.61662	0.58982	0.50985	0.55361	0.52895	0.50670	0.48860	AVRG		0.54202		8.68303
21 2-Nitrophenol	0.20356	0.18755	0.17701	0.20345	0.19399	0.19274	0.18512	AVRG		0.19192		5.03874
22 2,4-Dimethylphenol	0.41132	0.35947	0.33348	0.36798	0.34643	0.33383	0.31475	AVRG		0.35247		8.91119

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	80 Level 7										
23 Bis(2-Chloroethoxy)methane	0.43624	0.41350	0.35963	0.38551	0.36886	0.34949					
	0.33191						AVRG		0.37788		9.70311
24 Benzoic acid	+++++	34281	98690	434403	762615	1184783					
	1432942						QUAD	0.000e+00	5.48033	-0.07647	0.99243
25 2,4-Dichlorophenol	0.31070	0.26954	0.26170	0.29765	0.27829	0.27204					
	0.25998						AVRG		0.27855		6.79709
26 1,2,4-Trichlorobenzene	0.33202	0.31819	0.27673	0.30215	0.29212	0.28322					
	0.27098						AVRG		0.29649		7.54454
28 Naphthalene	1.16905	1.09590	0.93521	0.98181	0.90208	0.81456					
	0.73899						AVRG		0.94823		15.85670
29 4-Chloroaniline	0.43890	0.41294	0.38349	0.42519	0.42237	0.39578					
	0.38164						AVRG		0.40861		5.40210
30 Hexachlorobutadiene	0.18856	0.17918	0.15663	0.16953	0.16400	0.15769					
	0.15061						AVRG		0.16660		8.09145

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
31 4-Chloro-3-methylphenol	0.34789	0.29939	0.27016	0.31167	0.29694	0.28687					
	0.27114						AVRG		0.29772		8.99069
32 2-Methylnaphthalene	0.62822	0.55493	0.52860	0.55940	0.52973	0.48729					
	0.46961						AVRG		0.53682		9.70330
33 Hexachlorocyclopentadiene	0.26290	0.30139	0.26261	0.32354	0.32126	0.31487					
	0.30465						AVRG		0.29875		8.65851
34 2,4,6-Trichlorophenol	0.36901	0.32697	0.30137	0.35386	0.34615	0.34886					
	0.34560						AVRG		0.34169		6.34889
35 2,4,5-Trichlorophenol	0.36525	0.32888	0.30535	0.35851	0.36236	0.36093					
	0.34509						AVRG		0.34662		6.40920
37 2-Chloronaphthalene	1.21819	1.14115	0.98797	1.07321	1.01727	0.95523					
	0.89746						AVRG		1.04150		10.64847
38 2-Nitroaniline	0.36486	0.32735	0.31232	0.33865	0.32372	0.30193					
	0.28165						AVRG		0.32150		8.29643

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	80 Level 7										
39 Dimethylphthalate	1.41380	1.31605	1.13387	1.23710	1.19613	1.14477					
	1.04924						AVRG		1.21299		10.07097
40 Acenaphthylene	1.88663	1.79977	1.56064	1.65004	1.55030	1.41918					
	1.32812						AVRG		1.59924		12.38027
41 2,6-Dinitrotoluene	0.29752	0.29186	0.25686	0.29100	0.28224	0.27022					
	0.25554						AVRG		0.27789		6.18443
43 3-Nitroaniline	0.40712	0.38415	0.37120	0.41352	0.40853	0.38698					
	0.37057						AVRG		0.39172		4.59447
44 Acenaphthene	1.22976	1.14179	0.99650	1.08451	1.03422	0.98227					
	0.92146						AVRG		1.05579		9.92748
45 2,4-Dinitrophenol	+++++	17224	52539	230371	386838	603568					
	761378						QUAD	0.000e+00	6.29779	-0.40918	0.99595
46 Dibenzofuran	1.72079	1.49944	1.41467	1.47702	1.42137	1.31795					
	1.21332						AVRG		1.43780		11.03289

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	80 Level 7										
47 4-Nitrophenol	0.17717	0.17423	0.15506	0.19634	0.18540	0.17973					
	0.14883						AVRG		0.17382		9.58126
48 2,4-Dinitrotoluene	0.36959	0.38271	0.34894	0.39565	0.39068	0.38339					
	0.36668						AVRG		0.37681		4.27456
49 Fluorene	1.40968	1.32813	1.13899	1.22540	1.15111	1.05090					
	0.93263						AVRG		1.17669		13.74957
50 Diethylphthalate	1.48785	1.38198	1.21869	1.31661	1.27129	1.21095					
	1.14261						AVRG		1.29000		9.04706
51 4-Chlorophenyl-phenylether	0.63766	0.58137	0.50490	0.54971	0.52812	0.49445					
	0.44145						AVRG		0.53395		11.90539
52 4-Nitroaniline	0.32492	0.30155	0.28344	0.32181	0.32034	0.30997					
	0.29978						AVRG		0.30883		4.84063
53 4,6-Dinitro-2-methylphenol	+++++	0.09884	0.10741	0.13946	0.14081	0.14442					
	0.14444						AVRG		0.12923		15.85962

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54 N-Nitrosodiphenylamine	0.51334	0.47724	0.41317	0.45455	0.44048	0.43476	0.43039	AVRG		0.45199		7.45449
56 4-Bromophenyl-phenylether	0.22296	0.20682	0.18167	0.19751	0.19420	0.18833	0.18133	AVRG		0.19612		7.58719
57 Hexachlorobenzene	0.22357	0.20465	0.17727	0.19483	0.19222	0.18530	0.18819	AVRG		0.19515		7.74839
58 Pentachlorophenol	+++++	4411	8985	66319	125973	219823	281630	QUAD	0.000e+00	16.62642	-14.44636	0.99227
60 Phenanthrene	1.26063	1.15513	0.99023	1.05006	1.00666	0.93589	0.88145	AVRG		1.04001		12.51218
61 Anthracene	1.22848	1.14091	0.99909	1.04058	0.98956	0.91398	0.85723	AVRG		1.02426		12.44435
62 Carbazole	0.84554	0.60111	0.53143	0.68106	0.56734	0.54025	0.52302	AVRG		0.61282		18.95682

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	80 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
63 Di-n-butylphthalate	1.48836	1.39564	1.23732	1.25828	1.18392	1.06448	1.01281	AVRG		1.23440		13.69982
64 Fluoranthene	1.17830	1.12949	1.00597	1.03609	0.98955	0.93592	0.87883	AVRG		1.02202		10.21535
65 Pyrene	1.56354	1.43532	1.21727	1.29172	1.24337	1.11779	1.04651	AVRG		1.27365		13.98958
67 Butylbenzylphthalate	0.79181	0.75034	0.65701	0.69751	0.66545	0.62343	0.58950	AVRG		0.68215		10.34089
68 Benzo(a)anthracene	1.43180	1.28405	1.10985	1.18651	1.15593	1.07849	1.01280	AVRG		1.17992		11.88705
70 3,3'-Dichlorobenzidine	0.43085	0.42550	0.41241	0.42232	0.42901	0.41000	0.40051	AVRG		0.41866		2.68730
71 Chrysene	1.35143	1.22959	1.06732	1.12822	1.08253	1.01952	0.96561	AVRG		1.12060		11.73440

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	80 Level 7										
72 bis(2-Ethylhexyl)phthalate	0.65413	0.60238	0.53834	0.59668	0.58474	0.55761					
	0.52438						AVRG		0.57975		7.59313
73 Di-n-octylphthalate	1.18078	1.07207	0.93152	0.99606	0.93548	0.85426					
	0.77228						AVRG		0.96321		14.08056
74 Benzo(b)fluoranthene	1.38335	1.25709	1.13293	1.23089	1.19216	1.16225					
	1.26037						AVRG		1.23129		6.68133
75 Benzo(k)fluoranthene	1.53363	1.41623	1.17472	1.24252	1.18081	1.12154					
	0.89248						AVRG		1.22313		16.94873
76 Benzo(a)pyrene	1.28829	1.19092	1.04494	1.12874	1.08626	1.05185					
	0.99786						AVRG		1.11269		8.94115
78 Indeno(1,2,3-cd)pyrene	1.49419	1.43872	1.20051	1.32635	1.31103	1.29796					
	0.88019						AVRG		1.27842		15.66552
79 Dibenzo(a,h)anthracene	1.22041	1.16531	0.97408	1.05522	1.04028	1.02887					
	1.00123						AVRG		1.06934		8.40136

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
End Cal Date : 07-JAN-2010 17:02
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
80 Benzo(g,h,i)perylene	1.28409	1.23721	1.04586	1.14055	1.12327	1.10127					
	1.05926						AVRG		1.14165		7.78178
90 N-Nitrosodimethylamine	0.73709	0.73026	0.62635	0.70937	0.68120	0.66832					
	0.63784						AVRG		0.68435		6.34425
91 Aniline	1.84018	1.71939	1.66704	1.73027	1.67017	1.56451					
	1.52616						AVRG		1.67396		6.30099
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
93 Benzidine	+++++	15731	108254	326938	638124	982581					
	1326001						QUAD	0.000e+00	2.74771	-0.26178	0.99540
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
98 Retene	0.68626	0.58515	0.55496	0.60491	0.59582	0.53050					
	0.51252						AVRG		0.58145		9.88095
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
103 Pyridine	1.31390	1.20817	1.14215	1.30115	1.26933	1.20462					
	0.83053						AVRG		1.18141		14.05950
$ 1 2-Fluorophenol	1.18139	1.06000	1.04658	1.16162	1.11059	1.06842					
	1.03519						AVRG		1.09483		5.27298

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Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
$ 137 d8-1,4-Dioxane	0.52740	0.47945	0.40771	0.46070	0.44396	0.44298					
	0.42716						AVRG		0.45562		8.56935
$ 2 Phenol-d5	1.24796	1.11720	1.10182	1.17504	1.11654	1.05993					
	1.02078						AVRG		1.11990		6.64305
$ 5 2-Chlorophenol-d4	1.24733	1.05723	1.04552	1.16114	1.11988	1.07379					
	1.04848						AVRG		1.10762		6.75316
$ 10 1,2-Dichlorobenzene-d4	0.86058	0.76857	0.76113	0.82766	0.79605	0.76048					
	0.73262						AVRG		0.78674		5.64365
$ 18 Nitrobenzene-d5	0.39496	0.34385	0.34189	0.36487	0.34271	0.32106					
	0.30739						AVRG		0.34525		8.27239
$ 36 2-Fluorobiphenyl	1.33249	1.16160	1.14197	1.21507	1.14273	1.06940					
	1.01888						AVRG		1.15459		8.75651
$ 55 2,4,6-Tribromophenol	0.12093	0.11217	0.11081	0.12613	0.12476	0.12250					
	0.11512						AVRG		0.11892		5.19139

Analytical Resources, Inc.

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Cal Date : 07-Jan-2010 18:43 jianqing

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
$ 66 Terphenyl-d14	0.89534	0.74546	0.73547	0.75445	0.73872	0.67449					
	0.64795						AVRG		0.74170		10.60709
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00

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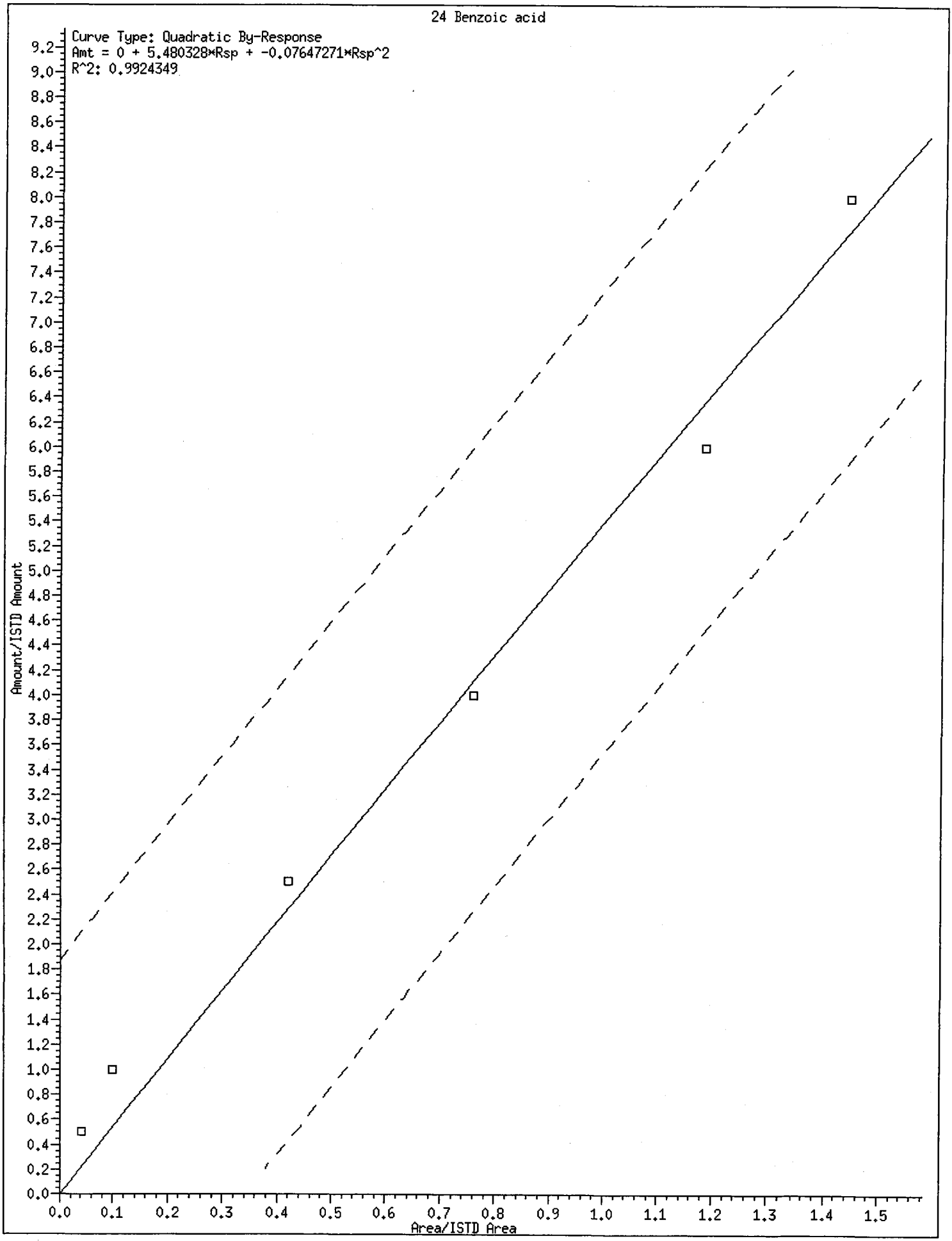
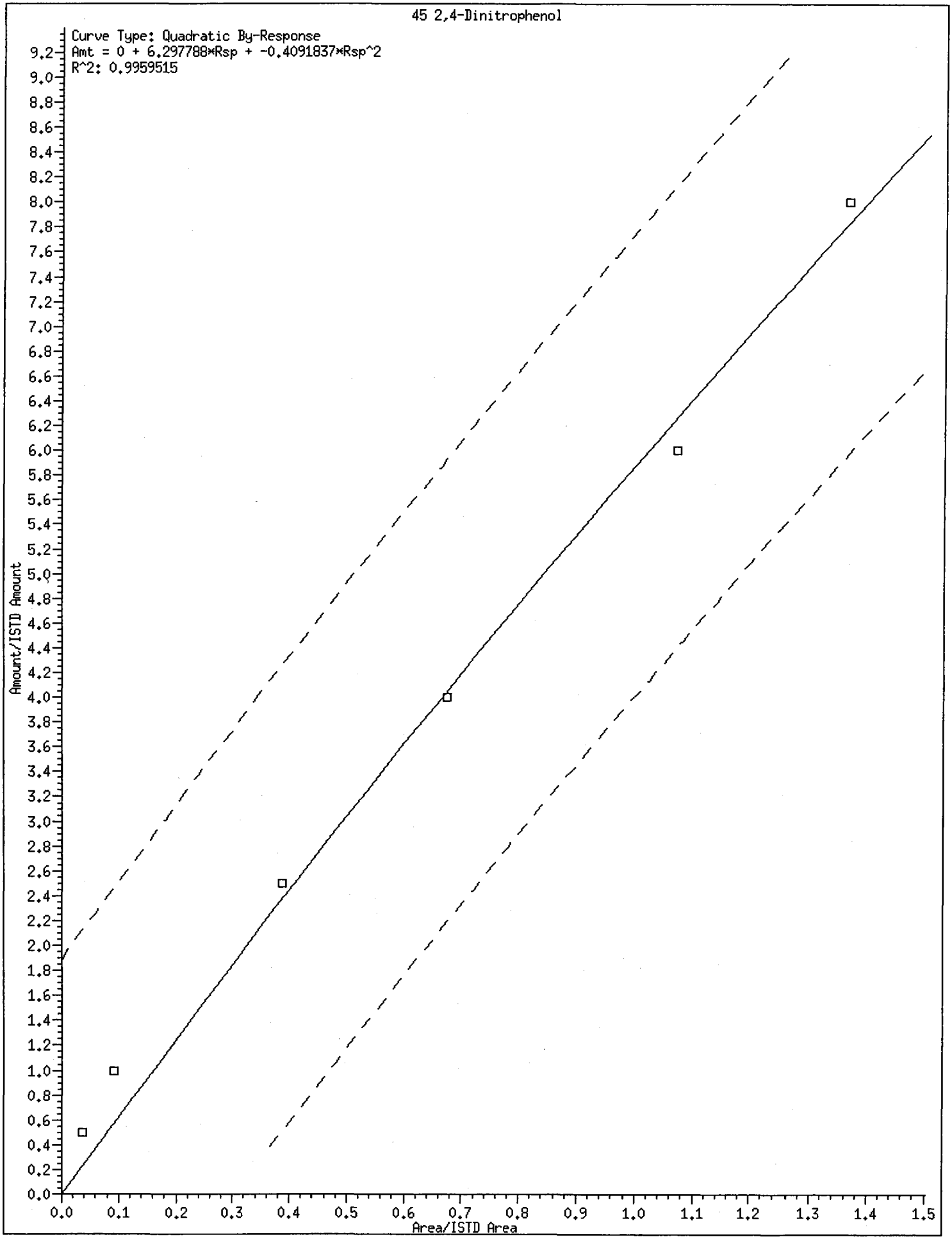
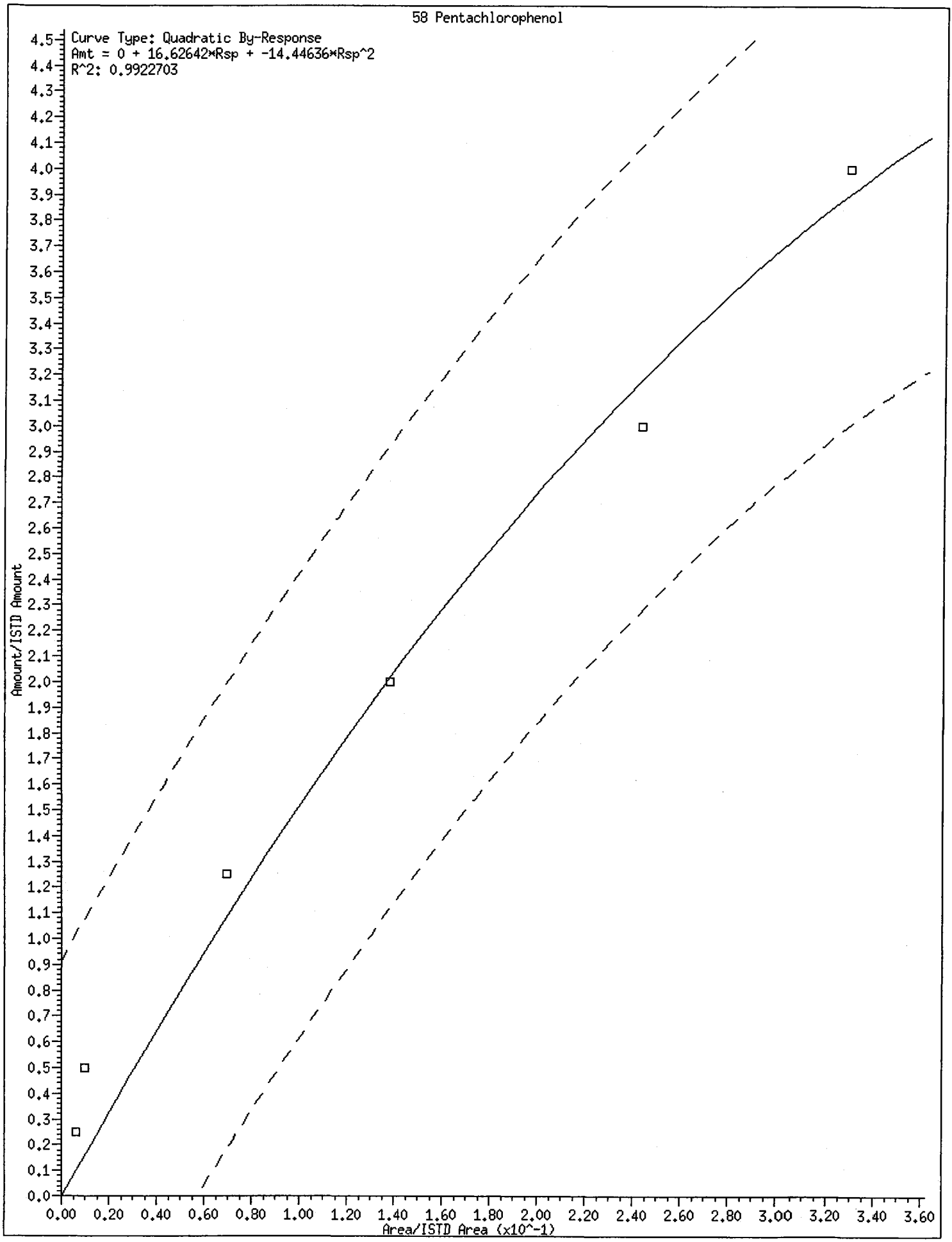
Cal Date : 07-Jan-2010 18:43 jianqing

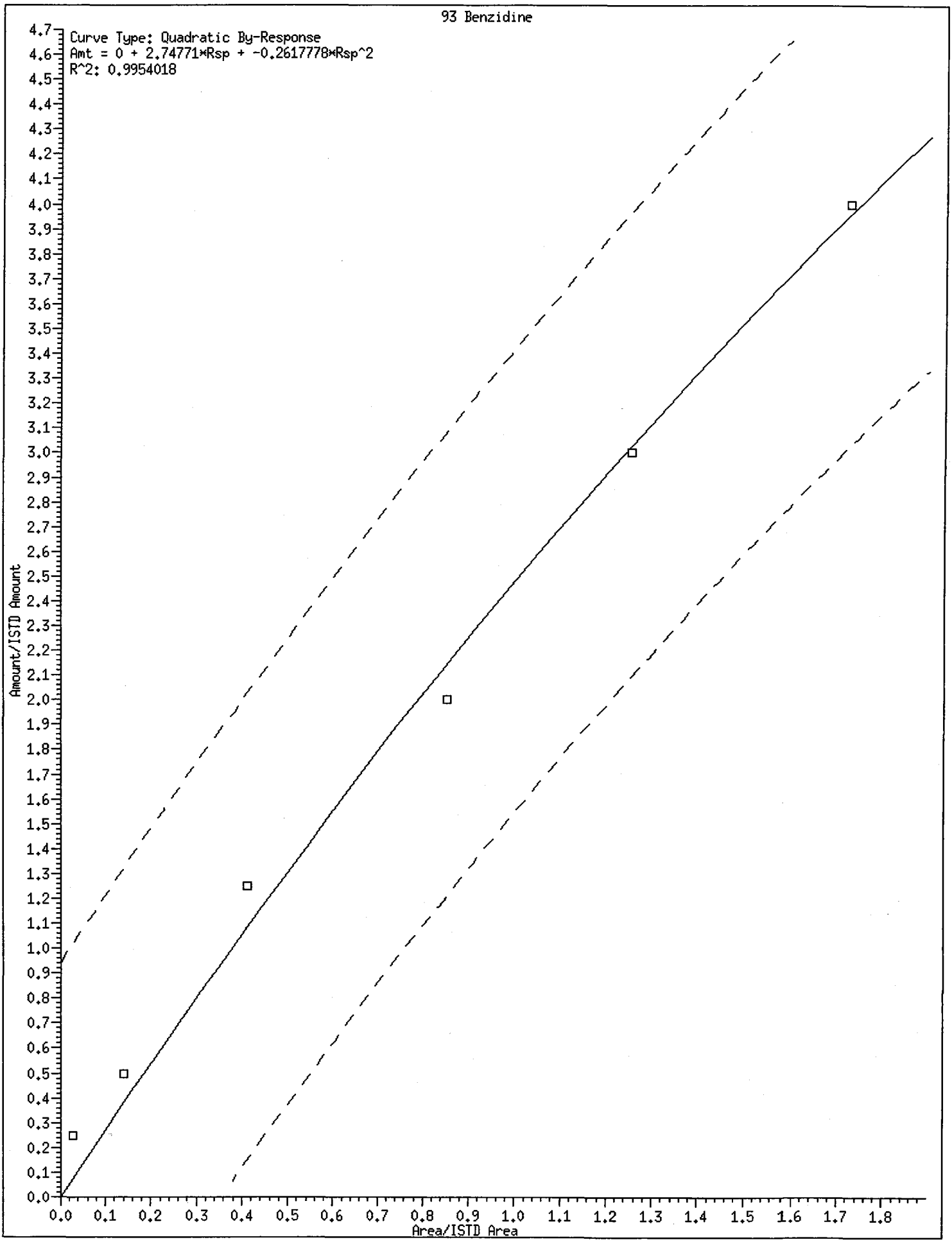
Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response


24 Benzoic acid
Curve Type: Quadratic By-Response
Amt = 0 + 5.480328*Rsp + -0.07647271*Rsp^2
R^2: 0.9924349
Amount/ISTD Amount
Area/ISTD Area
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
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
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
8.2
8.4
8.6
8.8
9.0
9.2


45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 6.297788*Rsp + -0.4091837*Rsp^2
R^2: 0.9959515
Amount/ISTD Amount
Area/ISTD Area
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
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
4.2
4.4
4.6
4.8
5.0
5.2
5.4
5.6
5.8
6.0
6.2
6.4
6.6
6.8
7.0
7.2
7.4
7.6
7.8
8.0
8.2
8.4
8.6
8.8
9.0
9.2

QF10:00374


58 Pentachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 16.62642*Rsp + -14.44636*Rsp^2
R^2: 0.9922703
Amount/ISTD Amount
Area/ISTD Area (x10^-1)
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 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5
0.00 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.20 2.40 2.60 2.80 3.00 3.20 3.40 3.60


93 Benzidine
Curve Type: Quadratic By-Response
Amt = 0 + 2.74771*Rsp + -0.2617778*Rsp^2
R^2: 0.9954018
Amount/ISTD Amount
Area/ISTD Area

QF10:00376

Analytical Resources, Inc.

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Target Version : 3.50
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Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt4.i/20100107.b/01071002.d
Level 2: /chem3/nt4.i/20100107.b/01071003.d
Level 3: /chem3/nt4.i/20100107.b/01071004.d
Level 4: /chem3/nt4.i/20100107.b/01071005.d
Level 5: /chem3/nt4.i/20100107.b/01071006.d
Level 6: /chem3/nt4.i/20100107.b/01071007.d
Level 7: /chem3/nt4.i/20100107.b/01071008.d

AB 01/07/10

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	$\overline{RRF}$	% RSD
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 n-Decane	1.34032	1.22550	1.12165	1.13557	1.04225	0.95216	0.90508	1.10322	13.764
180 n-Octadecane	+++++	0.48448	0.44749	0.41867	0.38200	0.33215	0.32179	0.39776	16.197
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	$\overline{RRF}$	% RSD
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
168 Pentachlorobenzene	0.43309	0.41631	0.36037	0.39552	0.38554	0.37673	0.34927	0.38812	7.648
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
133 Butylatedhydroxytoluene	1.16747	0.99626	0.95184	1.01684	0.96904	0.85273	0.76282	0.95957	13.327
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
144 alpha-Terpineol	0.18344	0.15450	0.14469	0.14634	0.13466	0.11649		
	0.11137						0.14164	17.153
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
123 Acetophenone	0.75335	0.70134	0.62177	0.66273	0.62470	0.58016		
	0.55419						0.64261	10.742
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
143 1,4-Dioxane	0.50026	0.47099	0.40309	0.45806	0.44708	0.44306		
	0.42614						0.44981	6.946
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.24901	0.18487	0.19103	0.30942	0.25753	0.25595		
	0.25366						0.24307	17.630

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Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
118 Triphenyl Phosphate	0.22708	0.19483	0.19155	0.20738	0.20665	0.19418		
	0.20161						0.20332	5.987
117 Butyl Diphenyl Phosphate	0.33870	0.27774	0.26854	0.28553	0.27341	0.23156		
	0.21774						0.27046	14.511
116 Dibutyl Phenyl Phosphate	0.77860	0.67988	0.67684	0.72733	0.70554	0.64023		
	0.63830						0.69239	7.190
115 Tributyl Phosphate	1.16971	0.98125	0.93778	0.94242	0.88213	0.77167		
	0.72415						0.91559	15.989
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
113 Diphenyl Oxide	0.82713	0.72625	0.68090	0.73435	0.71527	0.67163		
	0.66090						0.71663	7.858
112 Biphenyl	1.53958	1.32608	1.25007	1.29076	1.21961	1.09008		
	0.98336						1.24279	14.264

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
111 Azobenzene (1,2-DP-Hydrazine)	1.40289	1.29180	1.08769	1.06448	0.94836	0.88675	+++++	1.11366	17.837
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 3,4,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 1-methylnaphthalene	0.61018	0.58857	0.50129	0.54628	0.52043	0.48860	0.45790	0.53046	10.311
151 1,2,4,5-Tetrachlorobenzene	0.64139	0.45876	0.46173	0.62001	0.49005	0.47223	0.45888	0.51472	15.583
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
End Cal Date : 07-JAN-2010 17:02
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	___ RRF	% RSD
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.76426	1.51616	1.41630	1.56620	1.48310	1.42937	1.34854	1.50342	8.991
4 Bis(2-Chloroethyl)ether	1.31174	1.25071	1.06167	1.18675	1.12489	1.09341	1.05244	1.15452	8.565
6 2-Chlorophenol	1.40641	1.25265	1.19124	1.34234	1.27646	1.26936	1.20414	1.27752	5.921
7 1,3-Dichlorobenzene	1.54315	1.47610	1.28230	1.41792	1.36562	1.34175	1.28012	1.38671	7.100
9 1,4-Dichlorobenzene	1.58801	1.50673	1.29651	1.44947	1.39756	1.35470	1.28344	1.41092	7.909
11 Benzyl alcohol	0.54057	0.66806	0.73945	0.81540	0.79105	0.75983	0.74500	0.72276	12.828
12 1,2-Dichlorobenzene	1.46692	1.40998	1.22585	1.35668	1.31094	1.27121	1.20032	1.32027	7.362
13 2-Methylphenol	1.27981	1.08253	0.99644	1.11602	1.04730	1.02087	0.96823	1.07303	9.695

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
End Cal Date : 07-JAN-2010 17:02
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	___ RRF	% RSD
	80.000 Level 7							
14 2,2'-oxybis(1-Chloropropane)	1.61196	1.53755	1.30522	1.29207	1.14090	1.01542		
	+++++						1.31719	17.258
15 4-Methylphenol	1.33457	1.10911	1.03332	1.16515	1.10003	1.07496		
	1.00685						1.11772	9.726
16 N-Nitroso-di-n-propylamine	0.99373	0.91891	0.78540	0.82936	0.78692	0.74900		
	0.71826						0.82594	11.851
17 Hexachloroethane	0.62917	0.61817	0.53731	0.60694	0.58277	0.56653		
	0.54010						0.58300	6.318
19 Nitrobenzene	0.42263	0.38904	0.33255	0.35857	0.33817	0.31805		
	0.29922						0.35117	12.141
20 Isophorone	0.61662	0.58982	0.50985	0.55361	0.52895	0.50670		
	0.48860						0.54202	8.683
21 2-Nitrophenol	0.20356	0.18755	0.17701	0.20345	0.19399	0.19274		
	0.18512						0.19192	5.039
22 2,4-Dimethylphenol	0.41132	0.35947	0.33348	0.36798	0.34643	0.33383		
	0.31475						0.35247	8.911
23 Bis(2-Chloroethoxy)methane	0.43624	0.41350	0.35963	0.38551	0.36886	0.34949		
	0.33191						0.37788	9.703

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
End Cal Date : 07-JAN-2010 17:02
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
	80.000 Level 7								
24 Benzoic acid	+++++	0.08392	0.09876	0.16779	0.18921	0.19717			
	0.18012						0.15283	31.961	<-
25 2,4-Dichlorophenol	0.31070	0.26954	0.26170	0.29765	0.27829	0.27204			
	0.25998						0.27855	6.797	
26 1,2,4-Trichlorobenzene	0.33202	0.31819	0.27673	0.30215	0.29212	0.28322			
	0.27098						0.29649	7.545	
28 Naphthalene	1.16905	1.09590	0.93521	0.98181	0.90208	0.81456			
	0.73899						0.94823	15.857	
29 4-Chloroaniline	0.43890	0.41294	0.38349	0.42519	0.42237	0.39578			
	0.38164						0.40861	5.402	
30 Hexachlorobutadiene	0.18856	0.17918	0.15663	0.16953	0.16400	0.15769			
	0.15061						0.16660	8.091	
31 4-Chloro-3-methylphenol	0.34789	0.29939	0.27016	0.31167	0.29694	0.28687			
	0.27114						0.29772	8.991	
32 2-Methylnaphthalene	0.62822	0.55493	0.52860	0.55940	0.52973	0.48729			
	0.46961						0.53682	9.703	
33 Hexachlorocyclopentadiene	0.26290	0.30139	0.26261	0.32354	0.32126	0.31487			
	0.30465						0.29875	8.659	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
34 2,4,6-Trichlorophenol	0.36901	0.32697	0.30137	0.35386	0.34615	0.34886		
	0.34560						0.34169	6.349
35 2,4,5-Trichlorophenol	0.36525	0.32888	0.30535	0.35851	0.36236	0.36093		
	0.34509						0.34662	6.409
37 2-Chloronaphthalene	1.21819	1.14115	0.98797	1.07321	1.01727	0.95523		
	0.89746						1.04150	10.648
38 2-Nitroaniline	0.36486	0.32735	0.31232	0.33865	0.32372	0.30193		
	0.28165						0.32150	8.296
39 Dimethylphthalate	1.41380	1.31605	1.13387	1.23710	1.19613	1.14477		
	1.04924						1.21299	10.071
40 Acenaphthylene	1.88663	1.79977	1.56064	1.65004	1.55030	1.41918		
	1.32812						1.59924	12.380
41 2,6-Dinitrotoluene	0.29752	0.29186	0.25686	0.29100	0.28224	0.27022		
	0.25554						0.27789	6.184
43 3-Nitroaniline	0.40712	0.38415	0.37120	0.41352	0.40853	0.38698		
	0.37057						0.39172	4.594
44 Acenaphthene	1.22976	1.14179	0.99650	1.08451	1.03422	0.98227		
	0.92146						1.05579	9.927

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
	80.000 Level 7								
45 2,4-Dinitrophenol	+++++	0.07429	0.09152	0.15506	0.16844	0.17790			
	0.17080						0.13967	32.161	<-
46 Dibenzofuran	1.72079	1.49944	1.41467	1.47702	1.42137	1.31795			
	1.21332						1.43780	11.033	
47 4-Nitrophenol	0.17717	0.17423	0.15506	0.19634	0.18540	0.17973			
	0.14883						0.17382	9.581	
48 2,4-Dinitrotoluene	0.36959	0.38271	0.34894	0.39565	0.39068	0.38339			
	0.36668						0.37681	4.275	
49 Fluorene	1.40968	1.32813	1.13899	1.22540	1.15111	1.05090			
	0.93263						1.17669	13.750	
50 Diethylphthalate	1.48785	1.38198	1.21869	1.31661	1.27129	1.21095			
	1.14261						1.29000	9.047	
51 4-Chlorophenyl-phenylether	0.63766	0.58137	0.50490	0.54971	0.52812	0.49445			
	0.44145						0.53395	11.905	
52 4-Nitroaniline	0.32492	0.30155	0.28344	0.32181	0.32034	0.30997			
	0.29978						0.30883	4.841	
53 4,6-Dinitro-2-methylphenol	+++++	0.09884	0.10741	0.13946	0.14081	0.14442			
	0.14444						0.12923	15.860	

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD	
54 N-Nitrosodiphenylamine	0.51334	0.47724	0.41317	0.45455	0.44048	0.43476	0.43039	0.45199	7.454	
56 4-Bromophenyl-phenylether	0.22296	0.20682	0.18167	0.19751	0.19420	0.18833	0.18133	0.19612	7.587	
57 Hexachlorobenzene	0.22357	0.20465	0.17727	0.19483	0.19222	0.18530	0.18819	0.19515	7.748	
58 Pentachlorophenol	+++++	0.02425	0.01980	0.05575	0.06895	0.08078	0.08225	0.05530	49.763	<-
60 Phenanthrene	1.26063	1.15513	0.99023	1.05006	1.00666	0.93589	0.88145	1.04001	12.512	
61 Anthracene	1.22848	1.14091	0.99909	1.04058	0.98956	0.91398	0.85723	1.02426	12.444	
62 Carbazole	0.84554	0.60111	0.53143	0.68106	0.56734	0.54025	0.52302	0.61282	18.957	
63 Di-n-butylphthalate	1.48836	1.39564	1.23732	1.25828	1.18392	1.06448	1.01281	1.23440	13.700	
64 Fluoranthene	1.17830	1.12949	1.00597	1.03609	0.98955	0.93592	0.87883	1.02202	10.215	

Analytical Resources, Inc.

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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	____ RRF	% RSD
65 Pyrene	1.56354	1.43532	1.21727	1.29172	1.24337	1.11779	1.04651	1.27365	13.990
67 Butylbenzylphthalate	0.79181	0.75034	0.65701	0.69751	0.66545	0.62343	0.58950	0.68215	10.341
68 Benzo(a)anthracene	1.43180	1.28405	1.10985	1.18651	1.15593	1.07849	1.01280	1.17992	11.887
70 3,3'-Dichlorobenzidine	0.43085	0.42550	0.41241	0.42232	0.42901	0.41000	0.40051	0.41866	2.687
71 Chrysene	1.35143	1.22959	1.06732	1.12822	1.08253	1.01952	0.96561	1.12060	11.734
72 bis(2-Ethylhexyl)phthalate	0.65413	0.60238	0.53834	0.59668	0.58474	0.55761	0.52438	0.57975	7.593
73 Di-n-octylphthalate	1.18078	1.07207	0.93152	0.99606	0.93548	0.85426	0.77228	0.96321	14.081
74 Benzo(b)fluoranthene	1.38335	1.25709	1.13293	1.23089	1.19216	1.16225	1.26037	1.23129	6.681
75 Benzo(k)fluoranthene	1.53363	1.41623	1.17472	1.24252	1.18081	1.12154	0.89248	1.22313	16.949

Analytical Resources, Inc.

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Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD	
76 Benzo(a)pyrene	1.28829	1.19092	1.04494	1.12874	1.08626	1.05185	0.99786	1.11269	8.941	
78 Indeno(1,2,3-cd)pyrene	1.49419	1.43872	1.20051	1.32635	1.31103	1.29796	0.88019	1.27842	15.666	
79 Dibenzo(a,h)anthracene	1.22041	1.16531	0.97408	1.05522	1.04028	1.02887	1.00123	1.06934	8.401	
80 Benzo(g,h,i)perylene	1.28409	1.23721	1.04586	1.14055	1.12327	1.10127	1.05926	1.14165	7.782	
90 N-Nitrosodimethylamine	0.73709	0.73026	0.62635	0.70937	0.68120	0.66832	0.63784	0.68435	6.344	
91 Aniline	1.84018	1.71939	1.66704	1.73027	1.67017	1.56451	1.52616	1.67396	6.301	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
93 Benzidine	+++++	0.10714	0.28089	0.32905	0.42507	0.41636	0.43143	0.33166	37.863	<-
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Analytical Resources, Inc.

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Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 Retene	0.68626	0.58515	0.55496	0.60491	0.59582	0.53050	0.51252	0.58145	9.881
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Pyridine	1.31390	1.20817	1.14215	1.30115	1.26933	1.20462	0.83053	1.18141	14.059
$ 1 2-Fluorophenol	1.18139	1.06000	1.04658	1.16162	1.11059	1.06842	1.03519	1.09483	5.273
$ 137 d8-1,4-Dioxane	0.52740	0.47945	0.40771	0.46070	0.44396	0.44298	0.42716	0.45562	8.569

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2010 13:14
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Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt4.i/20100107.b/SW846100107.m
Cal Date : 07-Jan-2010 18:41 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	80.000 Level 7	RRF	% RSD
$ 2 Phenol-d5	1.24796	1.11720	1.10182	1.17504	1.11654	1.05993	1.02078	1.11990	6.643
$ 5 2-Chlorophenol-d4	1.24733	1.05723	1.04552	1.16114	1.11988	1.07379	1.04848	1.10762	6.753
$ 10 1,2-Dichlorobenzene-d4	0.86058	0.76857	0.76113	0.82766	0.79605	0.76048	0.73262	0.78674	5.644
$ 18 Nitrobenzene-d5	0.39496	0.34385	0.34189	0.36487	0.34271	0.32106	0.30739	0.34525	8.272
$ 36 2-Fluorobiphenyl	1.33249	1.16160	1.14197	1.21507	1.14273	1.06940	1.01888	1.15459	8.757
$ 55 2,4,6-Tribromophenol	0.12093	0.11217	0.11081	0.12613	0.12476	0.12250	0.11512	0.11892	5.191
$ 66 Terphenyl-d14	0.89534	0.74546	0.73547	0.75445	0.73872	0.67449	0.64795	0.74170	10.607
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071002.d
Lab Smp Id: IC010107 Client Smp ID: IC010107
Inj Date : 07-JAN-2010 13:14
Operator : JZ Inst ID: nt4.i
Smp Info : IC010107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/07/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.723	6.723	(0.777)	14800	1.00000	1.079
$	2 Phenol-d5	99	8.209	8.209	(0.948)	15634	1.00000	1.114
	3 Phenol	94	8.227	8.227	(0.950)	22102	1.00000	1.174
$	5 2-Chlorophenol-d4	132	8.362	8.362	(0.966)	15626	1.00000	1.126
	4 Bis(2-Chloroethyl)ether	93	8.303	8.303	(0.959)	16433	1.00000	1.136
	6 2-Chlorophenol	128	8.386	8.386	(0.969)	17619	1.00000	1.101
	7 1,3-Dichlorobenzene	146	8.597	8.597	(0.993)	19332	1.00000	1.113
*	8 1,4-Dichlorobenzene-d4	152	8.656	8.656	(1.000)	250552	20.0000	
	9 1,4-Dichlorobenzene	146	8.685	8.685	(1.003)	19894	1.00000	1.126
$	10 1,2-Dichlorobenzene-d4	152	8.955	8.955	(1.035)	10781	1.00000	1.094(M)
	12 1,2-Dichlorobenzene	146	8.979	8.979	(1.037)	18377	1.00000	1.111
	11 Benzyl alcohol	108	8.926	8.926	(1.031)	6772	1.00000	0.7479
	14 2,2'-oxybis(1-Chloropropane)	45	9.173	9.173	(1.060)	20194	1.00000	1.278(M)
	13 2-Methylphenol	108	9.155	9.155	(1.058)	16033	1.00000	1.193
	17 Hexachloroethane	117	9.467	9.467	(1.094)	7882	1.00000	1.079
	16 N-Nitroso-di-n-propylamine	70	9.378	9.378	(1.083)	12449	1.00000	1.203
	15 4-Methylphenol	108	9.384	9.384	(1.084)	16719	1.00000	1.194
$	18 Nitrobenzene-d5	82	9.578	9.578	(0.894)	17672	1.00000	1.144
	19 Nitrobenzene	77	9.608	9.608	(0.897)	18910	1.00000	1.203
	20 Isophorone	82	9.978	9.978	(0.931)	27590	1.00000	1.138
	21 2-Nitrophenol	139	10.130	10.130	(0.946)	9108	1.00000	1.061
	22 2,4-Dimethylphenol	107	10.224	10.224	(0.954)	18404	1.00000	1.167
	23 Bis(2-Chloroethoxy)methane	93	10.359	10.359	(0.967)	19519	1.00000	1.154
	24 Benzoic acid	105	10.342	10.342	(0.965)	5639	2.00000	0.9002(M)
	25 2,4-Dichlorophenol	162	10.518	10.518	(0.982)	13902	1.00000	1.115
	26 1,2,4-Trichlorobenzene	180	10.647	10.647	(0.994)	14856	1.00000	1.120
*	27 Naphthalene-d8	136	10.712	10.712	(1.000)	894883	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.741	10.741	(1.003)	52308	1.00000	1.233
	29 4-Chloroaniline	127	10.871	10.871	(1.015)	19638	1.00000	1.074
	30 Hexachlorobutadiene	225	11.047	11.047	(1.031)	8437	1.00000	1.132
	31 4-Chloro-3-methylphenol	107	11.687	11.687	(1.091)	15566	1.00000	1.169
	32 2-Methylnaphthalene	141	11.869	11.869	(1.108)	28109	1.00000	1.170
	33 Hexachlorocyclopentadiene	237	12.239	12.239	(0.900)	6774	1.00000	0.8800
	34 2,4,6-Trichlorophenol	196	12.386	12.386	(0.911)	9508	1.00000	1.080
	35 2,4,5-Trichlorophenol	196	12.451	12.451	(0.916)	9411	1.00000	1.054
$	36 2-Fluorobiphenyl	172	12.504	12.504	(0.920)	34333	1.00000	1.154
	37 2-Chloronaphthalene	162	12.656	12.656	(0.931)	31388	1.00000	1.170
	38 2-Nitroaniline	65	12.880	12.880	(0.947)	9401	1.00000	1.135
	39 Dimethylphthalate	163	13.226	13.226	(0.973)	36428	1.00000	1.166
	40 Acenaphthylene	152	13.344	13.344	(0.981)	48611	1.00000	1.180
	41 2,6-Dinitrotoluene	165	13.332	13.332	(0.981)	7666	1.00000	1.071
*	42 Acenaphthene-d10	164	13.596	13.596	(1.000)	515321	20.0000	
	43 3-Nitroaniline	138	12.880	12.880	(0.947)	10490	1.00000	1.039
	44 Acenaphthene	153	13.649	13.649	(1.004)	31686	1.00000	1.165
	45 2,4-Dinitrophenol	184	13.725	13.725	(1.010)	1866	2.00000	0.5799(M)
	46 Dibenzofuran	168	13.908	13.908	(1.023)	44338	1.00000	1.197
	47 4-Nitrophenol	109	13.866	13.866	(1.020)	4565	1.00000	1.019
	48 2,4-Dinitrotoluene	165	13.972	13.972	(1.028)	9523	1.00000	0.9809
	50 Diethylphthalate	149	14.383	14.383	(1.058)	38336	1.00000	1.153
	49 Fluorene	166	14.472	14.472	(1.064)	36322	1.00000	1.198
	51 4-Chlorophenyl-phenylether	204	14.477	14.477	(1.065)	16430	1.00000	1.194
	52 4-Nitroaniline	138	14.560	14.560	(1.071)	8372	1.00000	1.052
	53 4,6-Dinitro-2-methylphenol	198	14.630	14.630	(0.914)	5949	2.00000	1.201
	54 N-Nitrosodiphenylamine	169	14.683	14.683	(0.917)	20982	1.00000	1.136
$	55 2,4,6-Tribromophenol	330	14.900	14.900	(1.096)	3116	1.00000	1.017
	56 4-Bromophenyl-phenylether	248	15.270	15.270	(0.954)	9113	1.00000	1.137
	57 Hexachlorobenzene	284	15.511	15.511	(0.969)	9138	1.00000	1.146
	58 Pentachlorophenol	266	15.811	15.811	(0.988)	721	1.00000	0.3534
*	59 Phenanthrene-d10	188	16.005	16.005	(1.000)	817465	20.0000	
	60 Phenanthrene	178	16.034	16.034	(1.002)	51526	1.00000	1.212
	61 Anthracene	178	16.110	16.110	(1.007)	50212	1.00000	1.199
	62 Carbazole	167	16.387	16.387	(1.024)	34560	1.00000	1.380
	63 Di-n-butylphthalate	149	17.056	17.056	(1.066)	60834	1.00000	1.206
	64 Fluoranthene	202	17.996	17.996	(1.124)	48161	1.00000	1.153
	65 Pyrene	202	18.360	18.360	(0.902)	50987	1.00000	1.228
$	66 Terphenyl-d14	244	18.642	18.642	(0.916)	29197	1.00000	1.207
	67 Butylbenzylphthalate	149	19.500	19.500	(0.958)	25821	1.00000	1.161
	68 Benzo(a)anthracene	228	20.328	20.328	(0.999)	46691	1.00000	1.213
*	69 Chrysene-d12	240	20.358	20.358	(1.000)	652198	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.317	20.317	(0.998)	14050	1.00000	1.029
	71 Chrysene	228	20.399	20.399	(1.002)	44070	1.00000	1.206
	72 bis(2-Ethylhexyl)phthalate	149	20.487	20.487	(0.956)	36134	1.00000	1.128
*	134 Di-n-octylphthalate-d4	153	21.421	21.421	(1.000)	1104794	20.0000	
	73 Di-n-octylphthalate	149	21.433	21.433	(1.001)	65226	1.00000	1.226

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.997	21.997	(0.975)	47526	1.00000	1.123
75	Benzo(k)fluoranthene	252	22.032	22.032	(0.977)	52689	1.00000	1.254
76	Benzo(a)pyrene	252	22.467	22.467	(0.996)	44260	1.00000	1.158
* 77	Perylene-d12	264	22.561	22.561	(1.000)	687115	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.388	24.388	(1.081)	51334	1.00000	1.169
79	Dibenzo(a,h)anthracene	278	24.411	24.411	(1.082)	41928	1.00000	1.141
80	Benzo(g,h,i)perylene	276	24.916	24.916	(1.104)	44116	1.00000	1.125
90	N-Nitrosodimethylamine	74	4.215	4.215	(0.487)	9234	1.00000	1.077
103	Pyridine	79	4.209	4.209	(0.486)	16460	1.00000	1.112
91	Aniline	93	8.209	8.209	(0.948)	23053	1.00000	1.099
105	1-methylnaphthalene	141	12.045	12.045	(1.124)	27302	1.00000	1.150
93	Benzidine	184	18.225	18.225	(0.895)	1151	1.00000	0.1220(M)
111	Azobenzene (1,2-DP-Hydrazine)	77	14.736	14.736	(1.084)	36147	1.00000	1.314
143	1,4-Dioxane	88	3.445	3.445	(0.398)	6267	1.00000	1.112
$ 137	d8-1,4-Dioxane	96	3.381	3.381	(0.391)	6607	1.00000	1.158
151	1,2,4,5-Tetrachlorobenzene	216	12.210	12.210	(0.898)	16526	1.00000	1.246
120	2,3,4,6-Tetrachlorophenol	232	14.195	14.195	(1.044)	6416	1.00000	1.024
144	alpha-Terpineol	59	10.747	10.747	(1.003)	8208	1.00000	1.295
98	Retene	219	18.901	18.901	(0.928)	22379	1.00000	1.180
133	Butylatedhydroxytoluene	205	13.731	13.731	(1.010)	30081	1.00000	1.217
115	Tributyl Phosphate	99	14.730	14.730	(0.920)	47810	1.00000	1.278
116	Dibutyl Phenyl Phosphate	175	16.492	16.492	(1.030)	31824	1.00000	1.125
117	Butyl Diphenyl Phosphate	94	18.202	18.202	(0.894)	11045	1.00000	1.252
118	Triphenyl Phosphate	326	19.823	19.823	(0.974)	7405	1.00000	1.117
123	Acetophenone	105	9.337	9.337	(0.872)	33708	1.00000	1.172
179	n-Decane	57	8.456	8.456	(0.977)	16791	1.00000	1.215
180	n-Octadecane	57	15.846	15.846	(0.990)	22929	1.00000	1.332
168	Pentachlorobenzene	250	13.949	13.949	(1.026)	11159	1.00000	1.116
113	Diphenyl Oxide	170	12.833	12.833	(0.944)	21312	1.00000	1.154
112	Biphenyl	154	12.645	12.645	(0.930)	39669	1.00000	1.239

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071002.d
Lab Smp Id: IC010107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC010107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	250552	-12.43
27 Naphthalene-d8	1035557	517778	2071114	894883	-13.58
42 Acenaphthene-d10	594267	297134	1188534	515321	-13.28
59 Phenanthrene-d10	951721	475860	1903442	817465	-14.11
69 Chrysene-d12	794862	397431	1589724	652198	-17.95
134 Di-n-octylphthala	1280700	640350	2561400	1104794	-13.74
77 Perylene-d12	826094	413047	1652188	687115	-16.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	-0.08
27 Naphthalene-d8	10.71	10.21	11.21	10.71	-0.01
42 Acenaphthene-d10	13.60	13.10	14.10	13.60	-0.01
59 Phenanthrene-d10	16.01	15.51	16.51	16.00	-0.01
69 Chrysene-d12	20.36	19.86	20.86	20.36	-0.03
134 Di-n-octylphthala	21.42	20.92	21.92	21.42	0.00
77 Perylene-d12	22.56	22.06	23.06	22.56	0.00

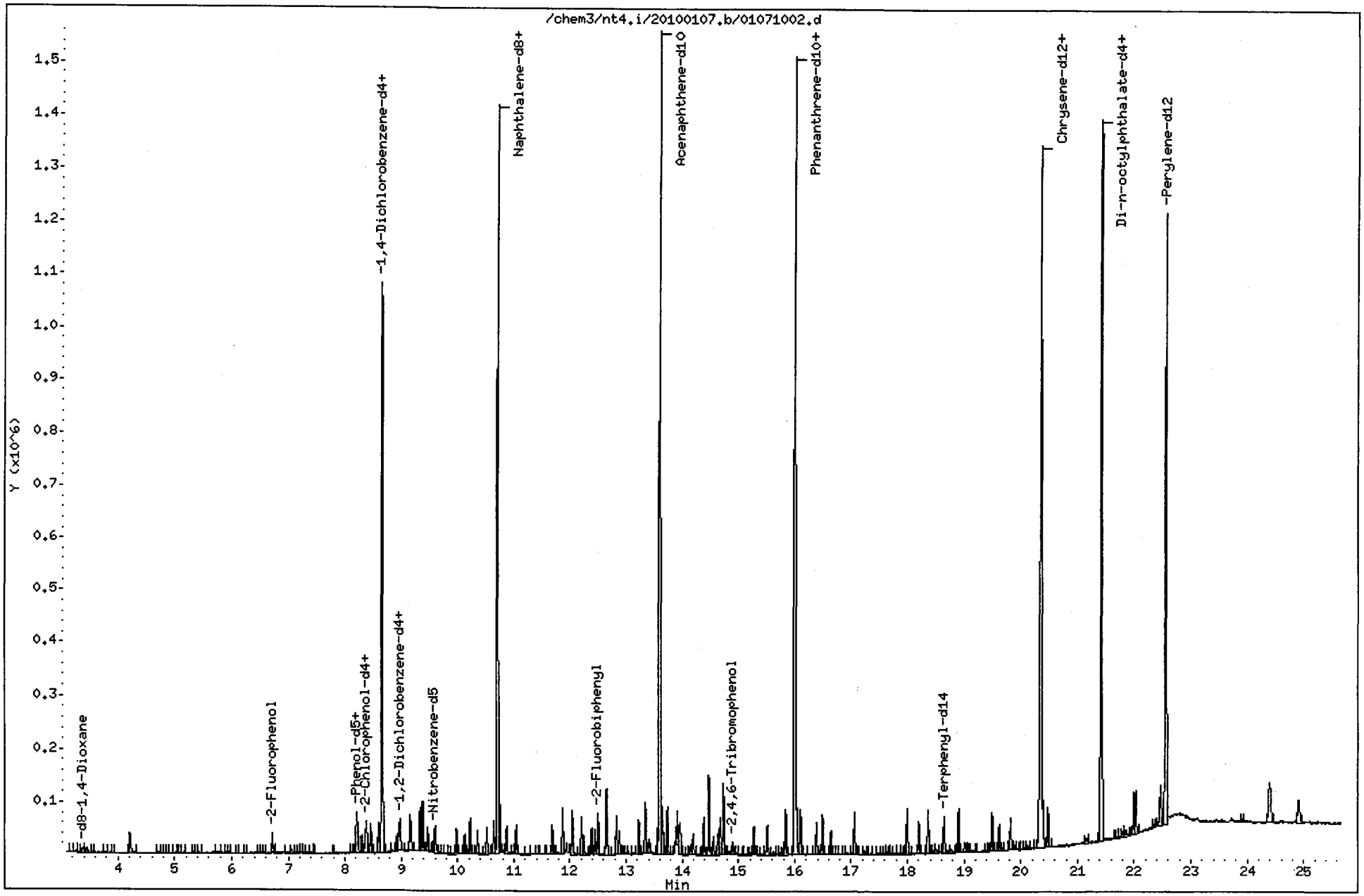
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071002.d
Date : 07-JAN-2010 13:14
Client ID: IC010107
Sample Info: IC010107

Column phase: ZB-5msi

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



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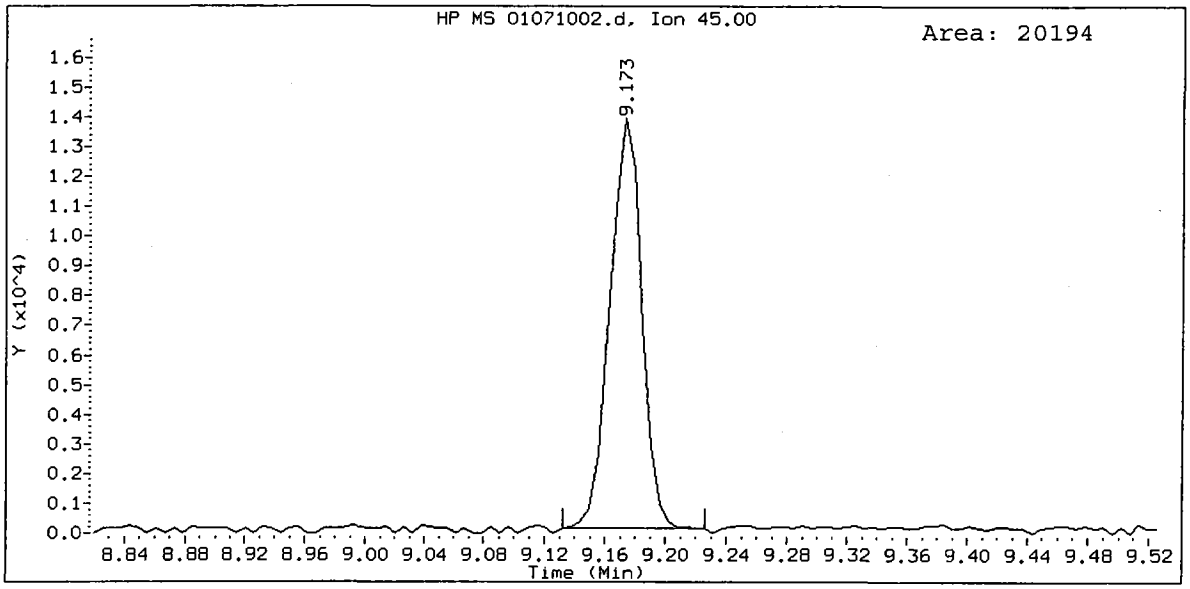
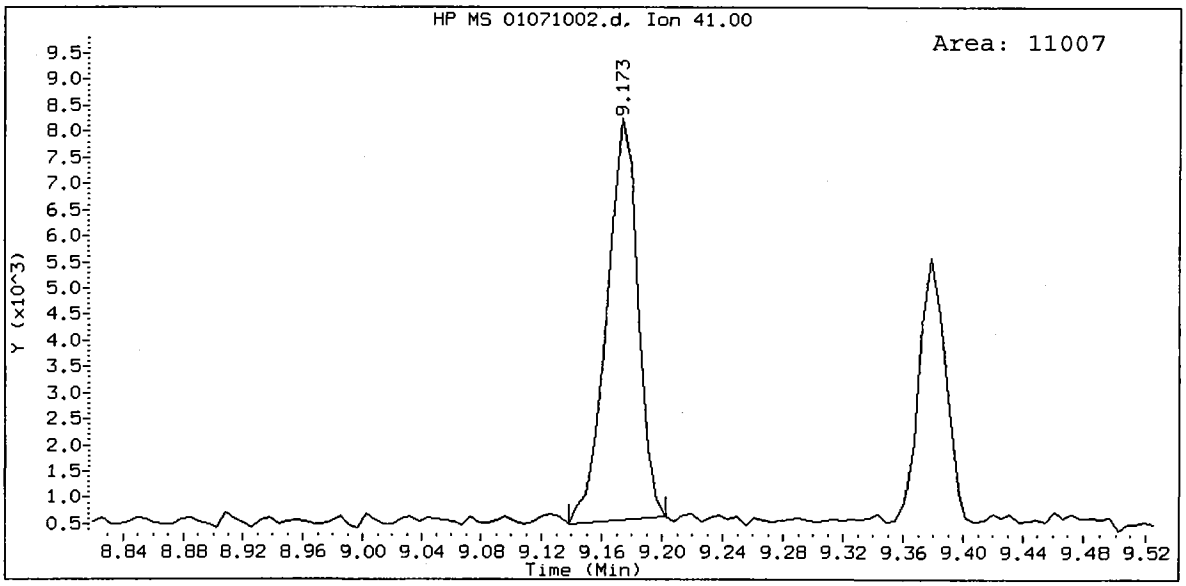
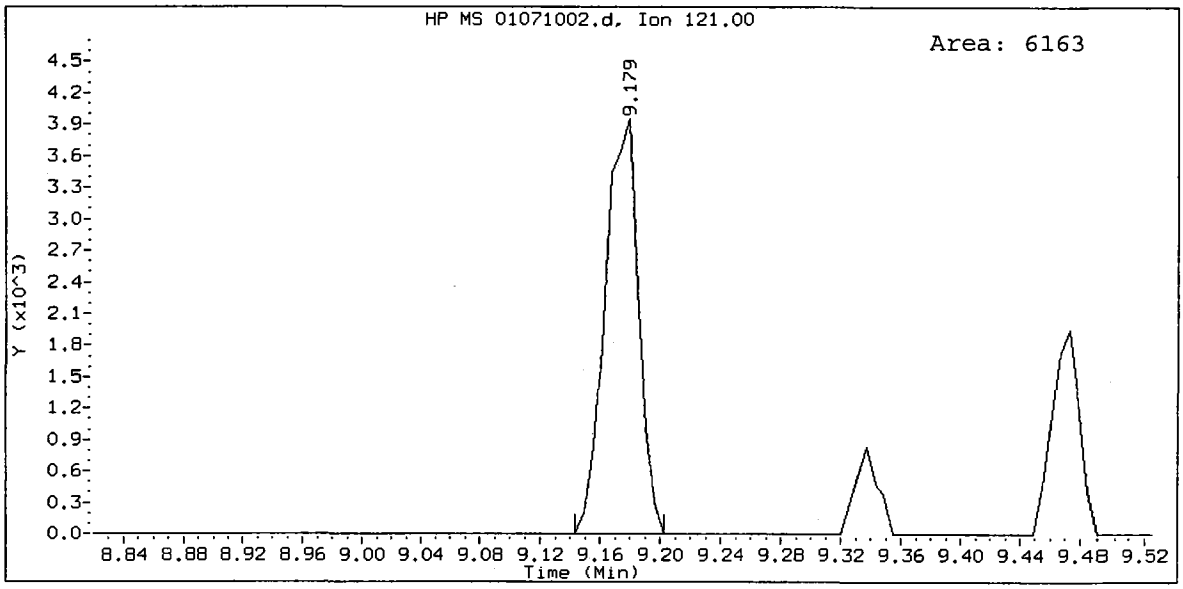
2,2'-oxybis(1-Chloropropane) Amount: 1.28







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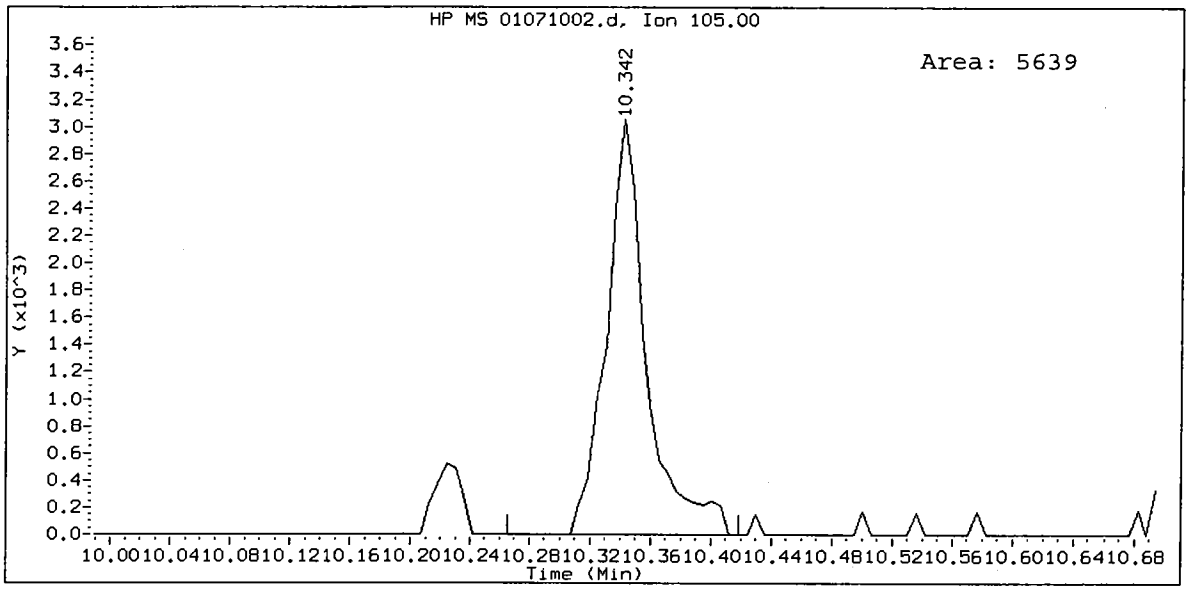
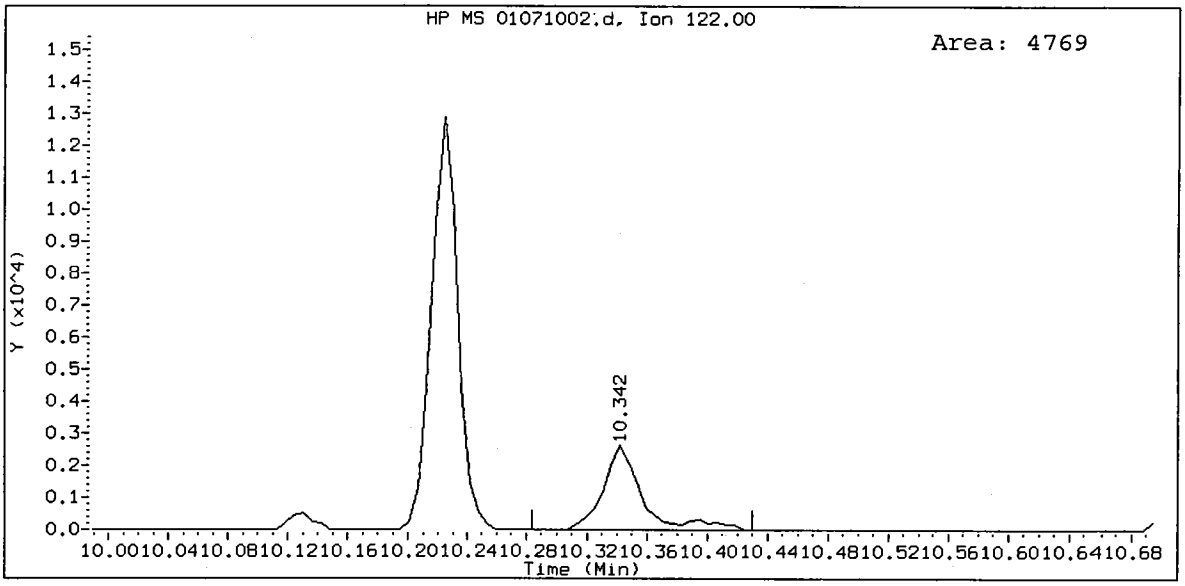
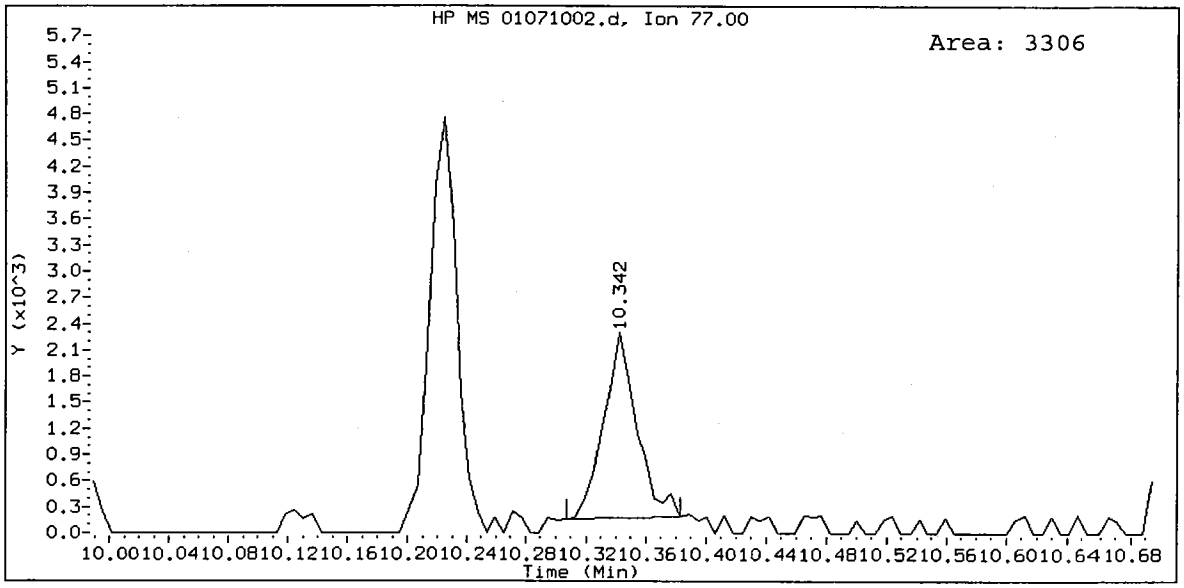
Benzoic acid Amount: 0.90







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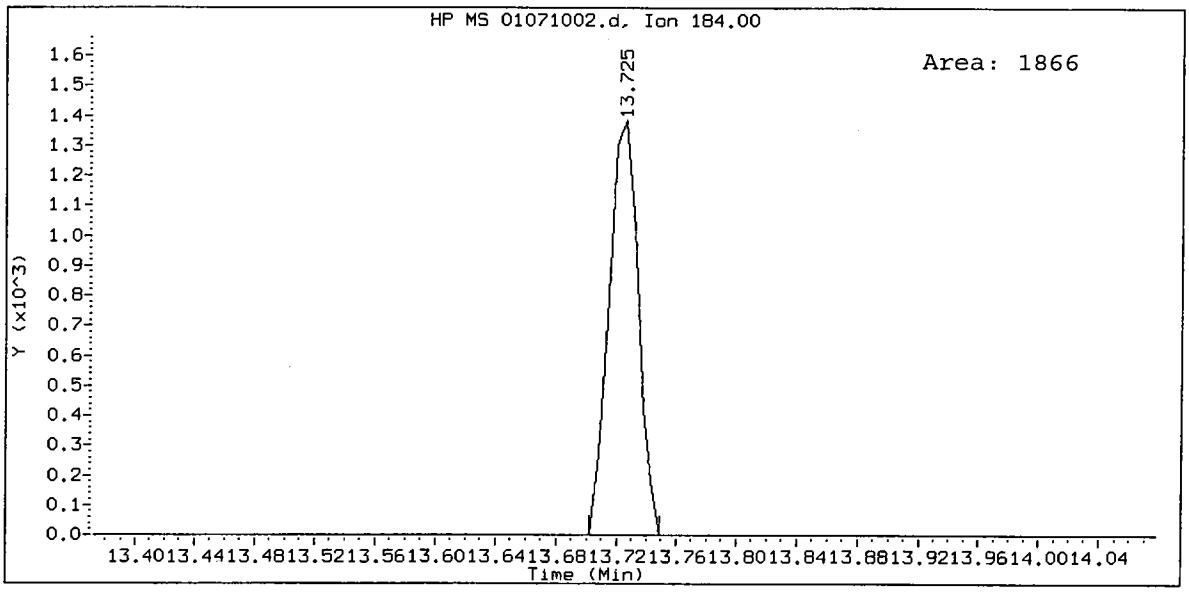
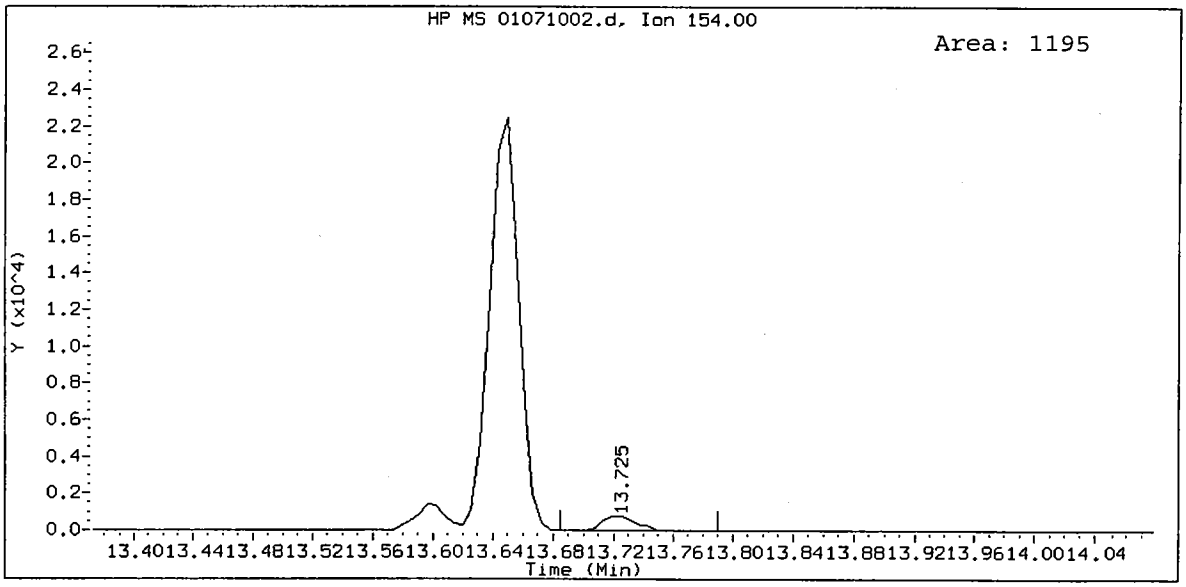
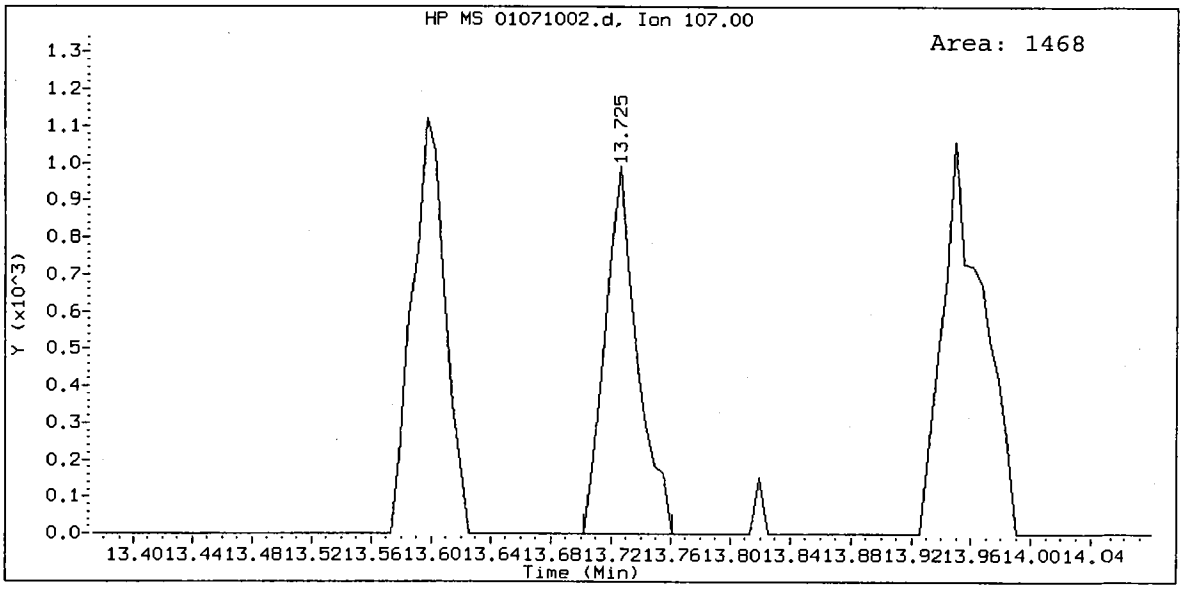
2,4-Dinitrophenol Amount: 0.58







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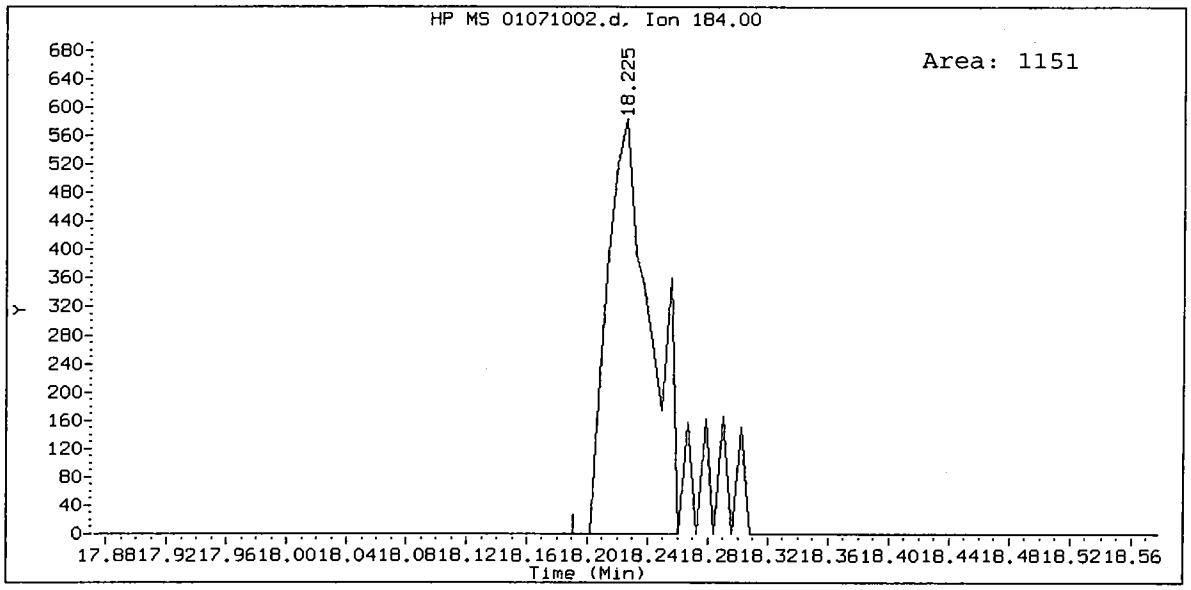
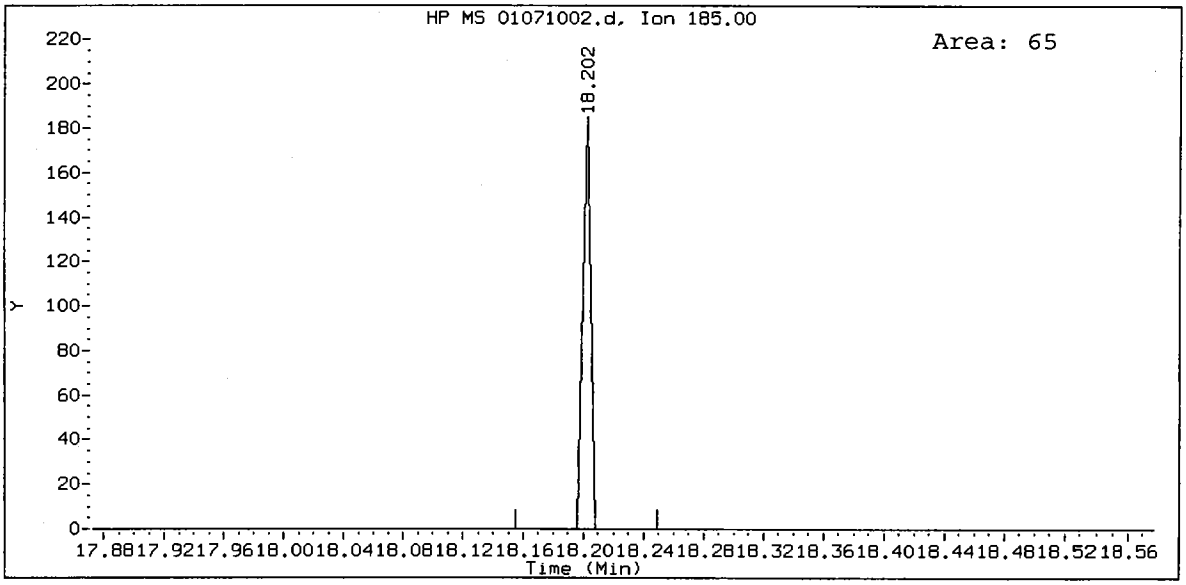
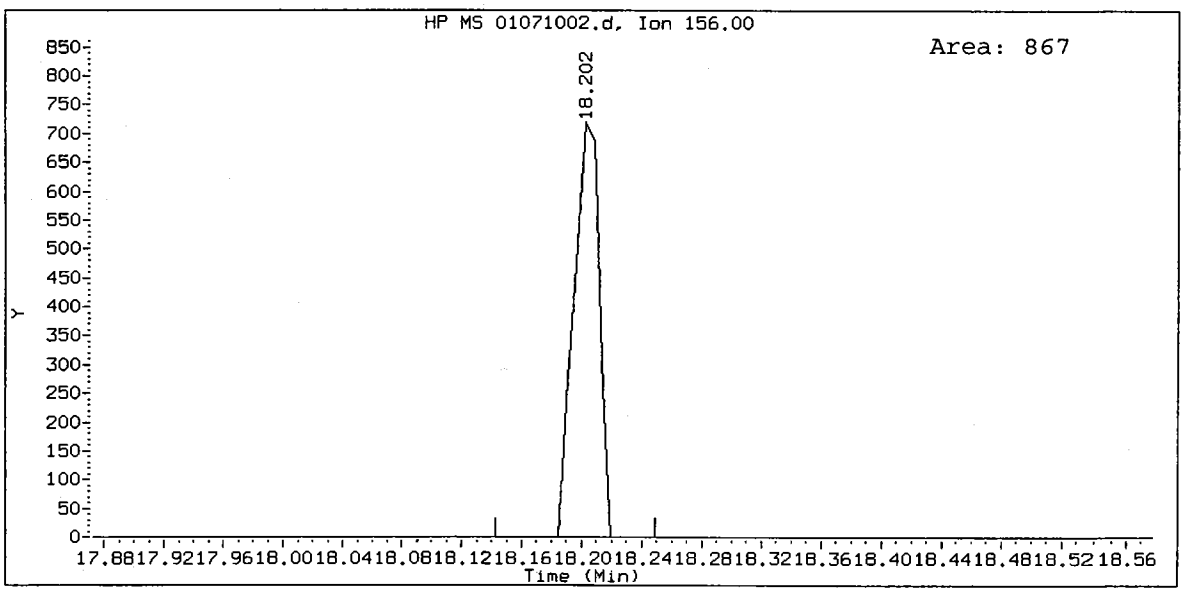
Benzidine Amount: 0.12







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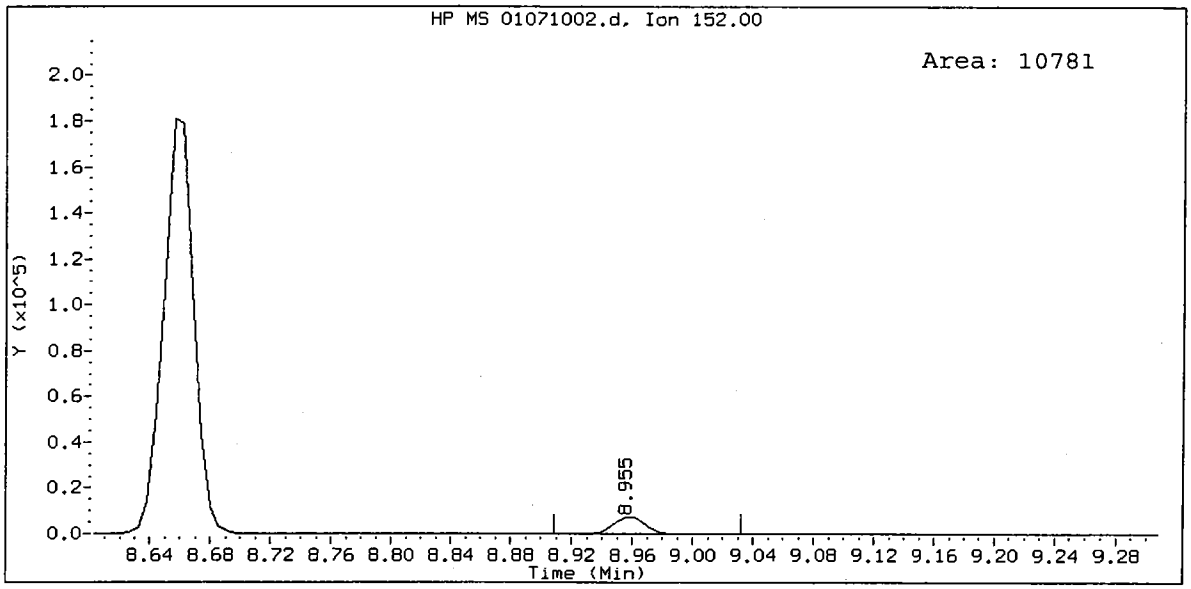
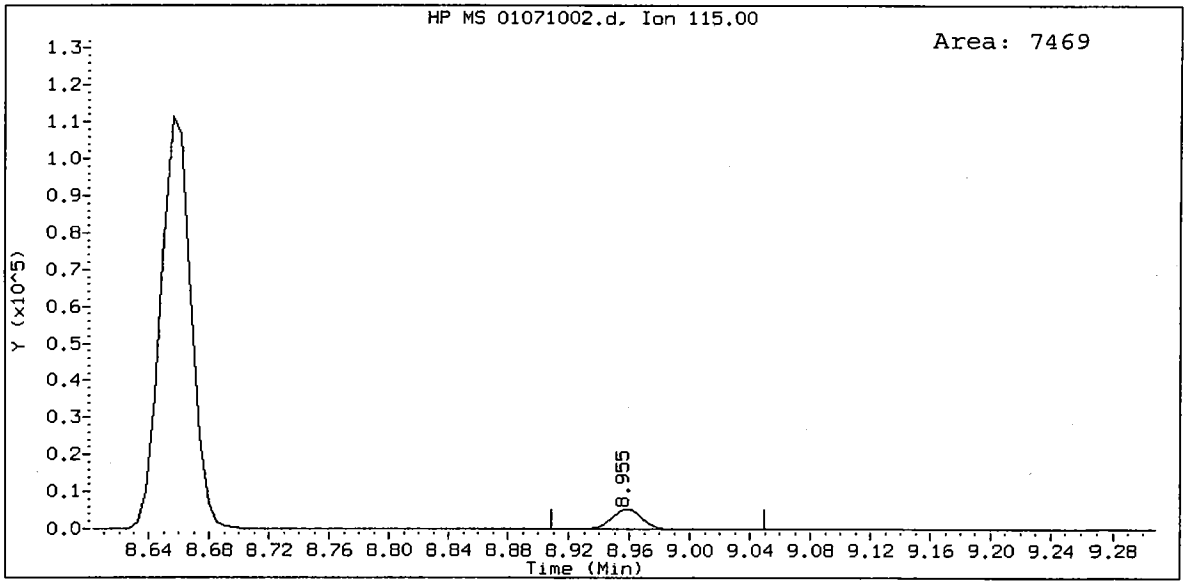
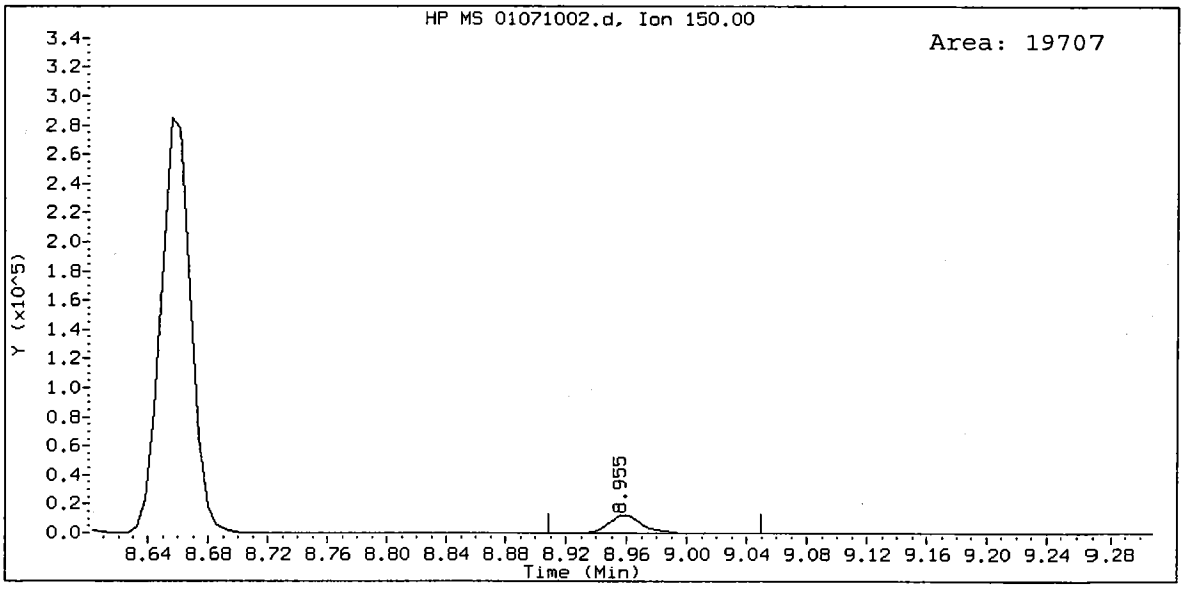
1,2-Dichlorobenzene-d4 Amount: 1.09







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 07-JAN-2010 14:15
Operator : JZ Inst ID: nt4.i
Smp Info : IC050107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 14:15 Cal File: 01071003.d
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 01/07/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.719	6.723	(0.776)	61124	5.00000	4.841
$	2 Phenol-d5	99	8.211	8.209	(0.948)	64422	5.00000	4.988
	3 Phenol	94	8.229	8.227	(0.950)	87428	5.00000	5.042
$	5 2-Chlorophenol-d4	132	8.364	8.362	(0.966)	60964	5.00000	4.773
	4 Bis(2-Chloroethyl)ether	93	8.300	8.303	(0.959)	72121	5.00000	5.417
	6 2-Chlorophenol	128	8.388	8.386	(0.969)	72233	5.00000	4.903
	7 1,3-Dichlorobenzene	146	8.599	8.597	(0.993)	85118	5.00000	5.322
*	8 1,4-Dichlorobenzene-d4	152	8.658	8.656	(1.000)	230656	20.0000	
	9 1,4-Dichlorobenzene	146	8.681	8.685	(1.003)	86884	5.00000	5.340
$	10 1,2-Dichlorobenzene-d4	152	8.957	8.955	(1.035)	44319	5.00000	1.091
	12 1,2-Dichlorobenzene	146	8.981	8.979	(1.037)	81305	5.00000	5.340
	11 Benzyl alcohol	108	8.922	8.926	(1.031)	38523	5.00000	4.622
	14 2,2'-oxybis(1-Chloropropane)	45	9.175	9.173	(1.060)	88661	5.00000	6.094
	13 2-Methylphenol	108	9.157	9.155	(1.058)	62423	5.00000	5.044
	17 Hexachloroethane	117	9.469	9.467	(1.094)	35646	5.00000	5.302
	16 N-Nitroso-di-n-propylamine	70	9.380	9.378	(1.083)	52988	5.00000	5.563
	15 4-Methylphenol	108	9.380	9.384	(1.083)	63956	5.00000	4.962
$	18 Nitrobenzene-d5	82	9.580	9.578	(0.894)	70229	5.00000	4.980
	19 Nitrobenzene	77	9.610	9.608	(0.897)	79459	5.00000	5.539
	20 Isophorone	82	9.980	9.978	(0.931)	120467	5.00000	5.441
	21 2-Nitrophenol	139	10.127	10.130	(0.945)	38306	5.00000	4.886
	22 2,4-Dimethylphenol	107	10.226	10.224	(0.954)	73420	5.00000	5.099
	23 Bis(2-Chloroethoxy)methane	93	10.361	10.359	(0.967)	84456	5.00000	5.471
	24 Benzoic acid	105	10.373	10.342	(0.968)	34281	10.0000	5.994
	25 2,4-Dichlorophenol	162	10.520	10.518	(0.982)	55051	5.00000	4.838
	26 1,2,4-Trichlorobenzene	180	10.649	10.647	(0.994)	64989	5.00000	5.366
*	27 Naphthalene-d8	136	10.714	10.712	(1.000)	816977	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.743	10.741	(1.003)	223832	5.00000	5.779
	29 4-Chloroaniline	127	10.873	10.871	(1.015)	84340	5.00000	5.053
	30 Hexachlorobutadiene	225	11.043	11.047	(1.031)	36597	5.00000	5.378
	31 4-Chloro-3-methylphenol	107	11.683	11.687	(1.090)	61148	5.00000	5.028
	32 2-Methylnaphthalene	141	11.865	11.869	(1.107)	113342	5.00000	5.169
	33 Hexachlorocyclopentadiene	237	12.241	12.239	(0.900)	34939	5.00000	5.044
	34 2,4,6-Trichlorophenol	196	12.388	12.386	(0.911)	37905	5.00000	4.785
	35 2,4,5-Trichlorophenol	196	12.453	12.451	(0.916)	38126	5.00000	4.744
$	36 2-Fluorobiphenyl	172	12.500	12.504	(0.919)	134661	5.00000	5.030
	37 2-Chloronaphthalene	162	12.658	12.656	(0.931)	132290	5.00000	5.478
	38 2-Nitroaniline	65	12.882	12.880	(0.947)	37949	5.00000	5.091
	39 Dimethylphthalate	163	13.228	13.226	(0.973)	152566	5.00000	5.425
	40 Acenaphthylene	152	13.346	13.344	(0.981)	208642	5.00000	5.627
	41 2,6-Dinitrotoluene	165	13.334	13.332	(0.981)	33835	5.00000	5.251
*	42 Acenaphthene-d10	164	13.598	13.596	(1.000)	463708	20.0000	
	43 3-Nitroaniline	138	12.882	12.880	(0.947)	44533	5.00000	4.903
	44 Acenaphthene	153	13.645	13.649	(1.003)	132364	5.00000	5.407
	45 2,4-Dinitrophenol	184	13.722	13.725	(1.009)	17224	10.0000	5.948
	46 Dibenzofuran	168	13.910	13.908	(1.023)	173826	5.00000	5.214
	47 4-Nitrophenol	109	13.874	13.866	(1.020)	20198	5.00000	5.012
	48 2,4-Dinitrotoluene	165	13.974	13.972	(1.028)	44366	5.00000	5.078
	50 Diethylphthalate	149	14.385	14.383	(1.058)	160209	5.00000	5.357
	49 Fluorene	166	14.474	14.472	(1.064)	153966	5.00000	5.643
	51 4-Chlorophenyl-phenylether	204	14.479	14.477	(1.065)	67396	5.00000	5.444
	52 4-Nitroaniline	138	14.562	14.560	(1.071)	34958	5.00000	4.882
	53 4,6-Dinitro-2-methylphenol	198	14.632	14.630	(0.914)	35954	10.0000	8.158
	54 N-Nitrosodiphenylamine	169	14.685	14.683	(0.918)	86797	5.00000	5.279
$	55 2,4,6-Tribromophenol	330	14.902	14.900	(1.096)	13004	5.00000	4.716
	56 4-Bromophenyl-phenylether	248	15.272	15.270	(0.954)	37615	5.00000	5.273
	57 Hexachlorobenzene	284	15.507	15.511	(0.969)	37221	5.00000	5.244
	58 Pentachlorophenol	266	15.807	15.811	(0.988)	4411	5.00000	2.429
*	59 Phenanthrene-d10	188	16.001	16.005	(1.000)	727498	20.0000	
	60 Phenanthrene	178	16.036	16.034	(1.002)	210088	5.00000	5.553
	61 Anthracene	178	16.113	16.110	(1.007)	207503	5.00000	5.569
	62 Carbazole	167	16.389	16.387	(1.024)	109326	5.00000	4.904
	63 Di-n-butylphthalate	149	17.058	17.056	(1.066)	253831	5.00000	5.653
	64 Fluoranthene	202	17.998	17.996	(1.125)	205426	5.00000	5.526
	65 Pyrene	202	18.362	18.360	(0.902)	210739	5.00000	5.635
$	66 Terphenyl-d14	244	18.644	18.642	(0.916)	109451	5.00000	5.025
	67 Butylbenzylphthalate	149	19.502	19.500	(0.958)	110168	5.00000	5.500
	68 Benzo(a)anthracene	228	20.330	20.328	(0.999)	188528	5.00000	5.441
*	69 Chrysene-d12	240	20.360	20.358	(1.000)	587293	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.313	20.317	(0.998)	62474	5.00000	5.082
	71 Chrysene	228	20.395	20.399	(1.002)	180533	5.00000	5.486
	72 bis(2-Ethylhexyl)phthalate	149	20.483	20.487	(0.956)	152215	5.00000	5.195
*	134 Di-n-octylphthalate-d4	153	21.423	21.421	(1.000)	1010753	20.0000	
	73 Di-n-octylphthalate	149	21.435	21.433	(1.001)	270899	5.00000	5.565

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.005	21.997	(0.975)	198869	5.00000	5.105
75	Benzo(k)fluoranthene	252	22.034	22.032	(0.977)	224045	5.00000	5.789
76	Benzo(a)pyrene	252	22.469	22.467	(0.996)	188402	5.00000	5.352
* 77	Perylene-d12	264	22.563	22.561	(1.000)	632794	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.395	24.388	(1.081)	227604	5.00000	5.627
79	Dibenzo(a,h)anthracene	278	24.413	24.411	(1.082)	184350	5.00000	5.449
80	Benzo(g,h,i)perylene	276	24.918	24.916	(1.104)	195725	5.00000	5.419
90	N-Nitrosodimethylamine	74	4.205	4.215	(0.486)	42110	5.00000	5.335
103	Pyridine	79	4.187	4.209	(0.484)	69668	5.00000	5.113
91	Aniline	93	8.206	8.209	(0.948)	99147	5.00000	5.136
105	1-methylnaphthalene	141	12.042	12.045	(1.124)	120212	5.00000	5.548
93	Benzidine	184	18.221	18.225	(0.895)	15731	5.00000	1.852(M)
111	Azobenzene (1,2-DP-Hydrazine)	77	14.738	14.736	(1.084)	149755	5.00000	6.049
143	1,4-Dioxane	88	3.430	3.445	(0.396)	27159	5.00000	5.235
$ 137	d8-1,4-Dioxane	96	3.365	3.381	(0.389)	27647	5.00000	5.261
151	1,2,4,5-Tetrachlorobenzene	216	12.206	12.210	(0.898)	53183	5.00000	4.456
120	2,3,4,6-Tetrachlorophenol	232	14.197	14.195	(1.044)	21432	5.00000	3.803
144	alpha-Terpineol	59	10.743	10.747	(1.003)	31555	5.00000	5.454
98	Retene	219	18.903	18.901	(0.928)	85914	5.00000	5.032
133	Butylatedhydroxytoluene	205	13.733	13.731	(1.010)	115493	5.00000	5.191
115	Tributyl Phosphate	99	14.732	14.730	(0.921)	178464	5.00000	5.359
116	Dibutyl Phenyl Phosphate	175	16.494	16.492	(1.031)	123653	5.00000	4.910
117	Butyl Diphenyl Phosphate	94	18.204	18.202	(0.894)	40779	5.00000	5.135
118	Triphenyl Phosphate	326	19.825	19.823	(0.974)	28605	5.00000	4.791
123	Acetophenone	105	9.339	9.337	(0.872)	143245	5.00000	5.457
179	n-Decane	57	8.458	8.456	(0.977)	70667	5.00000	5.554
180	n-Octadecane	57	15.848	15.846	(0.990)	88114	5.00000	5.753
168	Pentachlorobenzene	250	13.951	13.949	(1.026)	48261	5.00000	5.363
113	Diphenyl Oxide	170	12.829	12.833	(0.943)	84192	5.00000	5.067
112	Biphenyl	154	12.647	12.645	(0.930)	153728	5.00000	5.335

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071003.d
Lab Smp Id: IC050107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC050107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	230656	-19.38
27 Naphthalene-d8	1035557	517778	2071114	816977	-21.11
42 Acenaphthene-d10	594267	297134	1188534	463708	-21.97
59 Phenanthrene-d10	951721	475860	1903442	727498	-23.56
69 Chrysene-d12	794862	397431	1589724	587293	-26.11
134 Di-n-octylphthala	1280700	640350	2561400	1010753	-21.08
77 Perylene-d12	826094	413047	1652188	632794	-23.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	-0.05
27 Naphthalene-d8	10.71	10.21	11.21	10.71	0.01
42 Acenaphthene-d10	13.60	13.10	14.10	13.60	0.01
59 Phenanthrene-d10	16.01	15.51	16.51	16.00	-0.03
69 Chrysene-d12	20.36	19.86	20.86	20.36	-0.02
134 Di-n-octylphthala	21.42	20.92	21.92	21.42	0.01
77 Perylene-d12	22.56	22.06	23.06	22.56	0.01

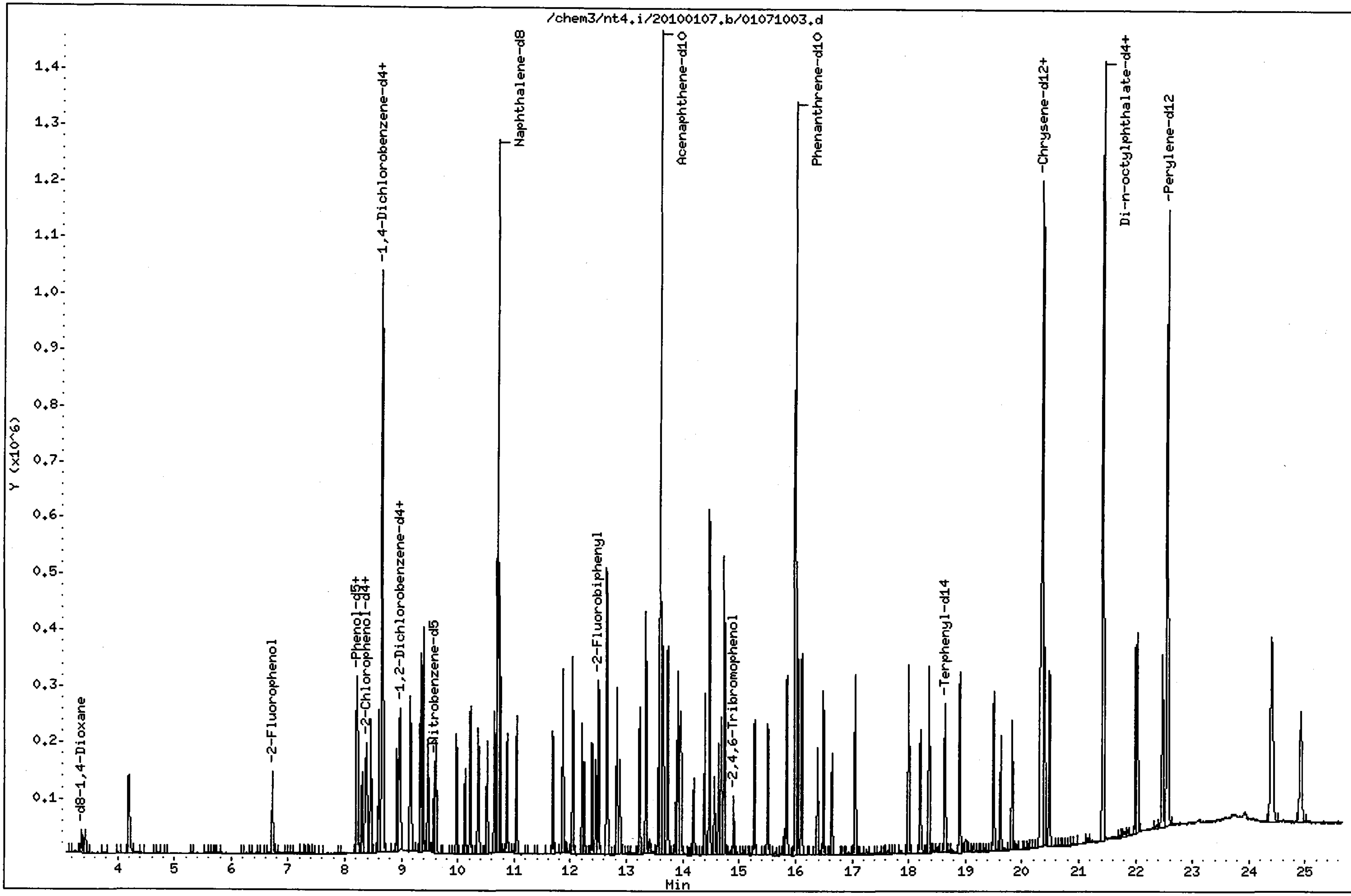
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071003.d
Date : 07-JAN-2010 14:15
Client ID: IC050107
Sample Info: IC050107

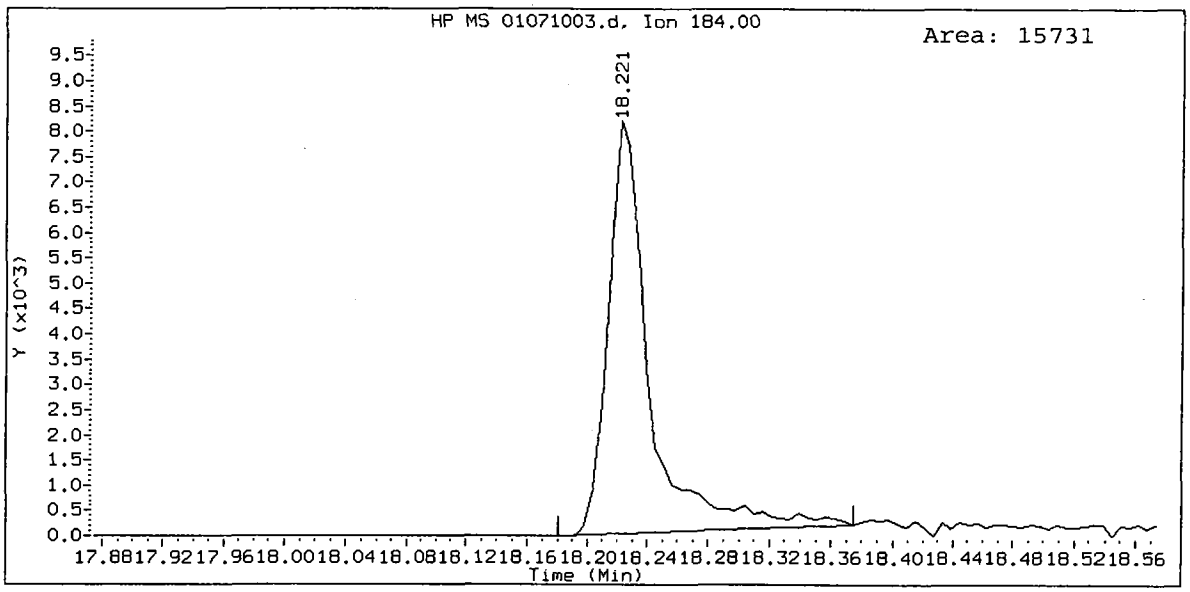
Column phase: ZB-5msi

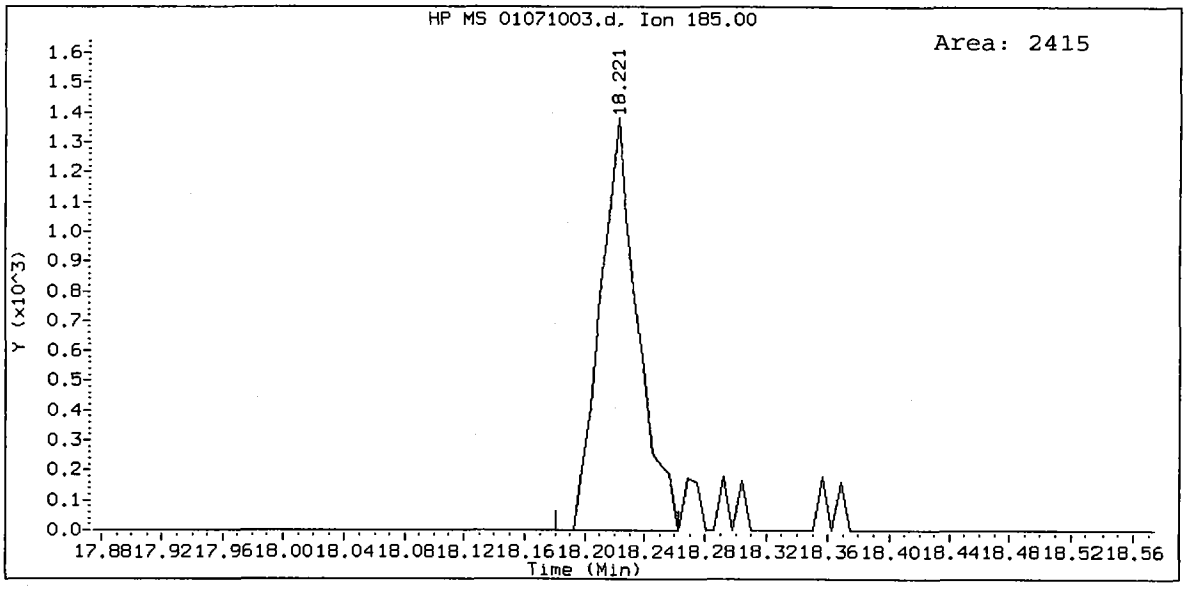
Instrument: nt4.i

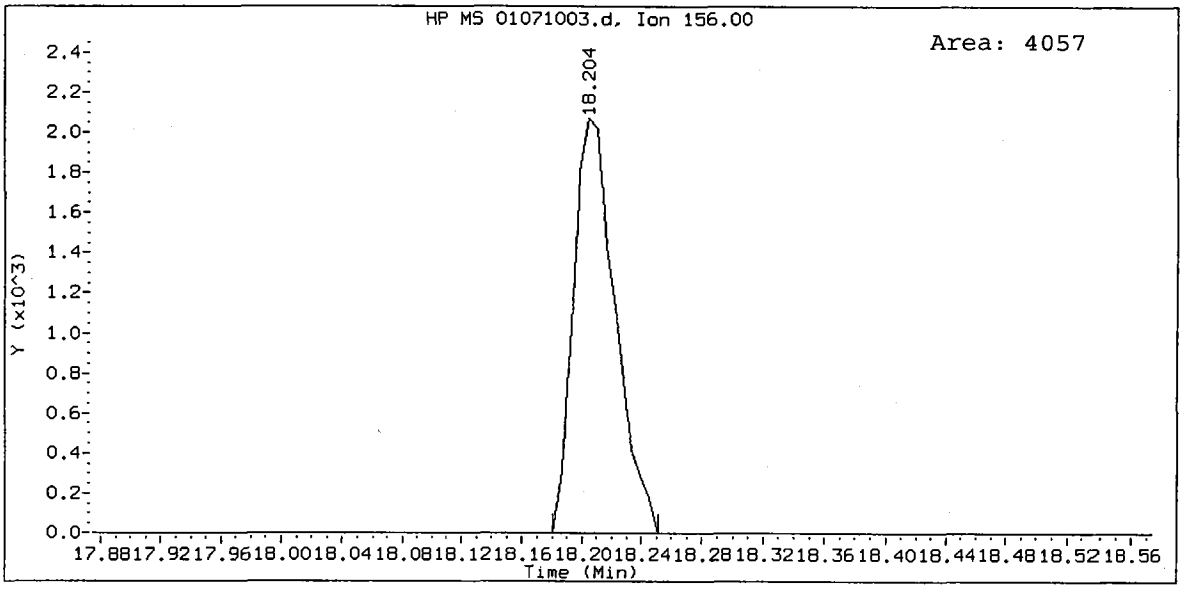
Operator: JZ
Column diameter: 0.32



IC050107, /chem3/nt4.i/20100107.b/01071003.d
Benzidine Amount: 1.85







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071004.d
Lab Smp Id: IC100107 Client Smp ID: IC100107
Inj Date : 07-JAN-2010 14:49
Operator : JZ Inst ID: nt4.i
Smp Info : IC100107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 14:49 Cal File: 01071004.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 07/10/

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	6.727	6.723	(0.777)	147263	10.0000	9.549
$ 2 Phenol-d5	99	8.213	8.209	(0.948)	155036	10.0000	9.534
3 Phenol	94	8.231	8.227	(0.950)	199286	10.0000	9.047
$ 5 2-Chlorophenol-d4	132	8.366	8.362	(0.966)	147114	10.0000	9.363
4 Bis(2-Chloroethyl)ether	93	8.302	8.303	(0.959)	149386	10.0000	8.788
6 2-Chlorophenol	128	8.390	8.386	(0.969)	167617	10.0000	9.282
7 1,3-Dichlorobenzene	146	8.601	8.597	(0.993)	180430	10.0000	8.943
* 8 1,4-Dichlorobenzene-d4	152	8.660	8.656	(1.000)	281417	20.0000	
9 1,4-Dichlorobenzene	146	8.683	8.685	(1.003)	182430	10.0000	8.857
$ 10 1,2-Dichlorobenzene-d4	152	8.959	8.955	(1.035)	107098	10.0000	1.061
12 1,2-Dichlorobenzene	146	8.977	8.979	(1.037)	172487	10.0000	8.964
11 Benzyl alcohol	108	8.924	8.926	(1.031)	104047	10.0000	11.39
14 2,2'-oxybis(1-Chloropropane)	45	9.177	9.173	(1.060)	183656	10.0000	8.642
13 2-Methylphenol	108	9.153	9.155	(1.057)	140207	10.0000	8.900
17 Hexachloroethane	117	9.471	9.467	(1.094)	75604	10.0000	9.032
16 N-Nitroso-di-n-propylamine	70	9.382	9.378	(1.083)	110512	10.0000	8.733
15 4-Methylphenol	108	9.382	9.384	(1.083)	145397	10.0000	8.916
$ 18 Nitrobenzene-d5	82	9.582	9.578	(0.895)	170817	10.0000	9.491
19 Nitrobenzene	77	9.612	9.608	(0.897)	166147	10.0000	8.719
20 Isophorone	82	9.982	9.978	(0.932)	254733	10.0000	8.912
21 2-Nitrophenol	139	10.128	10.130	(0.946)	88437	10.0000	9.347
22 2,4-Dimethylphenol	107	10.222	10.224	(0.954)	166616	10.0000	9.060
23 Bis(2-Chloroethoxy)methane	93	10.358	10.359	(0.967)	179677	10.0000	8.921
24 Benzoic acid	105	10.410	10.342	(0.972)	98690	20.0000	24.30
25 2,4-Dichlorophenol	162	10.522	10.518	(0.982)	130750	10.0000	9.325
26 1,2,4-Trichlorobenzene	180	10.645	10.647	(0.994)	138260	10.0000	8.956
* 27 Naphthalene-d8	136	10.710	10.712	(1.000)	999242	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.739	10.741	(1.003)	467250	10.0000	8.767
	29 4-Chloroaniline	127	10.869	10.871	(1.015)	191598	10.0000	9.313
	30 Hexachlorobutadiene	225	11.045	11.047	(1.031)	78258	10.0000	8.961
	31 4-Chloro-3-methylphenol	107	11.685	11.687	(1.091)	134976	10.0000	8.834
	32 2-Methylnaphthalene	141	11.867	11.869	(1.108)	264101	10.0000	9.264
	33 Hexachlorocyclopentadiene	237	12.237	12.239	(0.900)	75375	10.0000	9.527
	34 2,4,6-Trichlorophenol	196	12.384	12.386	(0.911)	86501	10.0000	9.065
	35 2,4,5-Trichlorophenol	196	12.449	12.451	(0.916)	87643	10.0000	9.165
$	36 2-Fluorobiphenyl	172	12.502	12.504	(0.920)	327777	10.0000	9.422
	37 2-Chloronaphthalene	162	12.654	12.656	(0.931)	283575	10.0000	8.855
	38 2-Nitroaniline	65	12.878	12.880	(0.947)	89643	10.0000	9.327
	39 Dimethylphthalate	163	13.230	13.226	(0.973)	325451	10.0000	8.804
	40 Acenaphthylene	152	13.342	13.344	(0.981)	447946	10.0000	8.923
	41 2,6-Dinitrotoluene	165	13.336	13.332	(0.981)	73727	10.0000	9.106
*	42 Acenaphthene-d10	164	13.594	13.596	(1.000)	574053	20.0000	
	43 3-Nitroaniline	138	12.878	12.880	(0.947)	106543	10.0000	9.580
	44 Acenaphthene	153	13.647	13.649	(1.004)	286023	10.0000	8.876
	45 2,4-Dinitrophenol	184	13.724	13.725	(1.010)	52539	20.0000	27.18
	46 Dibenzofuran	168	13.906	13.908	(1.023)	406047	10.0000	9.157
	47 4-Nitrophenol	109	13.876	13.866	(1.021)	44505	10.0000	9.185
	48 2,4-Dinitrotoluene	165	13.970	13.972	(1.028)	100156	10.0000	9.506
	50 Diethylphthalate	149	14.387	14.383	(1.058)	349795	10.0000	8.942
	49 Fluorene	166	14.470	14.472	(1.064)	326919	10.0000	8.814
	51 4-Chlorophenyl-phenylether	204	14.476	14.477	(1.065)	144921	10.0000	8.786
	52 4-Nitroaniline	138	14.564	14.560	(1.071)	81354	10.0000	9.345
	53 4,6-Dinitro-2-methylphenol	198	14.634	14.630	(0.914)	97471	20.0000	23.10
	54 N-Nitrosodiphenylamine	169	14.681	14.683	(0.917)	187471	10.0000	8.830
$	55 2,4,6-Tribromophenol	330	14.899	14.900	(1.096)	31804	10.0000	9.666
	56 4-Bromophenyl-phenylether	248	15.269	15.270	(0.954)	82431	10.0000	8.913
	57 Hexachlorobenzene	284	15.509	15.511	(0.969)	80434	10.0000	8.783
	58 Pentachlorophenol	266	15.809	15.811	(0.988)	8985	10.0000	9.629
*	59 Phenanthrene-d10	188	16.003	16.005	(1.000)	907483	20.0000	
	60 Phenanthrene	178	16.038	16.034	(1.002)	449309	10.0000	8.722
	61 Anthracene	178	16.109	16.110	(1.007)	453327	10.0000	8.898
	62 Carbazole	167	16.385	16.387	(1.024)	241133	10.0000	8.060
	63 Di-n-butylphthalate	149	17.054	17.056	(1.066)	561425	10.0000	9.007
	64 Fluoranthene	202	17.994	17.996	(1.124)	456452	10.0000	9.107
	65 Pyrene	202	18.359	18.360	(0.902)	469131	10.0000	8.662
$	66 Terphenyl-d14	244	18.640	18.642	(0.915)	283446	10.0000	9.285
	67 Butylbenzylphthalate	149	19.504	19.500	(0.958)	253208	10.0000	8.963
	68 Benzo(a)anthracene	228	20.332	20.328	(0.999)	427730	10.0000	8.703
*	69 Chrysene-d12	240	20.362	20.358	(1.000)	770789	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.315	20.317	(0.998)	158939	10.0000	9.751
	71 Chrysene	228	20.397	20.399	(1.002)	411339	10.0000	8.776
	72 bis(2-Ethylhexyl)phthalate	149	20.485	20.487	(0.956)	350290	10.0000	8.998
*	134 Di-n-octylphthalate-d4	153	21.425	21.421	(1.000)	1301379	20.0000	
	73 Di-n-octylphthalate	149	21.431	21.433	(1.000)	606131	10.0000	8.776

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.001	21.997	(0.975)	462540	10.0000	9.007
75	Benzo(k)fluoranthene	252	22.036	22.032	(0.977)	479603	10.0000	8.544
76	Benzo(a)pyrene	252	22.471	22.467	(0.996)	426617	10.0000	8.895
* 77	Perylene-d12	264	22.559	22.561	(1.000)	816539	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.397	24.388	(1.081)	490132	10.0000	8.713
79	Dibenzo(a,h)anthracene	278	24.409	24.411	(1.082)	397688	10.0000	8.698
80	Benzo(g,h,i)perylene	276	24.920	24.916	(1.105)	426991	10.0000	8.796
90	N-Nitrosodimethylamine	74	4.225	4.215	(0.488)	88133	10.0000	8.975
103	Pyridine	79	4.201	4.209	(0.485)	160710	10.0000	9.351
91	Aniline	93	8.208	8.209	(0.948)	234567	10.0000	9.569
105	1-methylnaphthalene	141	12.044	12.045	(1.125)	250456	10.0000	8.846
93	Benzidine	184	18.223	18.225	(0.895)	108254	10.0000	14.57
111	Azobenzene (1,2-DP-Hydrazine)	77	14.734	14.736	(1.084)	312197	10.0000	8.627
143	1,4-Dioxane	88	3.455	3.445	(0.399)	56718	10.0000	8.799
$ 137	d8-1,4-Dioxane	96	3.391	3.381	(0.392)	57368	10.0000	8.647
151	1,2,4,5-Tetrachlorobenzene	216	12.208	12.210	(0.898)	132529	10.0000	8.869
120	2,3,4,6-Tetrachlorophenol	232	14.194	14.195	(1.044)	54831	10.0000	9.171
144	alpha-Terpineol	59	10.745	10.747	(1.003)	72289	10.0000	8.994
98	Retene	219	18.899	18.901	(0.928)	213880	10.0000	9.116
133	Butylatedhydroxytoluene	205	13.729	13.731	(1.010)	273202	10.0000	9.165
115	Tributyl Phosphate	99	14.734	14.730	(0.921)	425508	10.0000	9.108
116	Dibutyl Phenyl Phosphate	175	16.490	16.492	(1.030)	307109	10.0000	9.509
117	Butyl Diphenyl Phosphate	94	18.200	18.202	(0.894)	103493	10.0000	9.103
118	Triphenyl Phosphate	326	19.827	19.823	(0.974)	73822	10.0000	9.367
123	Acetophenone	105	9.341	9.337	(0.872)	310650	10.0000	8.983
179	n-Decane	57	8.460	8.456	(0.977)	157825	10.0000	9.125
180	n-Octadecane	57	15.844	15.846	(0.990)	203043	10.0000	8.992
168	Pentachlorobenzene	250	13.947	13.949	(1.026)	103436	10.0000	8.937
113	Diphenyl Oxide	170	12.831	12.833	(0.944)	195436	10.0000	9.143
112	Biphenyl	154	12.643	12.645	(0.930)	358803	10.0000	9.112

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071004.d
Lab Smp Id: IC100107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC100107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	281417	-1.64
27 Naphthalene-d8	1035557	517778	2071114	999242	-3.51
42 Acenaphthene-d10	594267	297134	1188534	574053	-3.40
59 Phenanthrene-d10	951721	475860	1903442	907483	-4.65
69 Chrysene-d12	794862	397431	1589724	770789	-3.03
134 Di-n-octylphthala	1280700	640350	2561400	1301379	1.61
77 Perylene-d12	826094	413047	1652188	816539	-1.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	-0.03
27 Naphthalene-d8	10.71	10.21	11.21	10.71	-0.03
42 Acenaphthene-d10	13.60	13.10	14.10	13.59	-0.02
59 Phenanthrene-d10	16.01	15.51	16.51	16.00	-0.02
69 Chrysene-d12	20.36	19.86	20.86	20.36	-0.01
134 Di-n-octylphthala	21.42	20.92	21.92	21.42	0.01
77 Perylene-d12	22.56	22.06	23.06	22.56	-0.01

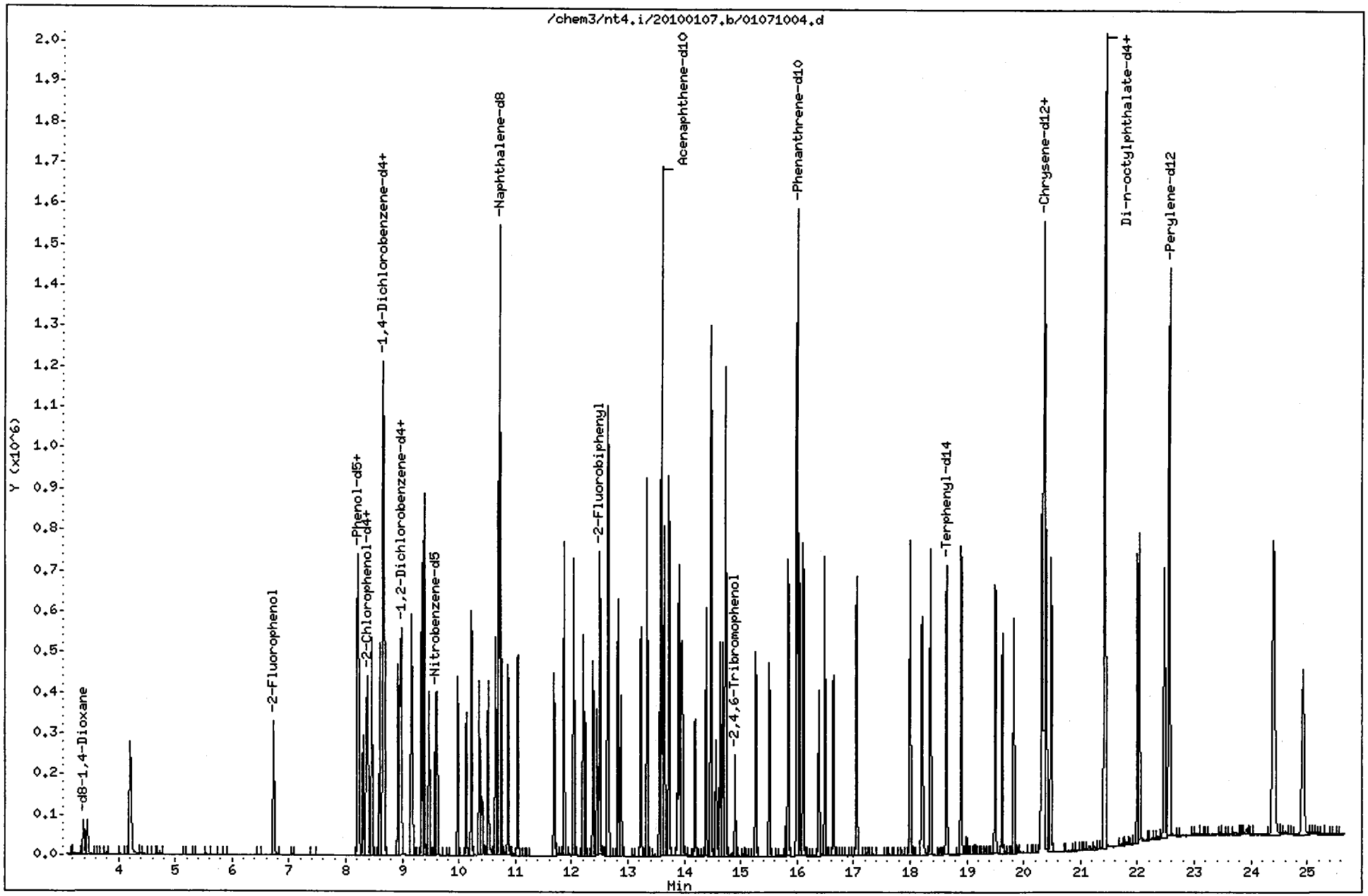
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071004.d
Date : 07-JAN-2010 14:49
Client ID: IC100107
Sample Info: IC100107

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071005.d
Lab Smp Id: IC250107 Client Smp ID: IC250107
Inj Date : 07-JAN-2010 15:22
Operator : JZ Inst ID: nt4.i
Smp Info : IC250107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 15:22 Cal File: 01071005.d
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 01/07/10

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.730	6.723	(0.777)	415448	25.0000	26.53
$ 2	Phenol-d5	99	8.216	8.209	(0.948)	420247	25.0000	26.23
3	Phenol	94	8.240	8.227	(0.951)	560147	25.0000	26.04
$ 5	2-Chlorophenol-d4	132	8.369	8.362	(0.966)	415279	25.0000	26.21
4	Bis(2-Chloroethyl)ether	93	8.310	8.303	(0.959)	424438	25.0000	25.70
6	2-Chlorophenol	128	8.392	8.386	(0.969)	480083	25.0000	26.27
7	1,3-Dichlorobenzene	146	8.604	8.597	(0.993)	507113	25.0000	25.56
* 8	1,4-Dichlorobenzene-d4	152	8.663	8.656	(1.000)	286117	20.0000	
9	1,4-Dichlorobenzene	146	8.686	8.685	(1.003)	518397	25.0000	25.68
$ 10	1,2-Dichlorobenzene-d4	152	8.962	8.955	(1.035)	296009	25.0000	5.877
12	1,2-Dichlorobenzene	146	8.980	8.979	(1.037)	485210	25.0000	25.69
11	Benzyl alcohol	108	8.933	8.926	(1.031)	291624	25.0000	28.20
14	2,2'-oxybis(1-Chloropropane)	45	9.180	9.173	(1.060)	462104	25.0000	25.60
13	2-Methylphenol	108	9.162	9.155	(1.058)	399139	25.0000	26.00
17	Hexachloroethane	117	9.467	9.467	(1.093)	217071	25.0000	26.03
16	N-Nitroso-di-n-propylamine	70	9.397	9.378	(1.085)	296616	25.0000	25.10

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	15	4-Methylphenol	108	9.391	9.384	(1.084)	416713	25.0000	26.06
$	18	Nitrobenzene-d5	82	9.585	9.578	(0.895)	472307	25.0000	26.42
	19	Nitrobenzene	77	9.614	9.608	(0.897)	464146	25.0000	25.53
	20	Isophorone	82	9.990	9.978	(0.933)	716618	25.0000	25.53
	21	2-Nitrophenol	139	10.131	10.130	(0.946)	263361	25.0000	26.50
	22	2,4-Dimethylphenol	107	10.231	10.224	(0.955)	476331	25.0000	26.10
	23	Bis(2-Chloroethoxy)methane	93	10.366	10.359	(0.968)	499028	25.0000	25.51
	24	Benzoic acid	105	10.484	10.342	(0.979)	434403	50.0000	59.93(M)
	25	2,4-Dichlorophenol	162	10.525	10.518	(0.982)	385286	25.0000	26.71
	26	1,2,4-Trichlorobenzene	180	10.648	10.647	(0.994)	391123	25.0000	25.48
*	27	Naphthalene-d8	136	10.713	10.712	(1.000)	1035557	20.0000	
	28	Naphthalene	128	10.748	10.741	(1.003)	1270895	25.0000	25.89
	29	4-Chloroaniline	127	10.877	10.871	(1.015)	550389	25.0000	26.01
	30	Hexachlorobutadiene	225	11.048	11.047	(1.031)	219448	25.0000	25.44
	31	4-Chloro-3-methylphenol	107	11.688	11.687	(1.091)	403436	25.0000	26.17
	32	2-Methylnaphthalene	141	11.870	11.869	(1.108)	724107	25.0000	26.05
	33	Hexachlorocyclopentadiene	237	12.240	12.239	(0.900)	240339	25.0000	27.08
	34	2,4,6-Trichlorophenol	196	12.387	12.386	(0.911)	262860	25.0000	25.89
	35	2,4,5-Trichlorophenol	196	12.452	12.451	(0.916)	266317	25.0000	25.86
$	36	2-Fluorobiphenyl	172	12.504	12.504	(0.920)	902592	25.0000	26.31
	37	2-Chloronaphthalene	162	12.663	12.656	(0.931)	797220	25.0000	25.76
	38	2-Nitroaniline	65	12.886	12.880	(0.948)	251558	25.0000	26.33
	39	Dimethylphthalate	163	13.239	13.226	(0.974)	918963	25.0000	25.50
	40	Acenaphthylene	152	13.350	13.344	(0.982)	1225707	25.0000	25.79
	41	2,6-Dinitrotoluene	165	13.339	13.332	(0.981)	216167	25.0000	26.18
*	42	Acenaphthene-d10	164	13.597	13.596	(1.000)	594267	20.0000	
	43	3-Nitroaniline	138	12.886	12.880	(0.948)	307173	25.0000	26.39
	44	Acenaphthene	153	13.650	13.649	(1.004)	805614	25.0000	25.68
	45	2,4-Dinitrophenol	184	13.732	13.725	(1.010)	230371	50.0000	62.08
	46	Dibenzofuran	168	13.914	13.908	(1.023)	1097183	25.0000	25.68
	47	4-Nitrophenol	109	13.879	13.866	(1.021)	145851	25.0000	28.56(M)
	48	2,4-Dinitrotoluene	165	13.979	13.972	(1.028)	293899	25.0000	26.25
	50	Diethylphthalate	149	14.396	14.383	(1.059)	978026	25.0000	25.52
	49	Fluorene	166	14.478	14.472	(1.065)	910267	25.0000	26.03
	51	4-Chlorophenyl-phenylether	204	14.478	14.477	(1.065)	408343	25.0000	25.74
	52	4-Nitroaniline	138	14.578	14.560	(1.072)	239051	25.0000	26.05
	53	4,6-Dinitro-2-methylphenol	198	14.649	14.630	(0.915)	331807	50.0000	57.86
	54	N-Nitrosodiphenylamine	169	14.690	14.683	(0.918)	540751	25.0000	25.14
$	55	2,4,6-Tribromophenol	330	14.907	14.900	(1.096)	93690	25.0000	26.52
	56	4-Bromophenyl-phenylether	248	15.271	15.270	(0.954)	234971	25.0000	25.18
	57	Hexachlorobenzene	284	15.512	15.511	(0.969)	231780	25.0000	24.96
	58	Pentachlorophenol	266	15.812	15.811	(0.988)	66319	25.0000	27.92
*	59	Phenanthrene-d10	188	16.006	16.005	(1.000)	951721	20.0000	
	60	Phenanthrene	178	16.041	16.034	(1.002)	1249202	25.0000	25.24
	61	Anthracene	178	16.117	16.110	(1.007)	1237929	25.0000	25.40
	62	Carbazole	167	16.387	16.387	(1.024)	810225	25.0000	27.78
	63	Di-n-butylphthalate	149	17.057	17.056	(1.066)	1496916	25.0000	25.48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
64	Fluoranthene	202	18.003	17.996	(1.125)	1232586	25.0000	25.34
65	Pyrene	202	18.367	18.360	(0.902)	1283427	25.0000	25.35
$ 66	Terphenyl-d14	244	18.643	18.642	(0.915)	749609	25.0000	25.43
67	Butylbenzylphthalate	149	19.507	19.500	(0.958)	693030	25.0000	25.56
68	Benzo(a)anthracene	228	20.335	20.328	(0.999)	1178886	25.0000	25.14
* 69	Chrysene-d12	240	20.364	20.358	(1.000)	794862	20.0000	
70	3,3'-Dichlorobenzidine	252	20.317	20.317	(0.998)	419604	25.0000	25.22
71	Chrysene	228	20.406	20.399	(1.002)	1120971	25.0000	25.17
72	bis(2-Ethylhexyl)phthalate	149	20.482	20.487	(0.956)	955217	25.0000	25.73
* 134	Di-n-octylphthalate-d4	153	21.422	21.421	(1.000)	1280700	20.0000	
73	Di-n-octylphthalate	149	21.434	21.433	(1.001)	1594562	25.0000	25.85
74	Benzo(b)fluoranthene	252	22.009	21.997	(0.976)	1271042	25.0000	24.99
75	Benzo(k)fluoranthene	252	22.044	22.032	(0.977)	1283051	25.0000	24.35
76	Benzo(a)pyrene	252	22.479	22.467	(0.996)	1165555	25.0000	25.36
* 77	Perylene-d12	264	22.561	22.561	(1.000)	826094	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.412	24.388	(1.082)	1369614	25.0000	25.94
79	Dibenzo(a,h)anthracene	278	24.430	24.411	(1.083)	1089643	25.0000	24.67
80	Benzo(g,h,i)perylene	276	24.946	24.916	(1.106)	1177750	25.0000	24.98
90	N-Nitrosodimethylamine	74	4.233	4.215	(0.489)	253704	25.0000	25.91
103	Pyridine	79	4.204	4.209	(0.485)	465353	25.0000	27.53
91	Aniline	93	8.210	8.209	(0.948)	618825	25.0000	25.84
105	1-methylnaphthalene	141	12.046	12.045	(1.124)	707128	25.0000	25.75
93	Benzidine	184	18.226	18.225	(0.895)	326938	25.0000	24.83
111	Azobenzene (1,2-DP-Hydrazine)	77	14.743	14.736	(1.084)	790735	25.0000	24.92
143	1,4-Dioxane	88	3.464	3.445	(0.400)	163822	25.0000	25.46
$ 137	d8-1,4-Dioxane	96	3.393	3.381	(0.392)	164769	25.0000	25.28
151	1,2,4,5-Tetrachlorobenzene	216	12.211	12.210	(0.898)	460566	25.0000	30.11
120	2,3,4,6-Tetrachlorophenol	232	14.196	14.195	(1.044)	229844	25.0000	31.82
144	alpha-Terpineol	59	10.748	10.747	(1.003)	189429	25.0000	25.83
98	Retene	219	18.908	18.901	(0.928)	601027	25.0000	26.01
133	Butylatedhydroxytoluene	205	13.732	13.731	(1.010)	755346	25.0000	26.49
115	Tributyl Phosphate	99	14.743	14.730	(0.921)	1121147	25.0000	25.73
116	Dibutyl Phenyl Phosphate	175	16.493	16.492	(1.030)	865266	25.0000	26.26
117	Butyl Diphenyl Phosphate	94	18.203	18.202	(0.894)	283696	25.0000	26.39
118	Triphenyl Phosphate	326	19.830	19.823	(0.974)	206044	25.0000	25.50
123	Acetophenone	105	9.350	9.337	(0.873)	857869	25.0000	25.78
179	n-Decane	57	8.463	8.456	(0.977)	406134	25.0000	25.73
180	n-Octadecane	57	15.847	15.846	(0.990)	498077	25.0000	24.86
168	Pentachlorobenzene	250	13.955	13.949	(1.026)	293808	25.0000	25.48
113	Diphenyl Oxide	170	12.833	12.833	(0.944)	545499	25.0000	25.62
112	Biphenyl	154	12.645	12.645	(0.930)	958819	25.0000	25.96

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071005.d
Lab Smp Id: IC250107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC250107
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	286117	0.00
27 Naphthalene-d8	1035557	517778	2071114	1035557	0.00
42 Acenaphthene-d10	594267	297134	1188534	594267	0.00
59 Phenanthrene-d10	951721	475860	1903442	951721	0.00
69 Chrysene-d12	794862	397431	1589724	794862	0.00
134 Di-n-octylphthala	1280700	640350	2561400	1280700	0.00
77 Perylene-d12	826094	413047	1652188	826094	0.00

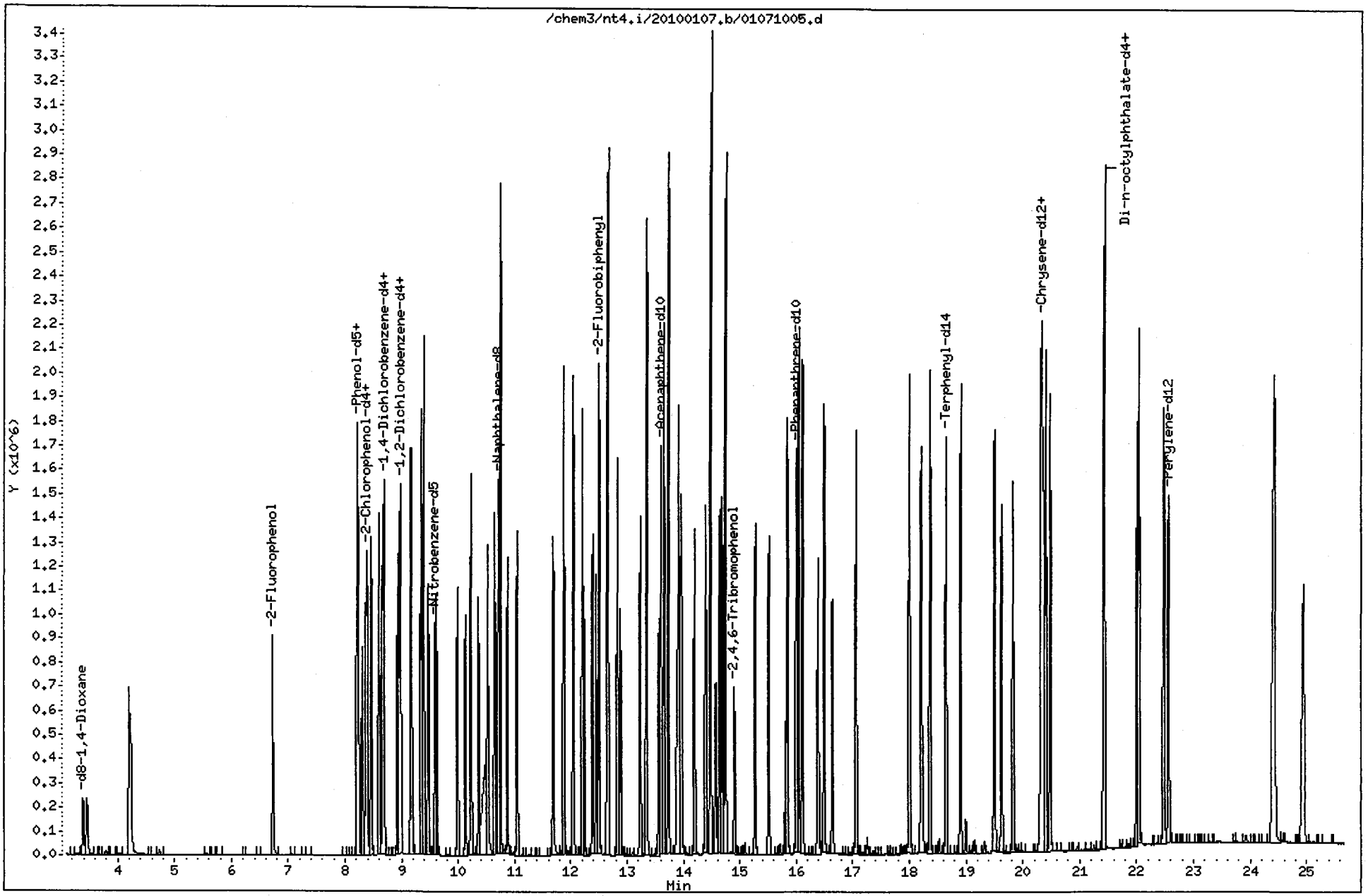
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	0.00
27 Naphthalene-d8	10.71	10.21	11.21	10.71	0.00
42 Acenaphthene-d10	13.60	13.10	14.10	13.60	0.00
59 Phenanthrene-d10	16.01	15.51	16.51	16.01	0.00
69 Chrysene-d12	20.36	19.86	20.86	20.36	0.00
134 Di-n-octylphthala	21.42	20.92	21.92	21.42	0.00
77 Perylene-d12	22.56	22.06	23.06	22.56	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.

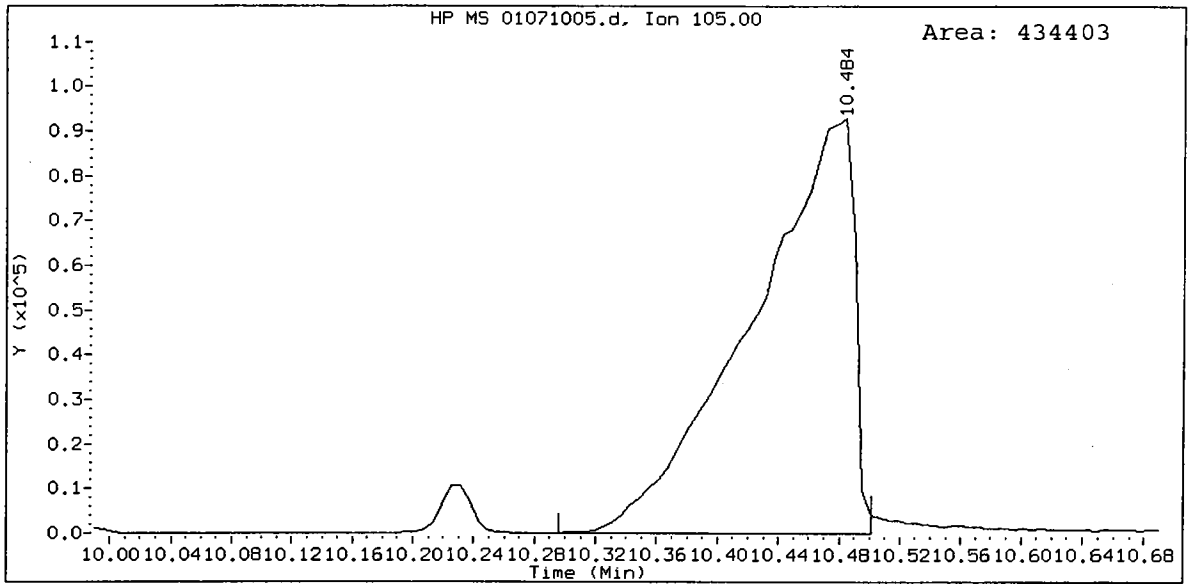
Data File: /chem3/nt4.i/20100107.b/01071005.d
Date : 07-JAN-2010 15:22
Client ID: IC250107
Sample Info: IC250107
Volume Injected (uL): 1.0
Column phase: ZB-5msi

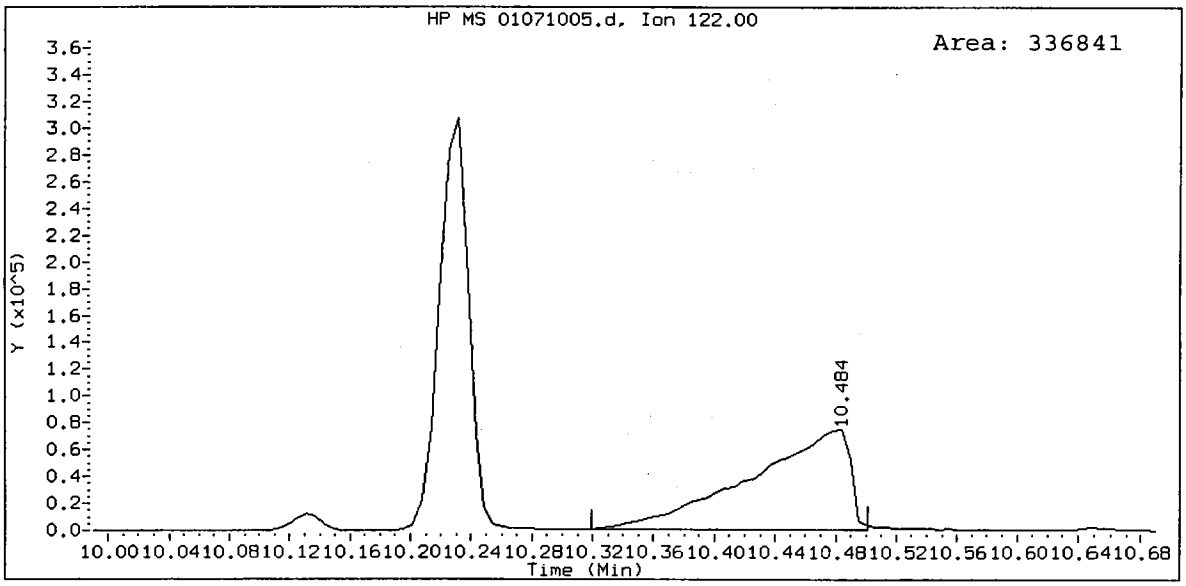
Instrument: nt4.i

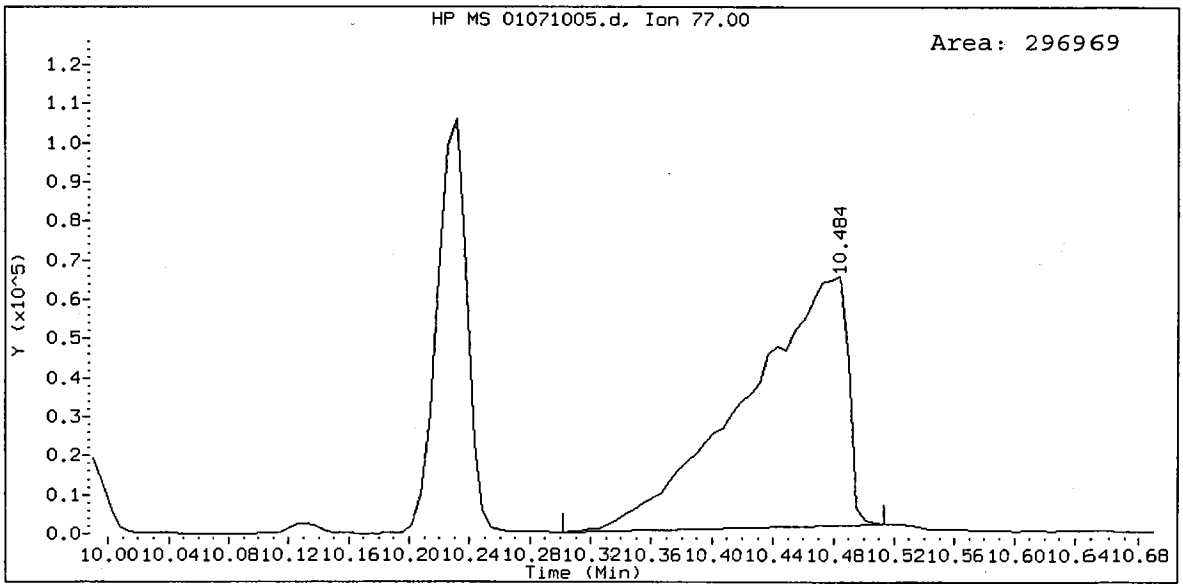
Operator: JZ
Column diameter: 0.32



IC250107, /chem3/nt4.i/20100107.b/01071005.d
Benzoic acid Amount: 59.93







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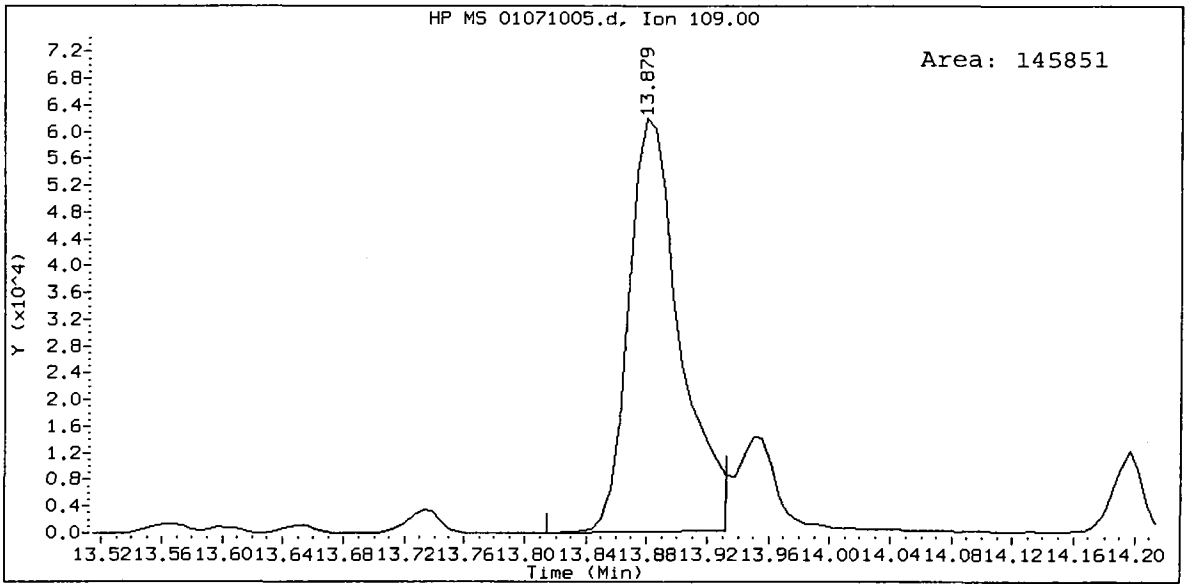
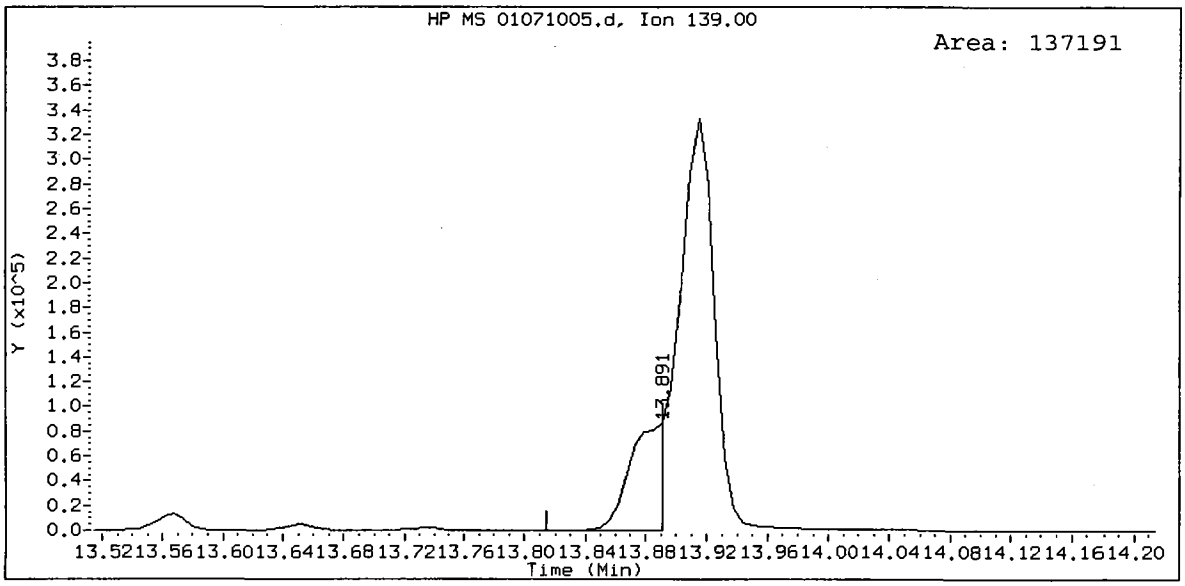
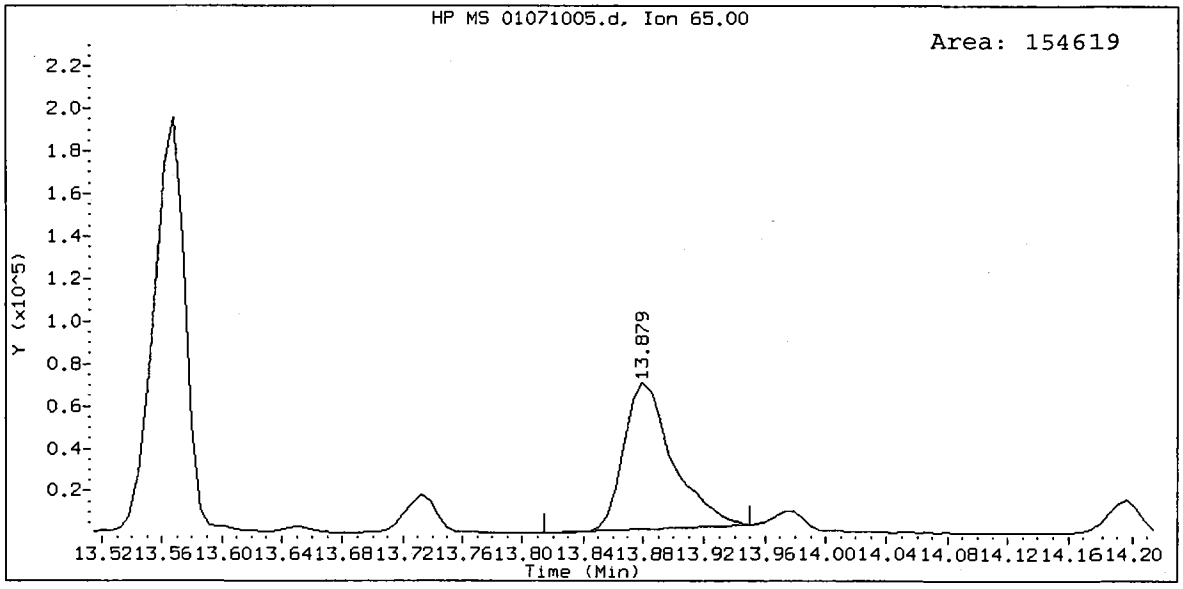
4-Nitrophenol Amount: 28.56







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071006.d
Lab Smp Id: IC400107 Client Smp ID: IC400107
Inj Date : 07-JAN-2010 15:55
Operator : JZ Inst ID: nt4.i
Smp Info : IC400107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 15:55 Cal File: 01071006.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 01/10/07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.731	6.723	(0.777)	612839	40.0000	40.58
$	2 Phenol-d5	99	8.223	8.209	(0.949)	616126	40.0000	39.88
	3 Phenol	94	8.246	8.227	(0.952)	818399	40.0000	39.46
$	5 2-Chlorophenol-d4	132	8.369	8.362	(0.966)	617965	40.0000	40.44
	4 Bis(2-Chloroethyl)ether	93	8.317	8.303	(0.960)	620732	40.0000	38.97
	6 2-Chlorophenol	128	8.393	8.386	(0.969)	704371	40.0000	39.97
	7 1,3-Dichlorobenzene	146	8.604	8.597	(0.993)	753571	40.0000	39.39
*	8 1,4-Dichlorobenzene-d4	152	8.663	8.656	(1.000)	275908	20.0000	
	9 1,4-Dichlorobenzene	146	8.687	8.685	(1.003)	771198	40.0000	39.62
$	10 1,2-Dichlorobenzene-d4	152	8.963	8.955	(1.035)	439274	40.0000	9.044
	12 1,2-Dichlorobenzene	146	8.986	8.979	(1.037)	723400	40.0000	39.72
	11 Benzyl alcohol	108	8.939	8.926	(1.032)	436514	40.0000	43.78
	14 2,2'-oxybis(1-Chloropropane)	45	9.180	9.173	(1.060)	629566	40.0000	36.17
	13 2-Methylphenol	108	9.168	9.155	(1.058)	577917	40.0000	39.04
	17 Hexachloroethane	117	9.474	9.467	(1.094)	321583	40.0000	39.98
	16 N-Nitroso-di-n-propylamine	70	9.403	9.378	(1.085)	434234	40.0000	38.11
	15 4-Methylphenol	108	9.392	9.384	(1.084)	607016	40.0000	39.37
$	18 Nitrobenzene-d5	82	9.591	9.578	(0.895)	690644	40.0000	39.71
	19 Nitrobenzene	77	9.621	9.608	(0.898)	681495	40.0000	38.52
	20 Isophorone	82	9.997	9.978	(0.933)	1065949	40.0000	39.04
	21 2-Nitrophenol	139	10.138	10.130	(0.946)	390940	40.0000	40.43
	22 2,4-Dimethylphenol	107	10.232	10.224	(0.955)	698126	40.0000	39.31
	23 Bis(2-Chloroethoxy)methane	93	10.367	10.359	(0.968)	743334	40.0000	39.05
	24 Benzoic acid	105	10.514	10.342	(0.981)	762615	80.0000	108.1
	25 2,4-Dichlorophenol	162	10.525	10.518	(0.982)	560814	40.0000	39.96
	26 1,2,4-Trichlorobenzene	180	10.655	10.647	(0.995)	588690	40.0000	39.41
*	27 Naphthalene-d8	136	10.713	10.712	(1.000)	1007609	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.749	10.741	(1.003)	1817896	40.0000	38.05
	29 4-Chloroaniline	127	10.878	10.871	(1.015)	851168	40.0000	41.35
	30 Hexachlorobutadiene	225	11.048	11.047	(1.031)	330492	40.0000	39.38
	31 4-Chloro-3-methylphenol	107	11.689	11.687	(1.091)	598393	40.0000	39.89
	32 2-Methylnaphthalene	141	11.871	11.869	(1.108)	1067525	40.0000	39.47
	33 Hexachlorocyclopentadiene	237	12.241	12.239	(0.900)	368908	40.0000	43.01
	34 2,4,6-Trichlorophenol	196	12.388	12.386	(0.911)	397487	40.0000	40.52
	35 2,4,5-Trichlorophenol	196	12.452	12.451	(0.916)	416095	40.0000	41.82
$	36 2-Fluorobiphenyl	172	12.505	12.504	(0.920)	1312199	40.0000	39.59
	37 2-Chloronaphthalene	162	12.664	12.656	(0.931)	1168135	40.0000	39.07
	38 2-Nitroaniline	65	12.887	12.880	(0.948)	371733	40.0000	40.28
	39 Dimethylphthalate	163	13.239	13.226	(0.974)	1373513	40.0000	39.44
	40 Acenaphthylene	152	13.351	13.344	(0.982)	1780212	40.0000	38.78
	41 2,6-Dinitrotoluene	165	13.345	13.332	(0.981)	324101	40.0000	40.63
*	42 Acenaphthene-d10	164	13.598	13.596	(1.000)	574151	20.0000	
	43 3-Nitroaniline	138	12.887	12.880	(0.948)	469117	40.0000	41.72
	44 Acenaphthene	153	13.656	13.649	(1.004)	1187600	40.0000	39.18
	45 2,4-Dinitrophenol	184	13.739	13.725	(1.010)	386838	80.0000	107.9
	46 Dibenzofuran	168	13.921	13.908	(1.024)	1632159	40.0000	39.54
	47 4-Nitrophenol	109	13.886	13.866	(1.021)	212896	40.0000	42.66(M)
	48 2,4-Dinitrotoluene	165	13.985	13.972	(1.028)	448623	40.0000	41.47
	50 Diethylphthalate	149	14.402	14.383	(1.059)	1459826	40.0000	39.42
	49 Fluorene	166	14.485	14.472	(1.065)	1321820	40.0000	39.13
	51 4-Chlorophenyl-phenylether	204	14.485	14.477	(1.065)	606436	40.0000	39.56
	52 4-Nitroaniline	138	14.590	14.560	(1.073)	367846	40.0000	41.49
	53 4,6-Dinitro-2-methylphenol	198	14.655	14.630	(0.916)	514486	80.0000	93.47
	54 N-Nitrosodiphenylamine	169	14.696	14.683	(0.918)	804711	40.0000	38.98
$	55 2,4,6-Tribromophenol	330	14.908	14.900	(1.096)	143259	40.0000	41.96
	56 4-Bromophenyl-phenylether	248	15.272	15.270	(0.954)	354788	40.0000	39.61
	57 Hexachlorobenzene	284	15.513	15.511	(0.969)	351166	40.0000	39.40
	58 Pentachlorophenol	266	15.818	15.811	(0.988)	125973	40.0000	55.25
*	59 Phenanthrene-d10	188	16.006	16.005	(1.000)	913448	20.0000	
	60 Phenanthrene	178	16.047	16.034	(1.003)	1839057	40.0000	38.72
	61 Anthracene	178	16.118	16.110	(1.007)	1807831	40.0000	38.64
	62 Carbazole	167	16.394	16.387	(1.024)	1036478	40.0000	37.03
	63 Di-n-butylphthalate	149	17.058	17.056	(1.066)	2162901	40.0000	38.36
	64 Fluoranthene	202	18.003	17.996	(1.125)	1807802	40.0000	38.73
	65 Pyrene	202	18.368	18.360	(0.902)	1866593	40.0000	39.05
$	66 Terphenyl-d14	244	18.650	18.642	(0.916)	1108996	40.0000	39.84
	67 Butylbenzylphthalate	149	19.507	19.500	(0.958)	999001	40.0000	39.02
	68 Benzo(a)anthracene	228	20.342	20.328	(0.999)	1735323	40.0000	39.19
*	69 Chrysene-d12	240	20.365	20.358	(1.000)	750618	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.324	20.317	(0.998)	644044	40.0000	40.99
	71 Chrysene	228	20.412	20.399	(1.002)	1625132	40.0000	38.64
	72 bis(2-Ethylhexyl)phthalate	149	20.488	20.487	(0.956)	1392955	40.0000	40.34
*	134 Di-n-octylphthalate-d4	153	21.428	21.421	(1.000)	1191095	20.0000	
	73 Di-n-octylphthalate	149	21.440	21.433	(1.001)	2228485	40.0000	38.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	74 Benzo(b)fluoranthene	252	22.016	21.997	(0.976)	1873823	40.0000	38.73
	75 Benzo(k)fluoranthene	252	22.051	22.032	(0.977)	1855997	40.0000	37.03
	76 Benzo(a)pyrene	252	22.486	22.467	(0.997)	1707376	40.0000	39.05
*	77 Perylene-d12	264	22.562	22.561	(1.000)	785897	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.424	24.388	(1.083)	2060662	40.0000	41.02
	79 Dibenzo(a,h)anthracene	278	24.448	24.411	(1.084)	1635103	40.0000	38.91
	80 Benzo(g,h,i)perylene	276	24.959	24.916	(1.106)	1765554	40.0000	39.36
	90 N-Nitrosodimethylamine	74	4.240	4.215	(0.489)	375895	40.0000	39.82
	103 Pyridine	79	4.205	4.209	(0.485)	700435	40.0000	42.98
	91 Aniline	93	8.217	8.209	(0.948)	921624	40.0000	39.91
	105 1-methylnaphthalene	141	12.047	12.045	(1.124)	1048772	40.0000	39.24
	93 Benzidine	184	18.227	18.225	(0.895)	638124	40.0000	51.33
	111 Azobenzene (1,2-DP-Hydrazine)	77	14.743	14.736	(1.084)	1089009	40.0000	35.53
	143 1,4-Dioxane	88	3.458	3.445	(0.399)	246708	40.0000	39.76
$	137 d8-1,4-Dioxane	96	3.394	3.381	(0.392)	244986	40.0000	38.98
	151 1,2,4,5-Tetrachlorobenzene	216	12.211	12.210	(0.898)	562720	40.0000	38.08
	120 2,3,4,6-Tetrachlorophenol	232	14.197	14.195	(1.044)	295720	40.0000	42.38
	144 alpha-Terpineol	59	10.754	10.747	(1.004)	271378	40.0000	38.03
	98 Retene	219	18.908	18.901	(0.928)	894473	40.0000	40.99
	133 Butylatedhydroxytoluene	205	13.739	13.731	(1.010)	1112749	40.0000	40.39
	115 Tributyl Phosphate	99	14.755	14.730	(0.922)	1611554	40.0000	38.54
	116 Dibutyl Phenyl Phosphate	175	16.500	16.492	(1.031)	1288952	40.0000	40.76
	117 Butyl Diphenyl Phosphate	94	18.209	18.202	(0.894)	410459	40.0000	40.44
	118 Triphenyl Phosphate	326	19.836	19.823	(0.974)	310229	40.0000	40.65
	123 Acetophenone	105	9.351	9.337	(0.873)	1258908	40.0000	38.89
	179 n-Decane	57	8.463	8.456	(0.977)	575129	40.0000	37.79
	180 n-Octadecane	57	15.848	15.846	(0.990)	697866	40.0000	36.29
	168 Pentachlorobenzene	250	13.956	13.949	(1.026)	442716	40.0000	39.73
	113 Diphenyl Oxide	170	12.834	12.833	(0.944)	821343	40.0000	39.92
	112 Biphenyl	154	12.646	12.645	(0.930)	1400482	40.0000	39.25

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071006.d
Lab Smp Id: IC400107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC400107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	275908	-3.57
27 Naphthalene-d8	1035557	517778	2071114	1007609	-2.70
42 Acenaphthene-d10	594267	297134	1188534	574151	-3.39
59 Phenanthrene-d10	951721	475860	1903442	913448	-4.02
69 Chrysene-d12	794862	397431	1589724	750618	-5.57
134 Di-n-octylphthala	1280700	640350	2561400	1191095	-7.00
77 Perylene-d12	826094	413047	1652188	785897	-4.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	0.01
27 Naphthalene-d8	10.71	10.21	11.21	10.71	0.01
42 Acenaphthene-d10	13.60	13.10	14.10	13.60	0.00
59 Phenanthrene-d10	16.01	15.51	16.51	16.01	0.00
69 Chrysene-d12	20.36	19.86	20.86	20.37	0.00
134 Di-n-octylphthala	21.42	20.92	21.92	21.43	0.03
77 Perylene-d12	22.56	22.06	23.06	22.56	0.00

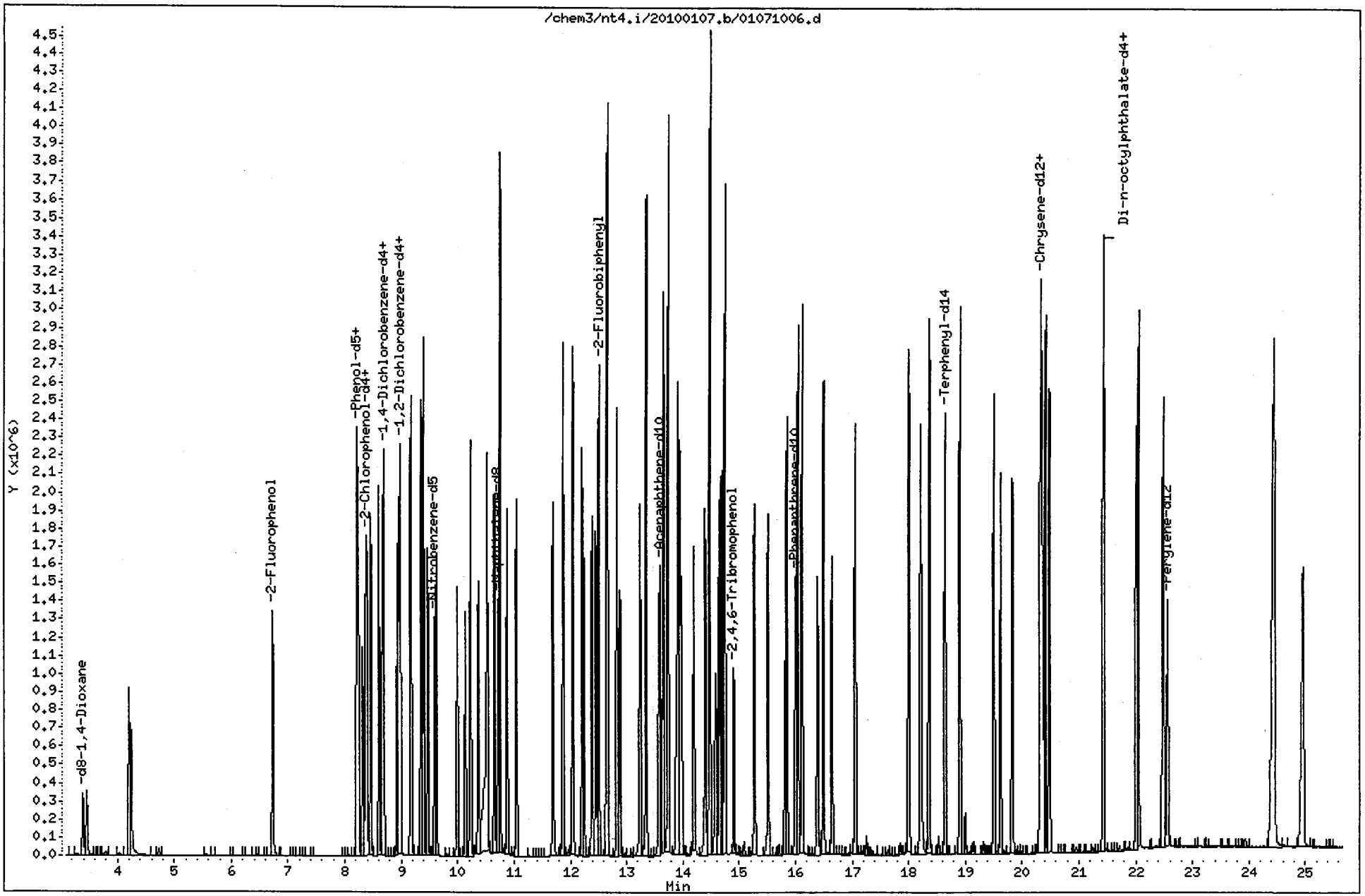
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071006.d
Date : 07-JAN-2010 15:55
Client ID: IC400107
Sample Info: IC400107

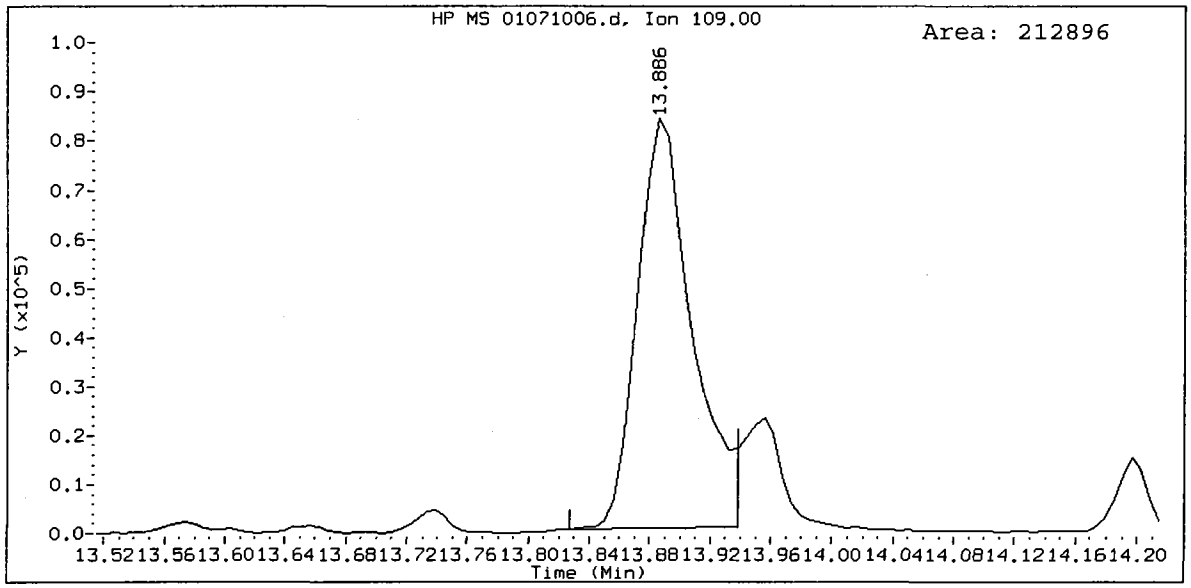
Instrument: nt4.i

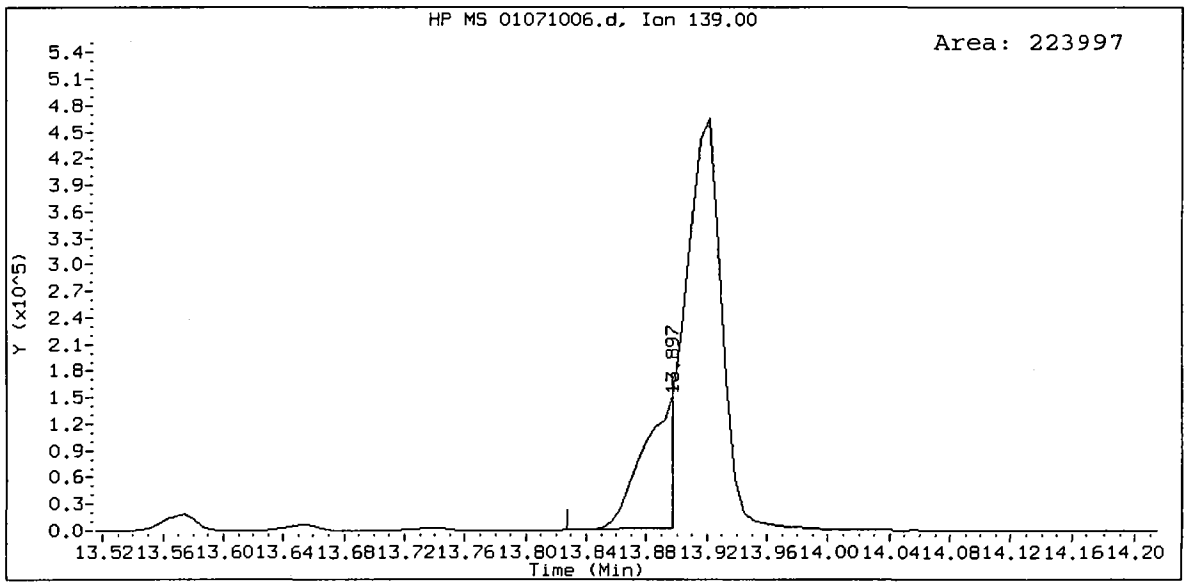
Operator: JZ
Column diameter: 0.32

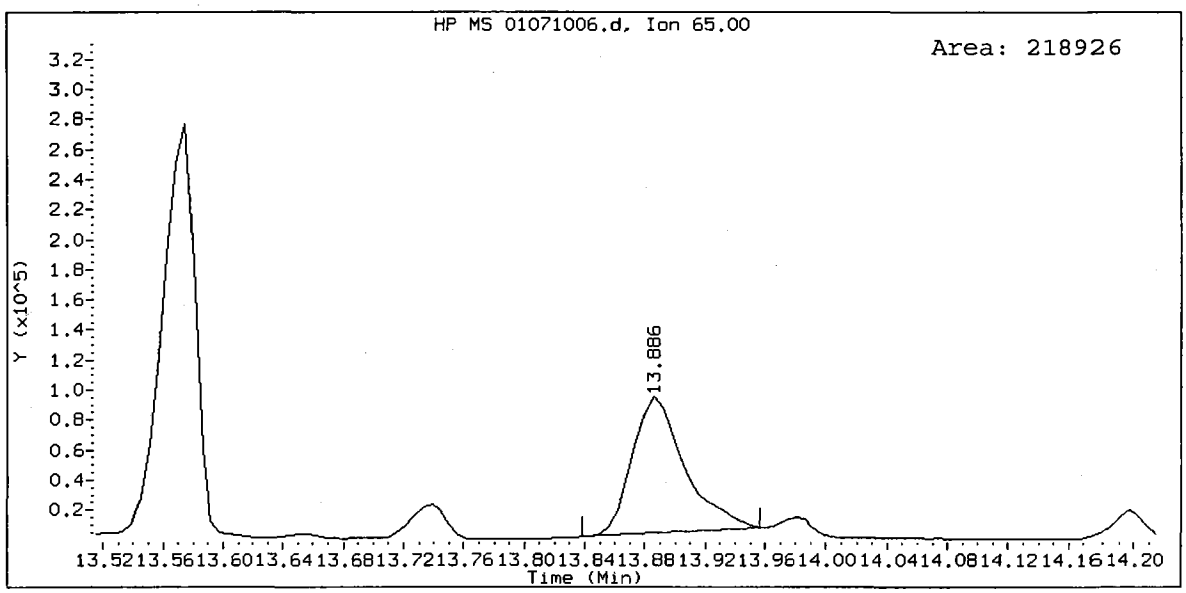
Column phase: ZB-5msi



IC400107, /chem3/nt4.i/20100107.b/01071006.d
4-Nitrophenol Amount: 42.66







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071007.d
Lab Smp Id: IC600107 Client Smp ID: IC600107
Inj Date : 07-JAN-2010 16:29
Operator : JZ Inst ID: nt4.i
Smp Info : IC600107
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 16:29 Cal File: 01071007.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

JZ 01/07/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.732	6.723	(0.777)	865856	60.0000	58.55
$ 2	Phenol-d5	99	8.230	8.209	(0.950)	858971	60.0000	56.79
3	Phenol	94	8.248	8.227	(0.952)	1158365	60.0000	57.04
$ 5	2-Chlorophenol-d4	132	8.377	8.362	(0.967)	870206	60.0000	58.17
4	Bis(2-Chloroethyl)ether	93	8.319	8.303	(0.960)	886103	60.0000	56.82
6	2-Chlorophenol	128	8.401	8.386	(0.969)	1028699	60.0000	59.62
7	1,3-Dichlorobenzene	146	8.606	8.597	(0.993)	1087360	60.0000	58.05
* 8	1,4-Dichlorobenzene-d4	152	8.665	8.656	(1.000)	270135	20.0000	
9	1,4-Dichlorobenzene	146	8.694	8.685	(1.003)	1097857	60.0000	57.61
$ 10	1,2-Dichlorobenzene-d4	152	8.965	8.955	(1.035)	616295	60.0000	12.96
12	1,2-Dichlorobenzene	146	8.988	8.979	(1.037)	1030195	60.0000	57.77
11	Benzyl alcohol	108	8.941	8.926	(1.032)	615771	60.0000	63.08
14	2,2'-oxybis(1-Chloropropane)	45	9.182	9.173	(1.060)	822900	60.0000	48.29
13	2-Methylphenol	108	9.176	9.155	(1.059)	827319	60.0000	57.08
17	Hexachloroethane	117	9.476	9.467	(1.094)	459122	60.0000	58.31
16	N-Nitroso-di-n-propylamine	70	9.417	9.378	(1.087)	606994	60.0000	54.41
15	4-Methylphenol	108	9.399	9.384	(1.085)	871155	60.0000	57.70
$ 18	Nitrobenzene-d5	82	9.599	9.578	(0.896)	964608	60.0000	55.80
19	Nitrobenzene	77	9.629	9.608	(0.899)	955566	60.0000	54.34
20	Isophorone	82	10.004	9.978	(0.934)	1522368	60.0000	56.09
21	2-Nitrophenol	139	10.140	10.130	(0.946)	579071	60.0000	60.26
22	2,4-Dimethylphenol	107	10.239	10.224	(0.956)	1002995	60.0000	56.83
23	Bis(2-Chloroethoxy)methane	93	10.375	10.359	(0.968)	1050036	60.0000	55.49
24	Benzoic acid	105	10.563	10.342	(0.986)	1184783	120.000	184.2(M)
25	2,4-Dichlorophenol	162	10.533	10.518	(0.983)	817324	60.0000	58.60
26	1,2,4-Trichlorobenzene	180	10.657	10.647	(0.995)	850916	60.0000	57.31
* 27	Naphthalene-d8	136	10.715	10.712	(1.000)	1001488	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.751	10.741	(1.003)	2447312	60.0000	51.54
	29 4-Chloroaniline	127	10.886	10.871	(1.016)	1189117	60.0000	58.12
	30 Hexachlorobutadiene	225	11.044	11.047	(1.031)	473769	60.0000	56.79
	31 4-Chloro-3-methylphenol	107	11.696	11.687	(1.092)	861891	60.0000	57.81
	32 2-Methylnaphthalene	141	11.873	11.869	(1.108)	1464033	60.0000	54.46
	33 Hexachlorocyclopentadiene	237	12.243	12.239	(0.900)	534129	60.0000	63.24
	34 2,4,6-Trichlorophenol	196	12.395	12.386	(0.911)	591785	60.0000	61.26
	35 2,4,5-Trichlorophenol	196	12.460	12.451	(0.916)	612248	60.0000	62.48
$	36 2-Fluorobiphenyl	172	12.513	12.504	(0.920)	1814053	60.0000	55.57
	37 2-Chloronaphthalene	162	12.671	12.656	(0.931)	1620384	60.0000	55.03
	38 2-Nitroaniline	65	12.895	12.880	(0.948)	512173	60.0000	56.35
	39 Dimethylphthalate	163	13.247	13.226	(0.974)	1941904	60.0000	56.63
	40 Acenaphthylene	152	13.353	13.344	(0.981)	2407393	60.0000	53.24
	41 2,6-Dinitrotoluene	165	13.353	13.332	(0.981)	458375	60.0000	58.34
*	42 Acenaphthene-d10	164	13.605	13.596	(1.000)	565443	20.0000	
	43 3-Nitroaniline	138	12.895	12.880	(0.948)	656444	60.0000	59.27
	44 Acenaphthene	153	13.658	13.649	(1.004)	1666255	60.0000	55.82
	45 2,4-Dinitrophenol	184	13.752	13.725	(1.011)	603568	120.000	171.3
	46 Dibenzofuran	168	13.923	13.908	(1.023)	2235685	60.0000	55.00
	47 4-Nitrophenol	109	13.899	13.866	(1.022)	304873	60.0000	64.57
	48 2,4-Dinitrotoluene	165	13.987	13.972	(1.028)	650360	60.0000	61.05
	50 Diethylphthalate	149	14.404	14.383	(1.059)	2054164	60.0000	56.32
	49 Fluorene	166	14.487	14.472	(1.065)	1782670	60.0000	53.59
	51 4-Chlorophenyl-phenylether	204	14.487	14.477	(1.065)	838748	60.0000	55.56
	52 4-Nitroaniline	138	14.604	14.560	(1.073)	525809	60.0000	60.22
	53 4,6-Dinitro-2-methylphenol	198	14.669	14.630	(0.916)	785982	120.000	143.8
	54 N-Nitrosodiphenylamine	169	14.704	14.683	(0.919)	1183074	60.0000	57.71
$	55 2,4,6-Tribromophenol	330	14.915	14.900	(1.096)	207802	60.0000	61.81
	56 4-Bromophenyl-phenylether	248	15.280	15.270	(0.954)	512486	60.0000	57.62
	57 Hexachlorobenzene	284	15.521	15.511	(0.970)	504237	60.0000	56.97
	58 Pentachlorophenol	266	15.820	15.811	(0.988)	219823	60.0000	97.10
*	59 Phenanthrene-d10	188	16.008	16.005	(1.000)	907075	20.0000	
	60 Phenanthrene	178	16.049	16.034	(1.003)	2546774	60.0000	53.99
	61 Anthracene	178	16.126	16.110	(1.007)	2487136	60.0000	53.54
	62 Carbazole	167	16.396	16.387	(1.024)	1470139	60.0000	52.89
	63 Di-n-butylphthalate	149	17.060	17.056	(1.066)	2896700	60.0000	51.74
	64 Fluoranthene	202	18.011	17.996	(1.125)	2546849	60.0000	54.95
	65 Pyrene	202	18.376	18.360	(0.902)	2637912	60.0000	52.66
$	66 Terphenyl-d14	244	18.652	18.642	(0.916)	1591742	60.0000	54.56
	67 Butylbenzylphthalate	149	19.509	19.500	(0.958)	1471258	60.0000	54.84
	68 Benzo(a)anthracene	228	20.349	20.328	(0.999)	2545154	60.0000	54.84
*	69 Chrysene-d12	240	20.373	20.358	(1.000)	786643	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.332	20.317	(0.998)	967567	60.0000	58.76
	71 Chrysene	228	20.420	20.399	(1.002)	2406002	60.0000	54.59
	72 bis(2-Ethylhexyl)phthalate	149	20.490	20.487	(0.956)	2014954	60.0000	57.71
*	134 Di-n-octylphthalate-d4	153	21.430	21.421	(1.000)	1204515	20.0000	
	73 Di-n-octylphthalate	149	21.442	21.433	(1.001)	3086917	60.0000	53.21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.029	21.997	(0.976)	2825259	60.0000	56.64
75	Benzo(k)fluoranthene	252	22.065	22.032	(0.978)	2726312	60.0000	52.75
76	Benzo(a)pyrene	252	22.493	22.467	(0.997)	2556899	60.0000	56.72
* 77	Perylene-d12	264	22.570	22.561	(1.000)	810286	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.450	24.388	(1.083)	3155156	60.0000	60.92
79	Dibenzo(a,h)anthracene	278	24.467	24.411	(1.084)	2501031	60.0000	57.73
80	Benzo(g,h,i)perylene	276	24.984	24.916	(1.107)	2677038	60.0000	57.88
90	N-Nitrosodimethylamine	74	4.253	4.215	(0.491)	541606	60.0000	58.59
103	Pyridine	79	4.201	4.209	(0.485)	976232	60.0000	61.18
91	Aniline	93	8.219	8.209	(0.948)	1267883	60.0000	56.08
105	1-methylnaphthalene	141	12.049	12.045	(1.124)	1467985	60.0000	55.26
93	Benzidine	184	18.235	18.225	(0.895)	982581	60.0000	75.41
111	Azobenzene (1,2-DP-Hydrazine)	77	14.751	14.736	(1.084)	1504218	60.0000	49.83
143	1,4-Dioxane	88	3.460	3.445	(0.399)	359061	60.0000	59.10
$ 137	d8-1,4-Dioxane	96	3.396	3.381	(0.392)	358990	60.0000	58.33
151	1,2,4,5-Tetrachlorobenzene	216	12.213	12.210	(0.898)	801058	60.0000	55.05
120	2,3,4,6-Tetrachlorophenol	232	14.205	14.195	(1.044)	434174	60.0000	63.18
144	alpha-Terpineol	59	10.756	10.747	(1.004)	349993	60.0000	49.35
98	Retene	219	18.910	18.901	(0.928)	1251949	60.0000	54.74
133	Butylatedhydroxytoluene	205	13.741	13.731	(1.010)	1446517	60.0000	53.32
115	Tributyl Phosphate	99	14.763	14.730	(0.922)	2099901	60.0000	50.57
116	Dibutyl Phenyl Phosphate	175	16.502	16.492	(1.031)	1742223	60.0000	55.48
117	Butyl Diphenyl Phosphate	94	18.211	18.202	(0.894)	546470	60.0000	51.37
118	Triphenyl Phosphate	326	19.838	19.823	(0.974)	458257	60.0000	57.30
123	Acetophenone	105	9.358	9.337	(0.873)	1743070	60.0000	54.17
179	n-Decane	57	8.465	8.456	(0.977)	771635	60.0000	51.78
180	n-Octadecane	57	15.850	15.846	(0.990)	903868	60.0000	47.33
168	Pentachlorobenzene	250	13.964	13.949	(1.026)	639060	60.0000	58.24
113	Diphenyl Oxide	170	12.836	12.833	(0.943)	1139301	60.0000	56.23
112	Biphenyl	154	12.654	12.645	(0.930)	1849131	60.0000	52.63

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071007.d
Lab Smp Id: IC600107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC600107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	270135	-5.59
27 Naphthalene-d8	1035557	517778	2071114	1001488	-3.29
42 Acenaphthene-d10	594267	297134	1188534	565443	-4.85
59 Phenanthrene-d10	951721	475860	1903442	907075	-4.69
69 Chrysene-d12	794862	397431	1589724	786643	-1.03
134 Di-n-octylphthala	1280700	640350	2561400	1204515	-5.95
77 Perylene-d12	826094	413047	1652188	810286	-1.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.67	0.03
27 Naphthalene-d8	10.71	10.21	11.21	10.72	0.02
42 Acenaphthene-d10	13.60	13.10	14.10	13.61	0.06
59 Phenanthrene-d10	16.01	15.51	16.51	16.01	0.02
69 Chrysene-d12	20.36	19.86	20.86	20.37	0.04
134 Di-n-octylphthala	21.42	20.92	21.92	21.43	0.04
77 Perylene-d12	22.56	22.06	23.06	22.57	0.04

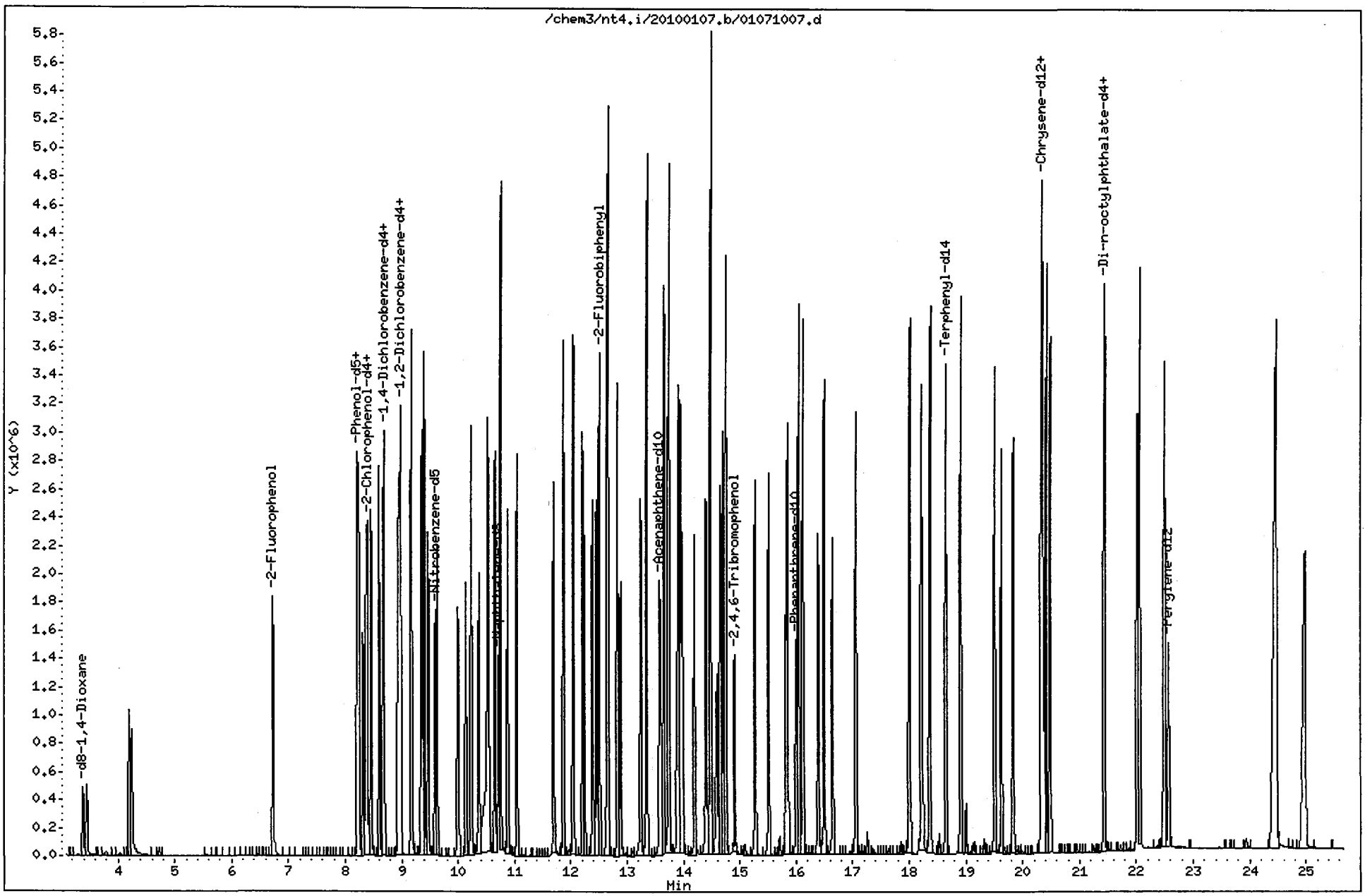
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071007.d
Date : 07-JAN-2010 16:29
Client ID: IC600107
Sample Info: IC600107

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



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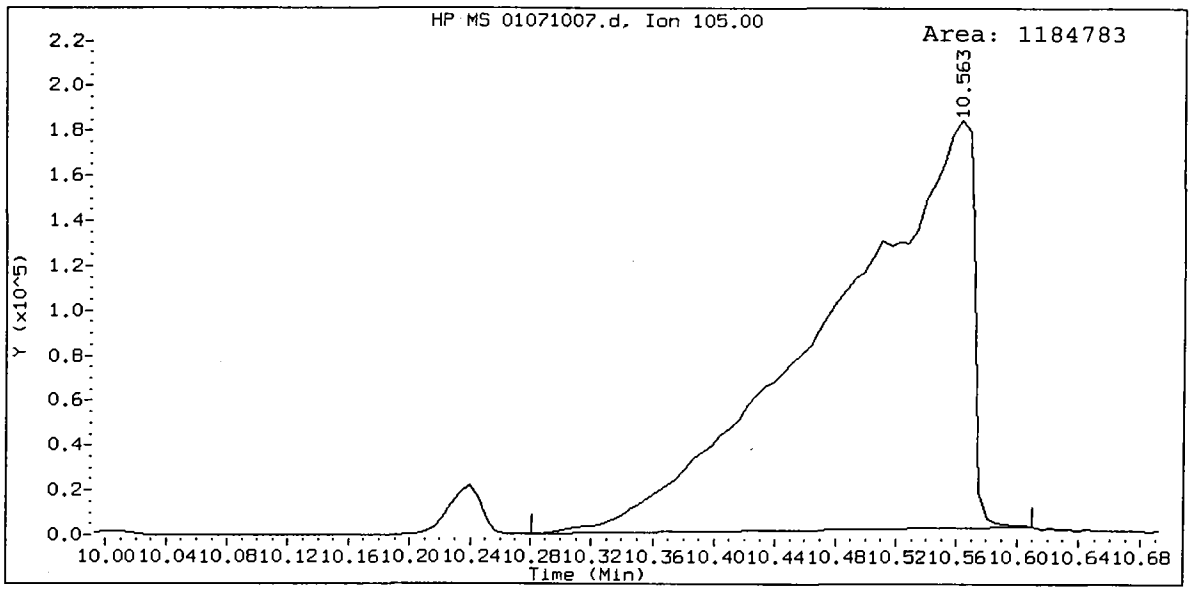
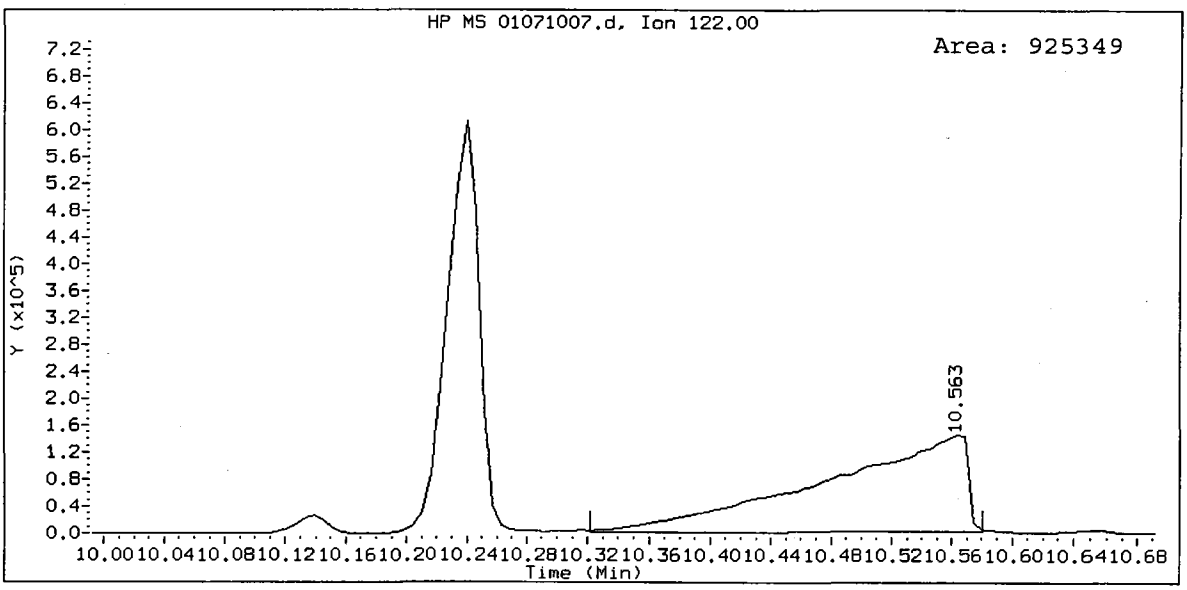
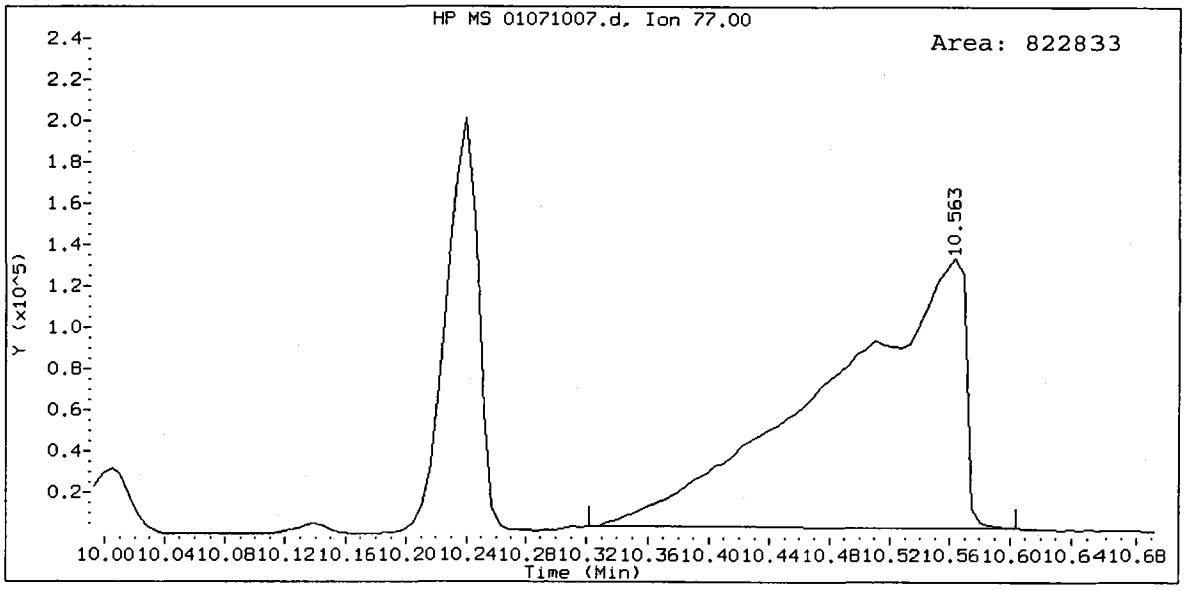
Benzoic acid Amount: 184.15







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071008.d
Lab Smp Id: IC800107 Client Smp ID: IC800107
Inj Date : 07-JAN-2010 17:02
Operator : JZ Inst ID: nt4.i
Smp Info : IC800107,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 17:02 Cal File: 01071008.d
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

AB 01/07/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	6.733	6.723	(0.777)	1102623	80.0000	75.64
$ 2	Phenol-d5	99	8.237	8.209	(0.950)	1087270	80.0000	72.92
3	Phenol	94	8.254	8.227	(0.953)	1436385	80.0000	71.76
$ 5	2-Chlorophenol-d4	132	8.377	8.362	(0.967)	1116779	80.0000	75.73
4	Bis(2-Chloroethyl)ether	93	8.325	8.303	(0.961)	1120994	80.0000	72.93
6	2-Chlorophenol	128	8.407	8.386	(0.970)	1282575	80.0000	75.40
7	1,3-Dichlorobenzene	146	8.607	8.597	(0.993)	1363507	80.0000	73.85
* 8	1,4-Dichlorobenzene-d4	152	8.665	8.656	(1.000)	266285	20.0000	
9	1,4-Dichlorobenzene	146	8.695	8.685	(1.003)	1367042	80.0000	72.77
$ 10	1,2-Dichlorobenzene-d4	152	8.971	8.955	(1.035)	780347	80.0000	16.65
12	1,2-Dichlorobenzene	146	8.988	8.979	(1.037)	1278507	80.0000	72.73
11	Benzyl alcohol	108	8.947	8.926	(1.033)	793528	80.0000	82.46
14	2,2'-oxybis(1-Chloropropane)	45	9.188	9.173	(1.060)	988674	80.0000	58.86
13	2-Methylphenol	108	9.182	9.155	(1.060)	1031305	80.0000	72.19
17	Hexachloroethane	117	9.476	9.467	(1.094)	575283	80.0000	74.11
16	N-Nitroso-di-n-propylamine	70	9.423	9.378	(1.087)	765048	80.0000	69.57
15	4-Methylphenol	108	9.406	9.384	(1.085)	1072435	80.0000	72.06
$ 18	Nitrobenzene-d5	82	9.605	9.578	(0.896)	1222703	80.0000	71.23
19	Nitrobenzene	77	9.635	9.608	(0.899)	1190204	80.0000	68.16
20	Isophorone	82	10.011	9.978	(0.934)	1943516	80.0000	72.12
21	2-Nitrophenol	139	10.146	10.130	(0.946)	736370	80.0000	77.17
22	2,4-Dimethylphenol	107	10.246	10.224	(0.956)	1252001	80.0000	71.44
23	Bis(2-Chloroethoxy)methane	93	10.375	10.359	(0.968)	1320246	80.0000	70.27
24	Benzoic acid	105	10.592	10.342	(0.988)	1432942	160.000	205.9(M)
25	2,4-Dichlorophenol	162	10.539	10.518	(0.983)	1034117	80.0000	74.66
26	1,2,4-Trichlorobenzene	180	10.657	10.647	(0.994)	1077869	80.0000	73.12
* 27	Naphthalene-d8	136	10.721	10.712	(1.000)	994426	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.757	10.741	(1.003)	2939472	80.0000	62.35
	29 4-Chloroaniline	127	10.886	10.871	(1.015)	1518038	80.0000	74.72
	30 Hexachlorobutadiene	225	11.050	11.047	(1.031)	599086	80.0000	72.32
	31 4-Chloro-3-methylphenol	107	11.697	11.687	(1.091)	1078508	80.0000	72.86
	32 2-Methylnaphthalene	141	11.879	11.869	(1.108)	1867957	80.0000	69.98
	33 Hexachlorocyclopentadiene	237	12.243	12.239	(0.900)	679011	80.0000	81.58
	34 2,4,6-Trichlorophenol	196	12.396	12.386	(0.911)	770281	80.0000	80.92
	35 2,4,5-Trichlorophenol	196	12.460	12.451	(0.916)	769132	80.0000	79.65
$	36 2-Fluorobiphenyl	172	12.513	12.504	(0.920)	2270890	80.0000	70.60
	37 2-Chloronaphthalene	162	12.672	12.656	(0.931)	2000271	80.0000	68.94
	38 2-Nitroaniline	65	12.901	12.880	(0.948)	627745	80.0000	70.08
	39 Dimethylphthalate	163	13.253	13.226	(0.974)	2338565	80.0000	69.20
	40 Acenaphthylene	152	13.359	13.344	(0.982)	2960125	80.0000	66.44
	41 2,6-Dinitrotoluene	165	13.359	13.332	(0.982)	569549	80.0000	73.56
*	42 Acenaphthene-d10	164	13.606	13.596	(1.000)	557203	20.0000	
	43 3-Nitroaniline	138	12.901	12.880	(0.948)	825924	80.0000	75.68
	44 Acenaphthene	153	13.664	13.649	(1.004)	2053763	80.0000	69.82
	45 2,4-Dinitrophenol	184	13.758	13.725	(1.011)	761378	160.000	218.8(M)
	46 Dibenzofuran	168	13.929	13.908	(1.024)	2704264	80.0000	67.51
	47 4-Nitrophenol	109	13.905	13.866	(1.022)	331719	80.0000	68.50
	48 2,4-Dinitrotoluene	165	13.993	13.972	(1.028)	817262	80.0000	77.85
	50 Diethylphthalate	149	14.411	14.383	(1.059)	2546660	80.0000	70.86
	49 Fluorene	166	14.493	14.472	(1.065)	2078664	80.0000	63.41
	51 4-Chlorophenyl-phenylether	204	14.493	14.477	(1.065)	983918	80.0000	66.14
	52 4-Nitroaniline	138	14.616	14.560	(1.074)	668154	80.0000	77.66
	53 4,6-Dinitro-2-methylphenol	198	14.675	14.630	(0.917)	989223	160.000	190.7(M)
	54 N-Nitrosodiphenylamine	169	14.710	14.683	(0.919)	1473759	80.0000	76.18
$	55 2,4,6-Tribromophenol	330	14.922	14.900	(1.097)	256581	80.0000	77.45
	56 4-Bromophenyl-phenylether	248	15.280	15.270	(0.954)	620938	80.0000	73.97
	57 Hexachlorobenzene	284	15.521	15.511	(0.970)	644429	80.0000	77.15
	58 Pentachlorophenol	266	15.826	15.811	(0.989)	281630	80.0000	131.8
*	59 Phenanthrene-d10	188	16.008	16.005	(1.000)	856068	20.0000	
	60 Phenanthrene	178	16.055	16.034	(1.003)	3018311	80.0000	67.80
	61 Anthracene	178	16.126	16.110	(1.007)	2935379	80.0000	66.95
	62 Carbazole	167	16.396	16.387	(1.024)	1790972	80.0000	68.28
	63 Di-n-butylphthalate	149	17.066	17.056	(1.066)	3468150	80.0000	65.64
	64 Fluoranthene	202	18.012	17.996	(1.125)	3009360	80.0000	68.79
	65 Pyrene	202	18.376	18.360	(0.902)	3216474	80.0000	65.73
$	66 Terphenyl-d14	244	18.652	18.642	(0.915)	1991507	80.0000	69.89
	67 Butylbenzylphthalate	149	19.515	19.500	(0.958)	1811841	80.0000	69.13
	68 Benzo(a)anthracene	228	20.355	20.328	(0.999)	3112892	80.0000	68.67
*	69 Chrysene-d12	240	20.379	20.358	(1.000)	768384	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.338	20.317	(0.998)	1230986	80.0000	76.53
	71 Chrysene	228	20.426	20.399	(1.002)	2967834	80.0000	68.93
	72 bis(2-Ethylhexyl)phthalate	149	20.491	20.487	(0.956)	2452323	80.0000	72.36
*	134 Di-n-octylphthalate-d4	153	21.430	21.421	(1.000)	1169150	20.0000	
	73 Di-n-octylphthalate	149	21.448	21.433	(1.001)	3611628	80.0000	64.14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	22.041	21.997	(0.977)	4014780	80.0000	81.89
75	Benzo(k)fluoranthene	252	22.071	22.032	(0.978)	2842908	80.0000	58.37(H)
76	Benzo(a)pyrene	252	22.500	22.467	(0.997)	3178585	80.0000	71.74
* 77	Perylene-d12	264	22.570	22.561	(1.000)	796348	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.456	24.388	(1.084)	2803755	80.0000	55.08
79	Dibenzo(a,h)anthracene	278	24.479	24.411	(1.085)	3189299	80.0000	74.90
80	Benzo(g,h,i)perylene	276	24.996	24.916	(1.107)	3374166	80.0000	74.23
90	N-Nitrosodimethylamine	74	4.254	4.215	(0.491)	679389	80.0000	74.56
103	Pyridine	79	4.201	4.209	(0.485)	884630	80.0000	56.24
91	Aniline	93	8.225	8.209	(0.949)	1625572	80.0000	72.94
105	1-methylnaphthalene	141	12.055	12.045	(1.124)	1821391	80.0000	69.06
93	Benzidine	184	18.235	18.225	(0.895)	1326001	80.0000	104.2
111	Azobenzene (1,2-DP-Hydrazine)	77	14.751	14.736	(1.084)	1765774	80.0000	59.36
143	1,4-Dioxane	88	3.455	3.445	(0.399)	453903	80.0000	75.79
$ 137	d8-1,4-Dioxane	96	3.390	3.381	(0.391)	454988	80.0000	75.00
151	1,2,4,5-Tetrachlorobenzene	216	12.219	12.210	(0.898)	1022764	80.0000	71.32
120	2,3,4,6-Tetrachlorophenol	232	14.205	14.195	(1.044)	565357	80.0000	83.49
144	alpha-Terpineol	59	10.762	10.747	(1.004)	442983	80.0000	62.90
98	Retene	219	18.916	18.901	(0.928)	1575257	80.0000	70.52
133	Butylatedhydroxytoluene	205	13.747	13.731	(1.010)	1700182	80.0000	63.60
115	Tributyl Phosphate	99	14.769	14.730	(0.923)	2479673	80.0000	63.27
116	Dibutyl Phenyl Phosphate	175	16.508	16.492	(1.031)	2185726	80.0000	73.75
117	Butyl Diphenyl Phosphate	94	18.217	18.202	(0.894)	669245	80.0000	64.41
118	Triphenyl Phosphate	326	19.844	19.823	(0.974)	619656	80.0000	79.33
123	Acetophenone	105	9.364	9.337	(0.873)	2204387	80.0000	68.99
179	n-Decane	57	8.466	8.456	(0.977)	964035	80.0000	65.63
180	n-Octadecane	57	15.856	15.846	(0.990)	1101885	80.0000	61.14
168	Pentachlorobenzene	250	13.970	13.949	(1.027)	778454	80.0000	71.99
113	Diphenyl Oxide	170	12.836	12.833	(0.943)	1473020	80.0000	73.78
112	Biphenyl	154	12.660	12.645	(0.930)	2191714	80.0000	63.30

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071008.d
Lab Smp Id: IC800107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: IC800107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	266285	-6.93
27 Naphthalene-d8	1035557	517778	2071114	994426	-3.97
42 Acenaphthene-d10	594267	297134	1188534	557203	-6.24
59 Phenanthrene-d10	951721	475860	1903442	856068	-10.05
69 Chrysene-d12	794862	397431	1589724	768384	-3.33
134 Di-n-octylphthala	1280700	640350	2561400	1169150	-8.71
77 Perylene-d12	826094	413047	1652188	796348	-3.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.67	0.03
27 Naphthalene-d8	10.71	10.21	11.21	10.72	0.08
42 Acenaphthene-d10	13.60	13.10	14.10	13.61	0.06
59 Phenanthrene-d10	16.01	15.51	16.51	16.01	0.02
69 Chrysene-d12	20.36	19.86	20.86	20.38	0.07
134 Di-n-octylphthala	21.42	20.92	21.92	21.43	0.04
77 Perylene-d12	22.56	22.06	23.06	22.57	0.04

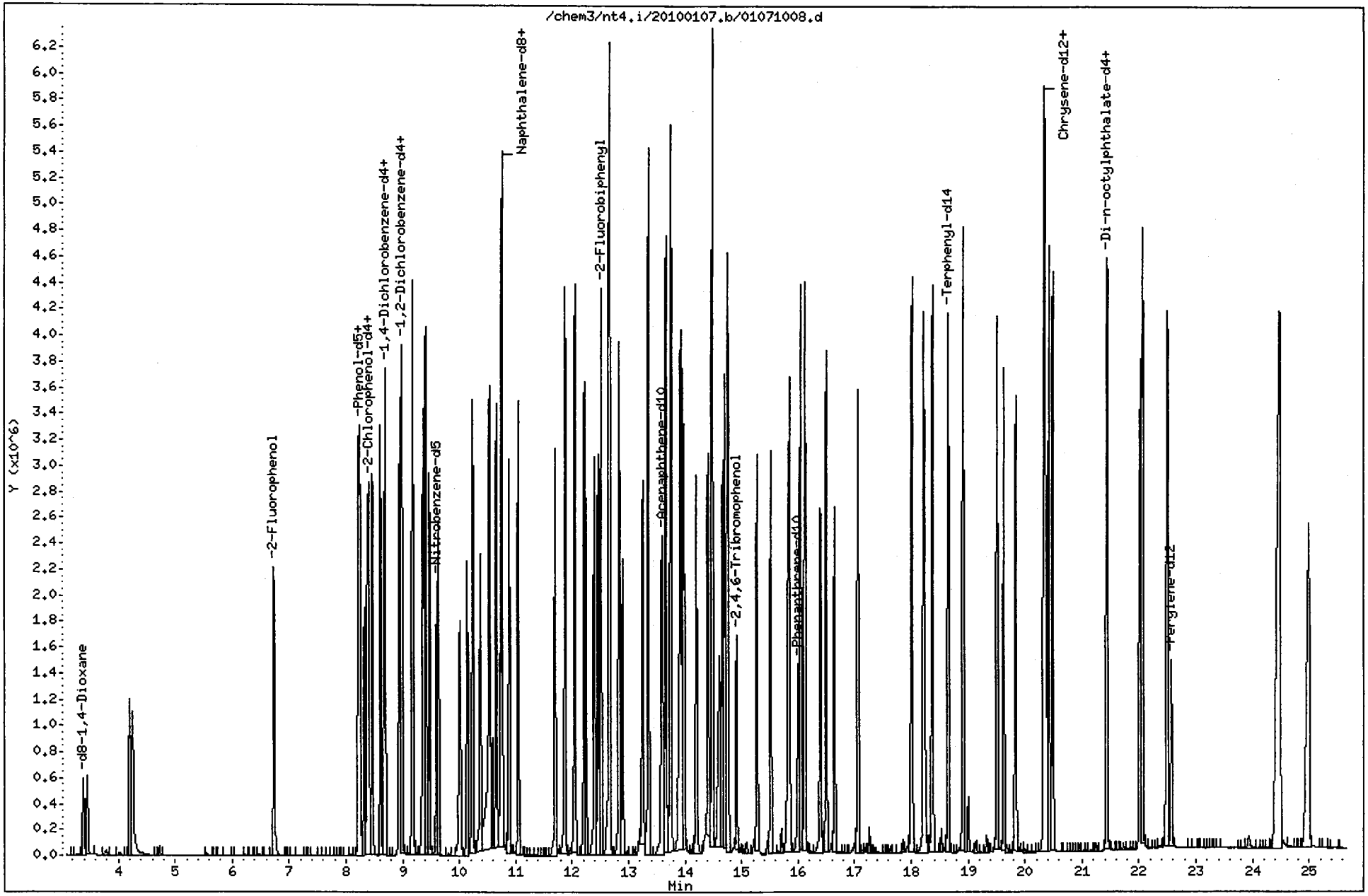
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100107.b/01071008.d
Date : 07-JAN-2010 17:02
Client ID: IC800107
Sample Info: IC800107,

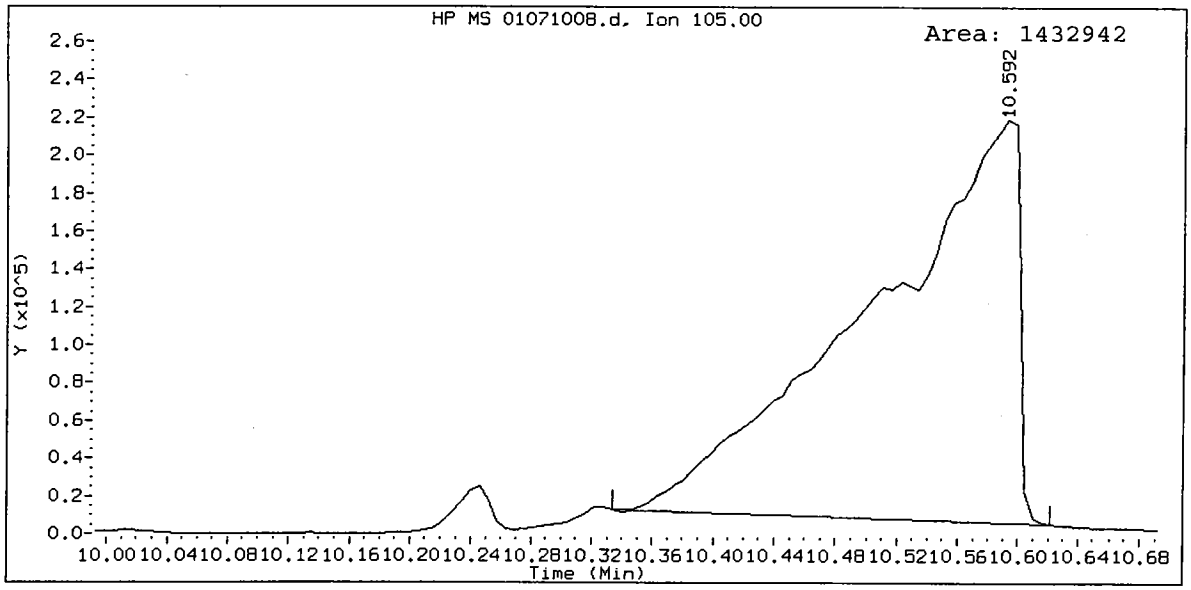
Column phase: ZB-5msi

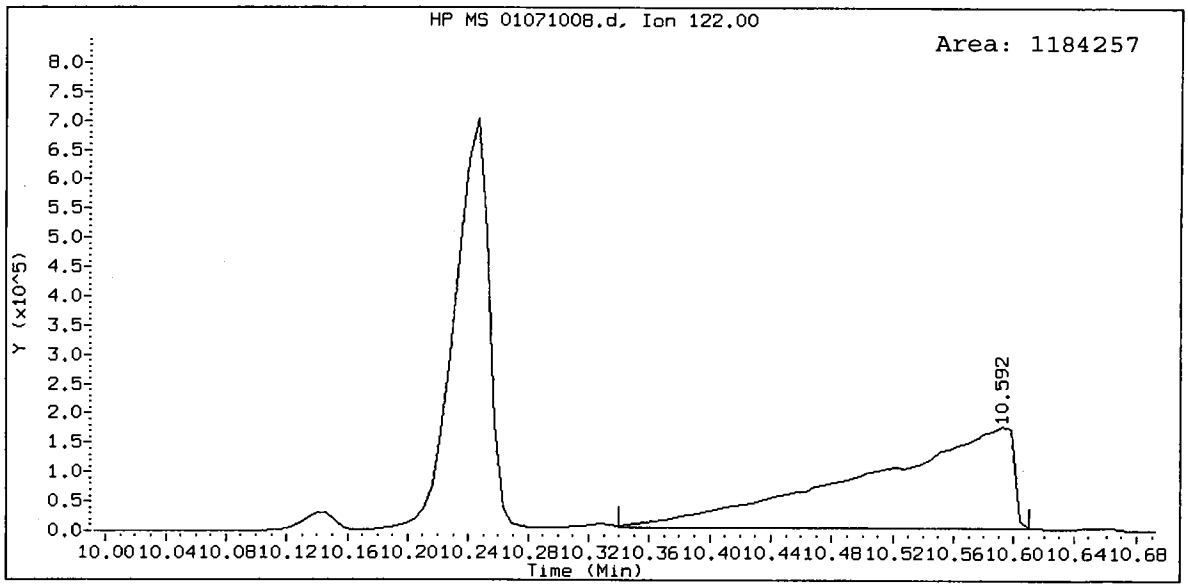
Instrument: nt4.i

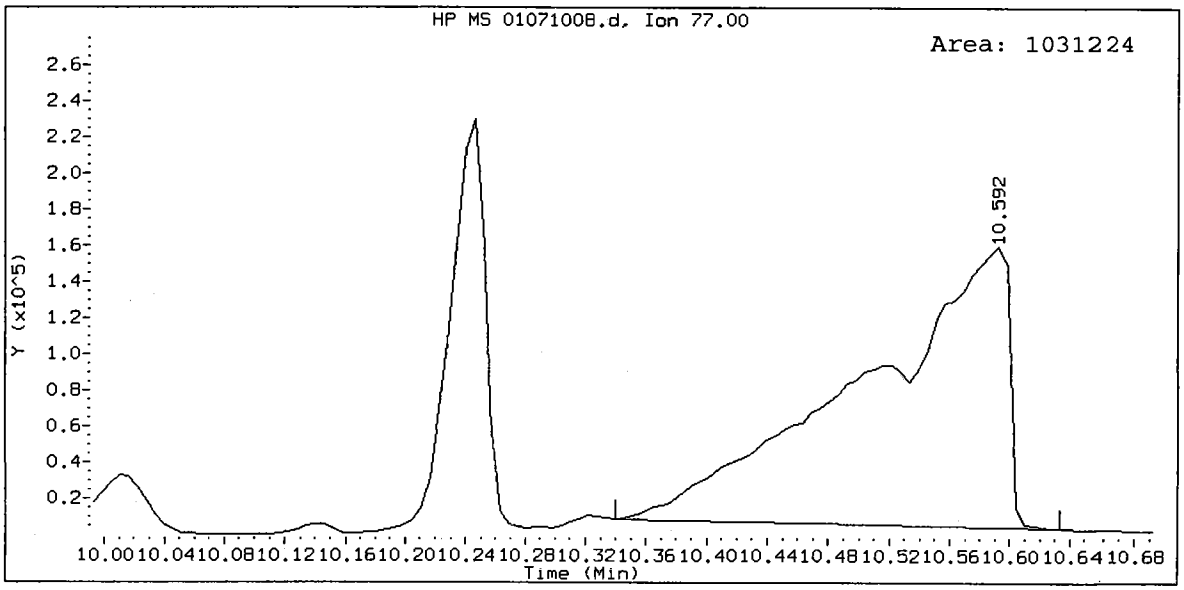
Operator: JZ
Column diameter: 0.32



IC800107, /chem3/nt4.i/20100107.b/01071008.d
Benzoic acid Amount: 205.85

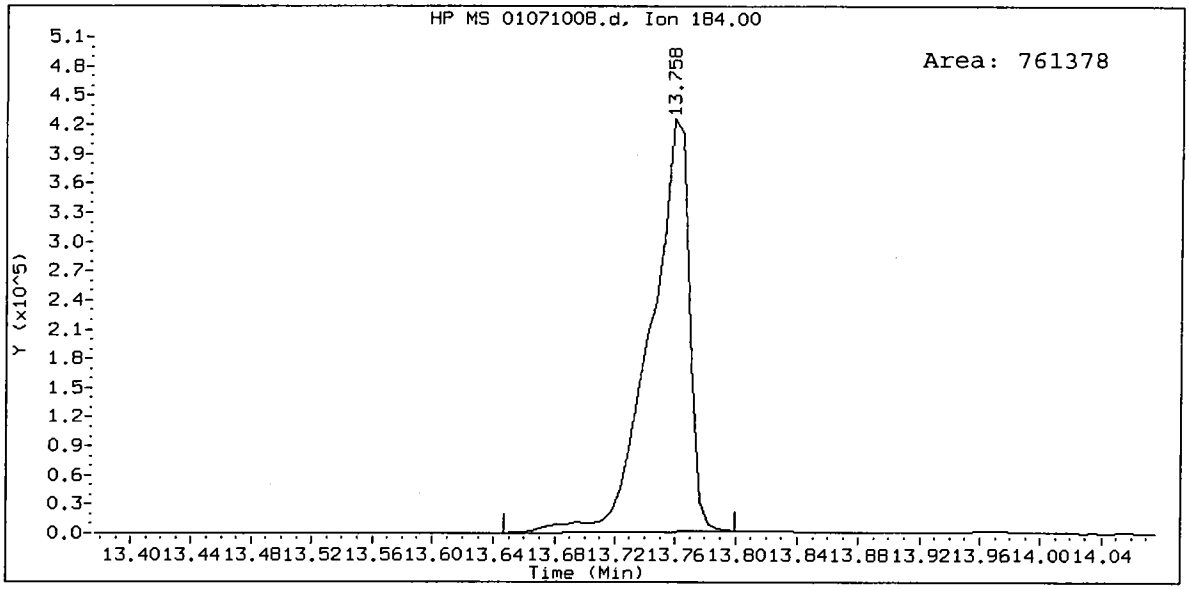


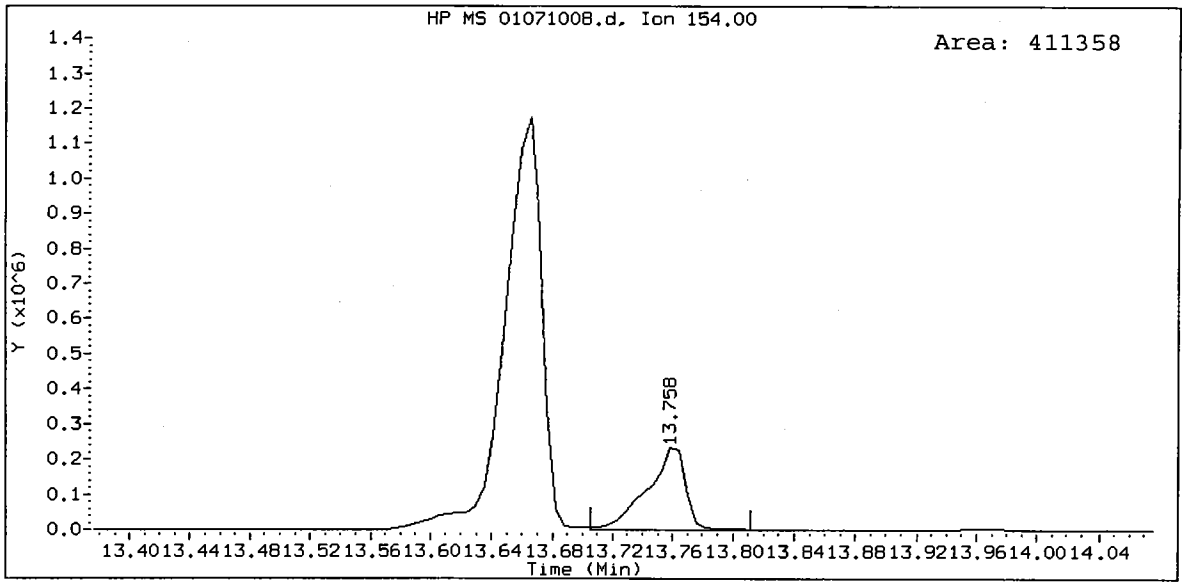


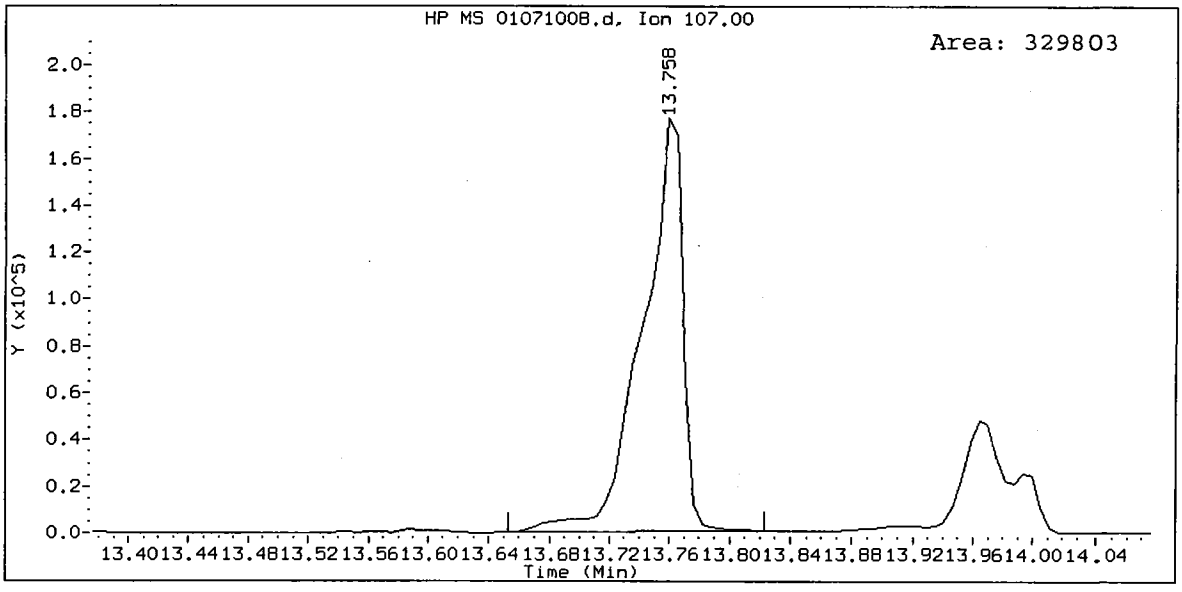


QF10:08:39

IC800107, /chem3/nt4.i/20100107.b/01071008.d
2,4-Dinitrophenol Amount: 218.82







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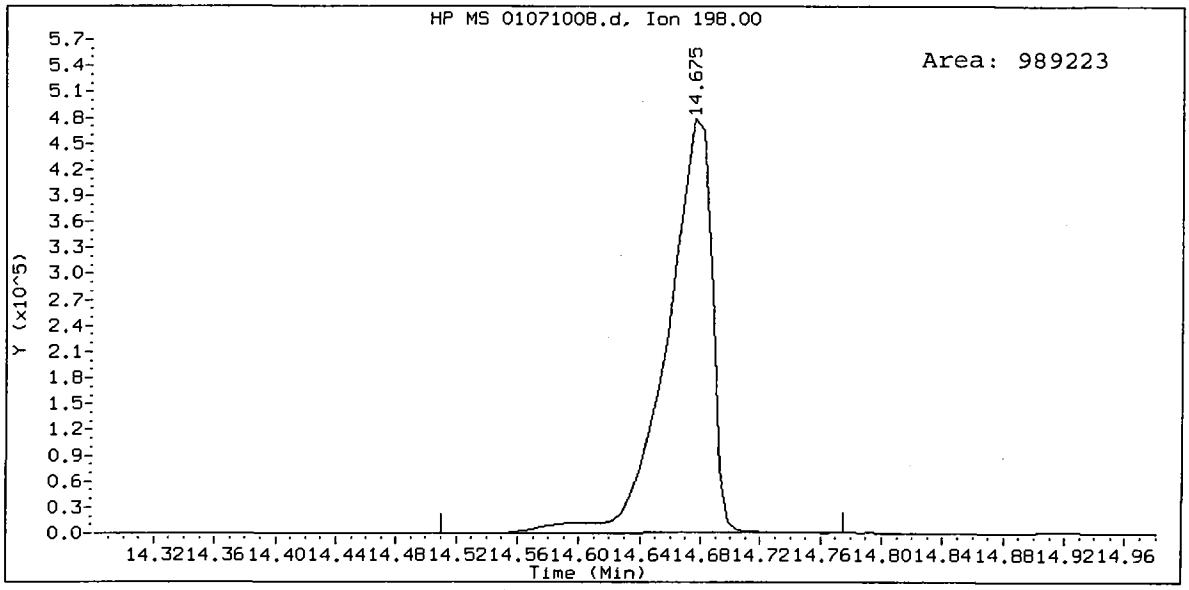
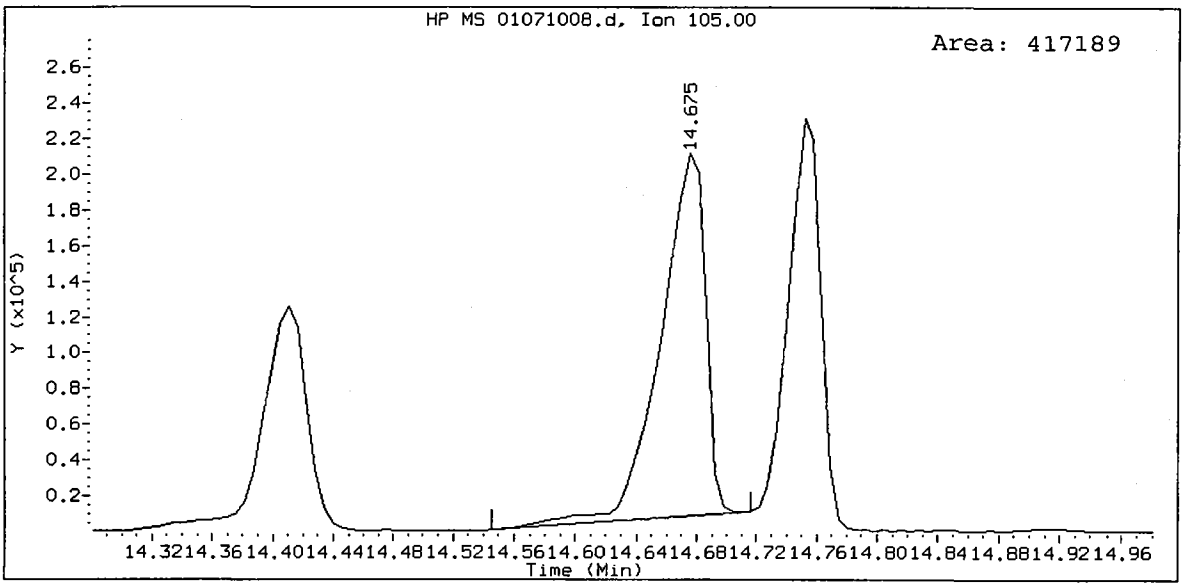
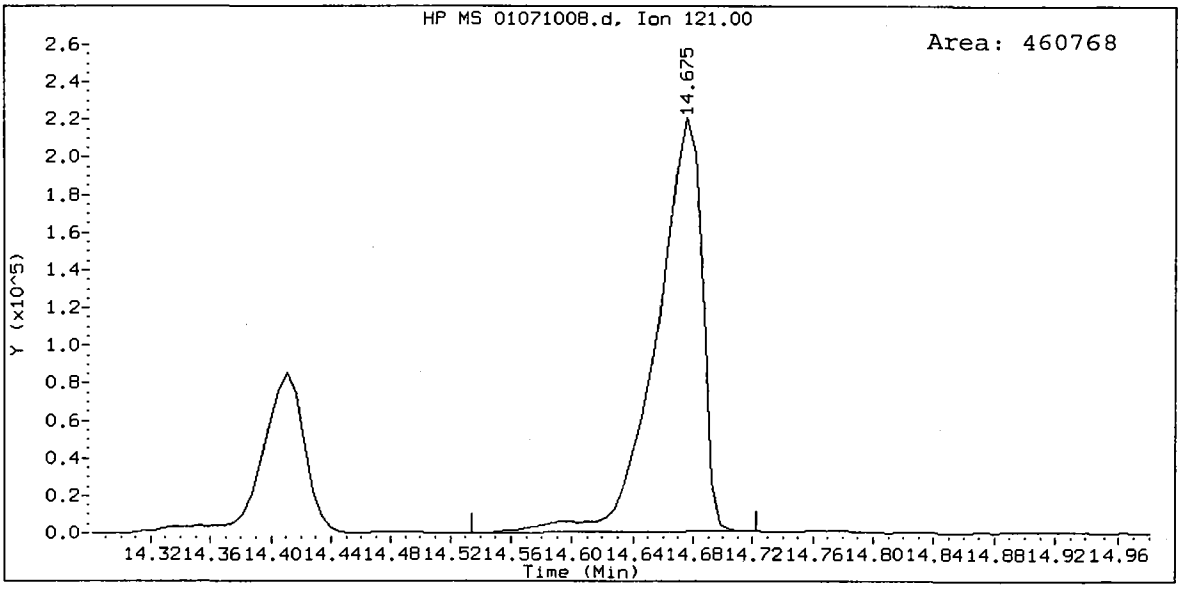
4,6-Dinitro-2-methylphenol Amount: 190.74







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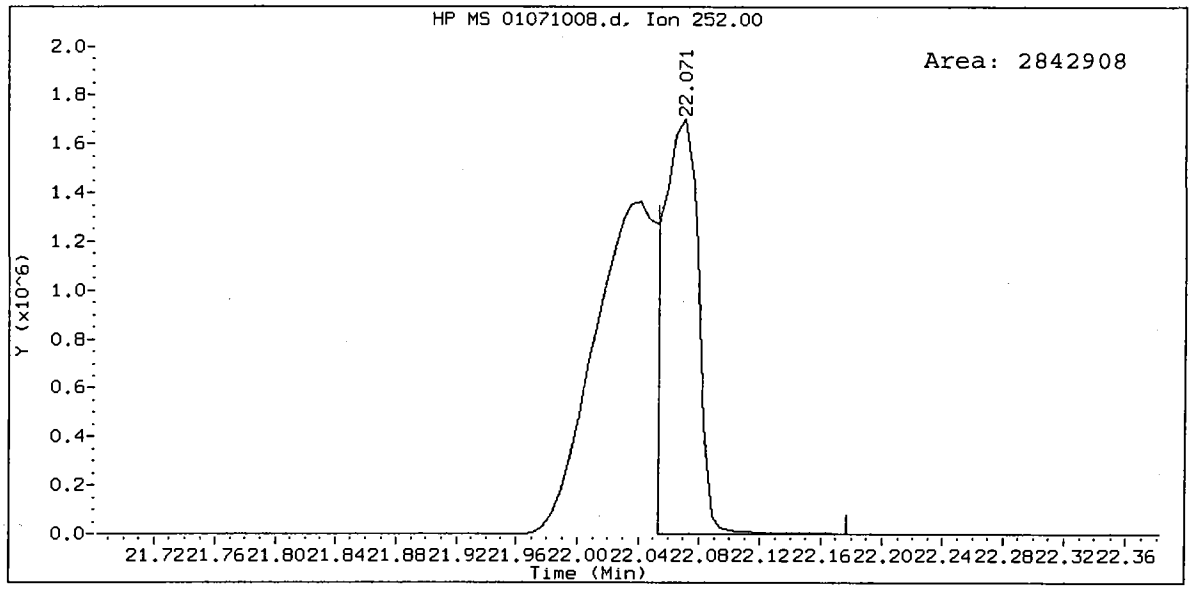
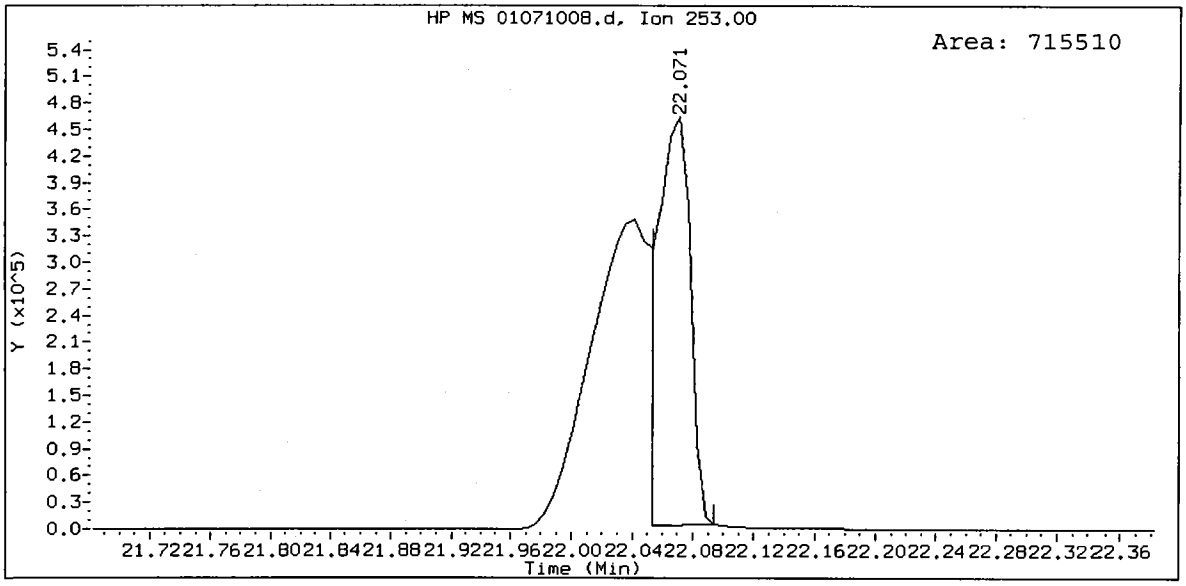
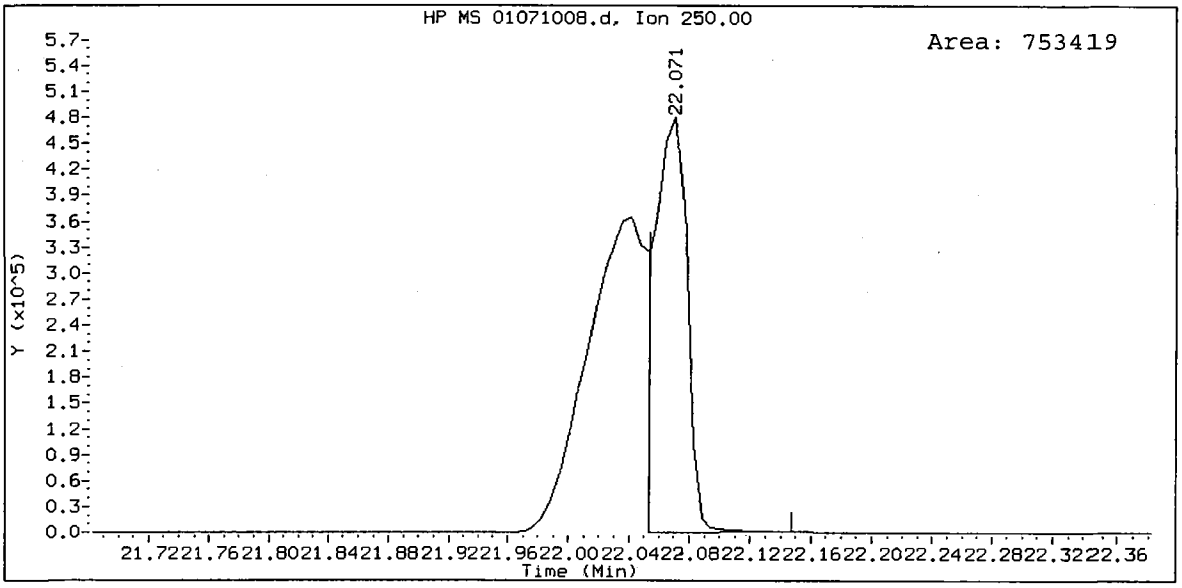
Benzo(k)fluoranthene Amount: 58.37







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100107.b/01071009.d
Lab Smp Id: ICV0107 Client Smp ID: ICV0107
Inj Date : 07-JAN-2010 17:36
Operator : JZ Inst ID: nt4.i
Smp Info : ICV0107,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100107.b/SW846100107.m
Meth Date : 07-Jan-2010 18:43 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICV.sub
Target Version: 3.50

JZ 01/07/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	3 Phenol	94	8.234	8.227	(0.951)	476214	25.6523	25.65
	4 Bis(2-Chloroethyl)ether	93	8.304	8.303	(0.959)	358990	25.1818	25.18
	6 2-Chlorophenol	128	8.386	8.386	(0.969)	405225	25.6883	25.69
	7 1,3-Dichlorobenzene	146	8.598	8.597	(0.993)	433738	25.3307	25.33
*	8 1,4-Dichlorobenzene-d4	152	8.657	8.656	(1.000)	246959	20.0000	
	9 1,4-Dichlorobenzene	146	8.686	8.685	(1.003)	443553	25.4594	25.46
	11 Benzyl alcohol	108	8.927	8.926	(1.031)	242509	27.1729	27.17
	12 1,2-Dichlorobenzene	146	8.980	8.979	(1.037)	412298	25.2902	25.29
	13 2-Methylphenol	108	9.162	9.155	(1.058)	336473	25.3947	25.39
	14 2,2'-oxybis(1-Chloropropane)	45	9.174	9.173	(1.060)	405557	24.9350	24.94
	15 4-Methylphenol	108	9.385	9.384	(1.084)	345482	25.0322	25.03
	16 N-Nitroso-di-n-propylamine	70	9.391	9.378	(1.085)	252669	24.7748	24.77
	17 Hexachloroethane	117	9.467	9.467	(1.094)	185019	25.7012	25.70
	19 Nitrobenzene	77	9.614	9.608	(0.897)	397410	25.3917	25.39
	20 Isophorone	82	9.984	9.978	(0.932)	604801	25.0364	25.04
	21 2-Nitrophenol	139	10.131	10.130	(0.946)	222092	25.9653	25.97
	22 2,4-Dimethylphenol	107	10.225	10.224	(0.954)	398282	25.3541	25.35
	23 Bis(2-Chloroethoxy)methane	93	10.360	10.359	(0.967)	423581	25.1513	25.15
	24 Benzoic acid	105	10.466	10.342	(0.977)	341791	41.8036	41.80
	25 2,4-Dichlorophenol	162	10.519	10.518	(0.982)	316639	25.5053	25.51
	26 1,2,4-Trichlorobenzene	180	10.648	10.647	(0.994)	329414	24.9293	24.93
*	27 Naphthalene-d8	136	10.713	10.712	(1.000)	891363	20.0000	
	28 Naphthalene	128	10.742	10.741	(1.003)	1071359	25.3511	25.35
	29 4-Chloroaniline	127	10.871	10.871	(1.015)	445399	24.4575	24.46
	30 Hexachlorobutadiene	225	11.042	11.047	(1.031)	188010	25.3210	25.32
	31 4-Chloro-3-methylphenol	107	11.682	11.687	(1.090)	329684	24.8465	24.85
	32 2-Methylnaphthalene	141	11.870	11.869	(1.108)	610616	25.5218	25.52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
	33 Hexachlorocyclopentadiene	237	12.240	12.239	(0.900)	199014	26.6205	26.62
	34 2,4,6-Trichlorophenol	196	12.387	12.386	(0.911)	213911	25.0170	25.02
	35 2,4,5-Trichlorophenol	196	12.452	12.451	(0.916)	221444	25.5295	25.53
	37 2-Chloronaphthalene	162	12.657	12.656	(0.931)	661256	25.3715	25.37
	38 2-Nitroaniline	65	12.880	12.880	(0.947)	208773	25.9497	25.95
	39 Dimethylphthalate	163	13.233	13.226	(0.973)	758632	24.9923	24.99
	40 Acenaphthylene	152	13.344	13.344	(0.981)	1028244	25.6931	25.69
	41 2,6-Dinitrotoluene	165	13.339	13.332	(0.981)	176839	25.4294	25.43
*	42 Acenaphthene-d10	164	13.597	13.596	(1.000)	500490	20.0000	
	43 3-Nitroaniline	138	12.880	12.880	(0.947)	248112	25.3107	25.31
	44 Acenaphthene	153	13.650	13.649	(1.004)	665266	25.1799	25.18
	45 2,4-Dinitrophenol	184	13.732	13.725	(1.010)	187206	45.9684	45.97
	46 Dibenzofuran	168	13.914	13.908	(1.023)	916105	25.4614	25.46
	47 4-Nitrophenol	109	13.879	13.866	(1.021)	115479	26.5480	26.55
	48 2,4-Dinitrotoluene	165	13.973	13.972	(1.028)	238183	25.2597	25.26
	49 Fluorene	166	14.478	14.472	(1.065)	753429	25.5867	25.59
	50 Diethylphthalate	149	14.390	14.383	(1.058)	796250	24.6658	24.67
	51 4-Chlorophenyl-phenylether	204	14.478	14.477	(1.065)	335944	25.1420	25.14
	52 4-Nitroaniline	138	14.572	14.560	(1.072)	196385	25.4111	25.41
	53 4,6-Dinitro-2-methylphenol	198	14.643	14.630	(0.915)	265107	52.8123	52.81
	54 N-Nitrosodiphenylamine	169	14.684	14.683	(0.918)	439687	25.0432	25.04
	56 4-Bromophenyl-phenylether	248	15.271	15.270	(0.954)	190273	24.9766	24.98
	57 Hexachlorobenzene	284	15.512	15.511	(0.970)	188281	24.8381	24.84
	58 Pentachlorophenol	266	15.812	15.811	(0.988)	47727	19.3382	19.34
*	59 Phenanthrene-d10	188	16.000	16.005	(1.000)	776886	20.0000	
	60 Phenanthrene	178	16.041	16.034	(1.003)	1008023	24.9521	24.95
	61 Anthracene	178	16.111	16.110	(1.007)	1012982	25.4603	25.46
	62 Carbazole	167	16.387	16.387	(1.024)	637128	26.7649	26.76
	63 Di-n-butylphthalate	149	17.057	17.056	(1.066)	1211284	25.2616	25.26
	64 Fluoranthene	202	17.997	17.996	(1.125)	990666	24.9540	24.95
	65 Pyrene	202	18.361	18.360	(0.902)	1036269	25.0743	25.07
	67 Butylbenzylphthalate	149	19.501	19.500	(0.958)	553413	25.0020	25.00
	68 Benzo(a)anthracene	228	20.335	20.328	(0.999)	955798	24.9643	24.96
*	69 Chrysene-d12	240	20.359	20.358	(1.000)	648969	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.317	20.317	(0.998)	357795	26.3380	26.34
	71 Chrysene	228	20.406	20.399	(1.002)	911445	25.0660	25.07
	72 bis(2-Ethylhexyl)phthalate	149	20.482	20.487	(0.956)	771384	24.8480	24.85
*	134 Di-n-octylphthalate-d4	153	21.422	21.421	(1.000)	1070944	20.0000	
	73 Di-n-octylphthalate	149	21.434	21.433	(1.001)	1315868	25.5127	25.51
	74 Benzo(b)fluoranthene	252	22.009	21.997	(0.976)	999954	23.0132	23.01
	75 Benzo(k)fluoranthene	252	22.044	22.032	(0.977)	1142114	26.4602	26.46
	76 Benzo(a)pyrene	252	22.473	22.467	(0.996)	979366	24.9418	24.94
*	77 Perylene-d12	264	22.561	22.561	(1.000)	705785	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.406	24.388	(1.082)	1161692	25.7498	25.75
	79 Dibenzo(a,h)anthracene	278	24.424	24.411	(1.083)	930153	24.6488	24.65
	80 Benzo(g,h,i)perylene	276	24.935	24.916	(1.105)	1001830	24.8668	24.87
	103 Pyridine	79	4.186	4.209	(0.484)	390219	26.7494	26.75

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
90	N-Nitrosodimethylamine	74	4.216	4.215	(0.487)	213548	25.2711	25.27
91	Aniline	93	8.210	8.209	(0.948)	528105	25.5494	25.55
105	1-methylnaphthalene	141	12.046	12.045	(1.124)	593022	25.0836	25.08
111	Azobenzene (1,2-DP-Hydrazine)	77	14.737	14.736	(1.084)	664364	23.8389	23.84
93	Benzidine	184	18.220	18.225	(0.895)	290421	23.5442	23.54
143	1,4-Dioxane	88	3.434	3.445	(0.397)	139776	25.1656	25.17

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01071009.d
Lab Smp Id: ICV0107
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

Calibration Date: 07-JAN-2010
Calibration Time: 15:22
Client Smp ID: ICV0107
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	246959	-13.69
27 Naphthalene-d8	1035557	517778	2071114	891363	-13.92
42 Acenaphthene-d10	594267	297134	1188534	500490	-15.78
59 Phenanthrene-d10	951721	475860	1903442	776886	-18.37
69 Chrysene-d12	794862	397431	1589724	648969	-18.35
134 Di-n-octylphthala	1280700	640350	2561400	1070944	-16.38
77 Perylene-d12	826094	413047	1652188	705785	-14.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.66	8.16	9.16	8.66	-0.07
27 Naphthalene-d8	10.71	10.21	11.21	10.71	0.00
42 Acenaphthene-d10	13.60	13.10	14.10	13.60	0.00
59 Phenanthrene-d10	16.01	15.51	16.51	16.00	-0.04
69 Chrysene-d12	20.36	19.86	20.86	20.36	-0.03
134 Di-n-octylphthala	21.42	20.92	21.92	21.42	0.00
77 Perylene-d12	22.56	22.06	23.06	22.56	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:
Sample Matrix: NONE
Lab Smp Id: ICV0107
Level:
Data Type: MS DATA
SpikeList File: ICV.spk
Sublist File: ICV.sub
Client SDG: 20100107
Fraction: SV
Client Smp ID: ICV0107
Operator: JZ
SampleType: LCS
Quant Type: ISTD
Method File: /chem3/nt4.i/20100107.b/SW846100107.m
Misc Info: 10-

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
3 Phenol	25.00	25.65	102.61	
4 Bis(2-Chloroethyl)	25.00	25.18	100.73	
6 2-Chlorophenol	25.00	25.69	102.75	
7 1,3-Dichlorobenzen	25.00	25.33	101.32	
9 1,4-Dichlorobenzen	25.00	25.46	101.84	
11 Benzyl alcohol	25.00	27.17	108.69	
12 1,2-Dichlorobenzen	25.00	25.29	101.16	
13 2-Methylphenol	25.00	25.39	101.58	
14 2,2'-oxybis(1-Chlo	25.00	24.94	99.74	
15 4-Methylphenol	25.00	25.03	100.13	
16 N-Nitroso-di-n-pro	25.00	24.77	99.10	
17 Hexachloroethane	25.00	25.70	102.80	
19 Nitrobenzene	25.00	25.39	101.57	
20 Isophorone	25.00	25.04	100.15	
21 2-Nitrophenol	25.00	25.97	103.86	
22 2,4-Dimethylphenol	25.00	25.35	101.42	
23 Bis(2-Chloroethoxy	25.00	25.15	100.61	
24 Benzoic acid	50.00	41.80	83.61	
25 2,4-Dichlorophenol	25.00	25.51	102.02	
26 1,2,4-Trichloroben	25.00	24.93	99.72	
28 Naphthalene	25.00	25.35	101.40	
29 4-Chloroaniline	25.00	24.46	97.83	
30 Hexachlorobutadien	25.00	25.32	101.28	
31 4-Chloro-3-methylp	25.00	24.85	99.39	
32 2-Methylnaphthalen	25.00	25.52	102.09	
33 Hexachlorocyclopen	25.00	26.62	106.48	
34 2,4,6-Trichlorophe	25.00	25.02	100.07	
35 2,4,5-Trichlorophe	25.00	25.53	102.12	
37 2-Chloronaphthalen	25.00	25.37	101.49	
38 2-Nitroaniline	25.00	25.95	103.80	
39 Dimethylphthalate	25.00	24.99	99.97	
40 Acenaphthylene	25.00	25.69	102.77	
41 2,6-Dinitrotoluene	25.00	25.43	101.72	

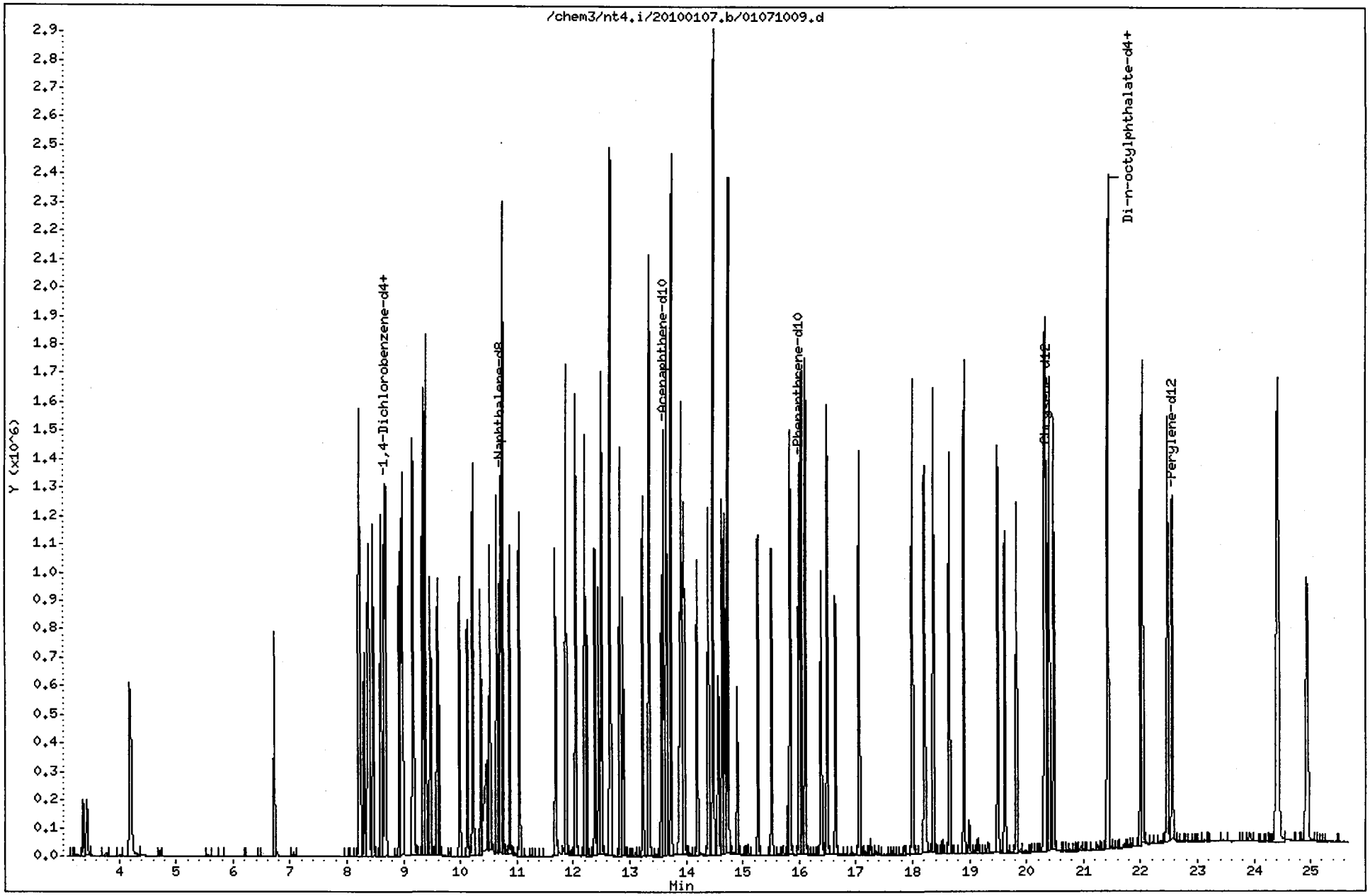
SPIKE	COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
43	3-Nitroaniline	25.00	25.31	101.24	
44	Acenaphthene	25.00	25.18	100.72	
45	2,4-Dinitrophenol	50.00	45.97	91.94	
46	Dibenzofuran	25.00	25.46	101.85	
47	4-Nitrophenol	25.00	26.55	106.19	
48	2,4-Dinitrotoluene	25.00	25.26	101.04	
49	Fluorene	25.00	25.59	102.35	
50	Diethylphthalate	25.00	24.67	98.66	
51	4-Chlorophenyl-phe	25.00	25.14	100.57	
52	4-Nitroaniline	25.00	25.41	101.64	
53	4,6-Dinitro-2-meth	50.00	52.81	105.62	
54	N-Nitrosodiphenyla	25.00	25.04	100.17	
56	4-Bromophenyl-phen	25.00	24.98	99.91	
57	Hexachlorobenzene	25.00	24.84	99.35	
58	Pentachlorophenol	25.00	19.34	77.35	
60	Phenanthrene	25.00	24.95	99.81	
61	Anthracene	25.00	25.46	101.84	
63	Di-n-butylphthalat	25.00	25.26	101.05	
64	Fluoranthene	25.00	24.95	99.82	
65	Pyrene	25.00	25.07	100.30	
67	Butylbenzylphthala	25.00	25.00	100.01	
68	Benzo(a)anthracene	25.00	24.96	99.86	
70	3,3'-Dichlorobenzi	25.00	26.34	105.35	
71	Chrysene	25.00	25.07	100.26	
72	bis(2-Ethylhexyl)p	25.00	24.85	99.39	
73	Di-n-octylphthalat	25.00	25.51	102.05	
74	Benzo(b)fluoranthe	25.00	23.01	92.05	
75	Benzo(k)fluoranthe	25.00	26.46	105.84	
76	Benzo(a)pyrene	25.00	24.94	99.77	
78	Indeno(1,2,3-cd)py	25.00	25.75	103.00	
79	Dibenzo(a,h)anthra	25.00	24.65	98.60	
80	Benzo(g,h,i)peryle	25.00	24.87	99.47	
90	N-Nitrosodimethyla	25.00	25.27	101.08	
91	Aniline	25.00	25.55	102.20	
93	Benzidine	25.00	23.54	94.18	
105	1-methylnaphthalen	25.00	25.08	100.33	
143	1,4-Dioxane	25.00	25.17	100.66	

Data File: /chem3/nt4.i/20100107.b/01071009.d
Date : 07-JAN-2010 17:36
Client ID: ICV0107
Sample Info: ICV0107,

Column phase: ZB-5msi

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATE

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINA

Instrument ID: NT4 Cont. Calib. Date: 01/18/10

Init. Calib. Date: 01/07/10 Cont. Calib. Time: 1338

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.948	1.005	0.700	AVRG	6.0
2-Methylnaphthalene	0.537	0.570	0.400	AVRG	6.1
Acenaphthylene	1.599	1.650	0.900	AVRG	3.2
Acenaphthene	1.056	1.080	0.900	AVRG	2.3
Dibenzofuran	1.438	1.497	0.800	AVRG	4.1
Fluorene	1.177	1.326	0.900	AVRG	12.6
Phenanthrene	1.040	1.059	0.700	AVRG	1.8
Anthracene	1.024	1.069	0.700	AVRG	4.4
Fluoranthene	1.022	1.210	0.600	AVRG	18.4
Pyrene	1.274	1.167	0.600	AVRG	-8.4
Benzo(a)anthracene	1.180	1.205	0.800	AVRG	2.1
Chrysene	1.120	1.124	0.700	AVRG	0.4
Benzo(b)fluoranthene	1.231	1.189	0.700	AVRG	-3.4
Benzo(k)fluoranthene	1.223	1.261	0.700	AVRG	3.1
Benzo(a)pyrene	1.113	1.125	0.700	AVRG	1.1
Indeno(1,2,3-cd)pyrene	1.278	1.239	0.500	AVRG	-3.0
Dibenzo(a,h)anthracene	1.069	1.034	0.400	AVRG	-3.3
Benzo(g,h,i)perylene	1.141	1.012	0.500	AVRG	-11.3
1-methylnaphthalene	0.530	0.566	0.010	AVRG	6.8
Terphenyl-d14	0.741	0.695	0.010	AVRG	-6.2
2-Fluorobiphenyl	1.154	1.125	0.010	AVRG	-2.5

<- Exceeds QC limit of 20% D
* RF less than minimum RF

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 01181001.d
Analysis Type:
Lab Sample ID: CC0118
Method: /chem3/nt4.i/20100118.b/SW846100107.m

Injection Date: 18-JAN-2010 13:38
Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Init. Cal. Times: 13:14 17:02
Quant Type: ISTD

01/18/10

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 2-Fluorophenol	1.09483	1.09939	1.09939	0.010	0.41652	20.00000	Averaged	
$ 2 Phenol-d5	1.11990	1.15042	1.15042	0.010	2.72611	20.00000	Averaged	
3 Phenol	1.50342	1.61717	1.61717	0.100	7.56575	20.00000	Averaged	
$ 5 2-Chlorophenol-d4	1.10762	1.12049	1.12049	0.010	1.16112	20.00000	Averaged	
4 Bis(2-Chloroethyl)ether	1.15452	1.12499	1.12499	0.700	-2.55745	20.00000	Averaged	
6 2-Chlorophenol	1.27752	1.37373	1.37373	0.800	7.53107	20.00000	Averaged	
7 1,3-Dichlorobenzene	1.38671	1.41507	1.41507	0.010	2.04490	20.00000	Averaged	
9 1,4-Dichlorobenzene	1.41092	1.45598	1.45598	0.010	3.19363	20.00000	Averaged	
$ 10 1,2-Dichlorobenzene-d4	0.78674	0.79000	0.79000	0.010	0.41399	20.00000	Averaged	
12 1,2-Dichlorobenzene	1.32027	1.37395	1.37395	0.010	4.06579	20.00000	Averaged	
11 Benzyl alcohol	0.72276	0.83780	0.83780	0.010	15.91543	20.00000	Averaged	
14 2,2'-oxybis(1-Chloropropane	1.31719	1.31207	1.31207	0.010	-0.38876	20.00000	Averaged	
13 2-Methylphenol	1.07303	1.17819	1.17819	0.700	9.80030	20.00000	Averaged	
17 Hexachloroethane	0.58300	0.59690	0.59690	0.300	2.38349	20.00000	Averaged	
16 N-Nitroso-di-n-propylamine	0.82594	0.84060	0.84060	0.500	1.77460	20.00000	Averaged	
15 4-Methylphenol	1.11772	1.24927	1.24927	0.600	11.77017	20.00000	Averaged	
$ 18 Nitrobenzene-d5	0.34525	0.36014	0.36014	0.010	4.31328	20.00000	Averaged	
19 Nitrobenzene	0.35117	0.37180	0.37180	0.200	5.87405	20.00000	Averaged	
20 Isophorone	0.54202	0.53549	0.53549	0.400	-1.20543	20.00000	Averaged	
21 2-Nitrophenol	0.19192	0.20339	0.20339	0.100	5.97645	20.00000	Averaged	
22 2,4-Dimethylphenol	0.35247	0.38042	0.38042	0.200	7.93050	20.00000	Averaged	
23 Bis(2-Chloroethoxy)methane	0.37788	0.37013	0.37013	0.050	-2.04928	20.00000	Averaged	
24 Benzoic acid	61.61022	50.00000	0.22663	0.010	23.22044	20.00000	Quadratic	<- NTC
25 2,4-Dichlorophenol	0.27855	0.30943	0.30943	0.100	11.08387	20.00000	Averaged	
26 1,2,4-Trichlorobenzene	0.29649	0.30824	0.30824	0.010	3.96398	20.00000	Averaged	
28 Naphthalene	0.94823	1.00536	1.00536	0.100	6.02509	20.00000	Averaged	
29 4-Chloroaniline	0.40861	0.39540	0.39540	0.010	-3.23517	20.00000	Averaged	
30 Hexachlorobutadiene	0.16660	0.17665	0.17665	0.010	6.03070	20.00000	Averaged	
31 4-Chloro-3-methylphenol	0.29772	0.33565	0.33565	0.200	12.74154	20.00000	Averaged	
32 2-Methylnaphthalene	0.53682	0.57019	0.57019	0.300	6.21506	20.00000	Averaged	
33 Hexachlorocyclopentadiene	0.29875	0.25838	0.25838	0.010	-13.51340	20.00000	Averaged	
34 2,4,6-Trichlorophenol	0.34169	0.35677	0.35677	0.200	4.41310	20.00000	Averaged	
35 2,4,5-Trichlorophenol	0.34662	0.37334	0.37334	0.200	7.70813	20.00000	Averaged	
$ 36 2-Fluorobiphenyl	1.15459	1.12486	1.12486	0.010	-2.57519	20.00000	Averaged	
37 2-Chloronaphthalene	1.04150	1.06527	1.06527	0.700	2.28258	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 01181001.d
Analysis Type:
Lab Sample ID: CC0118
Method: /chem3/nt4.i/20100118.b/SW846100107.m

Injection Date: 18-JAN-2010 13:38
Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Init. Cal. Times: 13:14 17:02
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.32150	0.32344	0.32344	0.010	0.60408	20.00000	Averaged	
39 Dimethylphthalate	1.21299	1.24253	1.24253	0.010	2.43454	20.00000	Averaged	
40 Acenaphthylene	1.59924	1.64953	1.64953	0.900	3.14459	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.27789	0.30209	0.30209	0.100	8.70612	20.00000	Averaged	
43 3-Nitroaniline	0.39172	0.39528	0.39528	0.010	0.90767	20.00000	Averaged	
44 Acenaphthene	1.05579	1.07968	1.07968	0.100	2.26250	20.00000	Averaged	
45 2,4-Dinitrophenol	42.47669	50.00000	0.13799	0.030	-15.04661	20.00000	Quadratic	
46 Dibenzofuran	1.43780	1.49697	1.49697	0.800	4.11589	20.00000	Averaged	
47 4-Nitrophenol	0.17382	0.23507	0.23507	0.010	35.23574	20.00000	Averaged	<- MTC
48 2,4-Dinitrotoluene	0.37681	0.41620	0.41620	0.200	10.45394	20.00000	Averaged	
50 Diethylphthalate	1.29000	1.44455	1.44455	0.010	11.98072	20.00000	Averaged	
49 Fluorene	1.17669	1.32571	1.32571	0.100	12.66419	20.00000	Averaged	
51 4-Chlorophenyl-phenylether	0.53395	0.60428	0.60428	0.100	13.17078	20.00000	Averaged	
52 4-Nitroaniline	0.30883	0.33753	0.33753	0.010	9.29199	20.00000	Averaged	
53 4,6-Dinitro-2-methylphenol	0.12923	0.13132	0.13132	0.001	1.61775	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.45199	0.42175	0.42175	0.010	-6.68920	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.11892	0.14196	0.14196	0.010	19.37892	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.19612	0.18968	0.18968	0.100	-3.28356	20.00000	Averaged	
57 Hexachlorobenzene	0.19515	0.19432	0.19432	0.100	-0.42433	20.00000	Averaged	
58 Pentachlorophenol	35.54753	25.00000	0.09541	0.010	42.19012	20.00000	Quadratic	<- MTC
60 Phenanthrene	1.04001	1.05948	1.05948	0.700	1.87225	20.00000	Averaged	
61 Anthracene	1.02426	1.06886	1.06886	0.700	4.35422	20.00000	Averaged	
62 Carbazole	0.61282	0.69568	0.69568	0.010	13.52131	20.00000	Averaged	
63 Di-n-butylphthalate	1.23440	1.34937	1.34937	0.010	9.31356	20.00000	Averaged	
64 Fluoranthene	1.02202	1.21044	1.21044	0.600	18.43593	20.00000	Averaged	
65 Pyrene	1.27365	1.16661	1.16661	0.600	-8.40388	20.00000	Averaged	
$ 66 Terphenyl-d14	0.74170	0.69472	0.69472	0.010	-6.33345	20.00000	Averaged	
67 Butylbenzylphthalate	0.68215	0.66125	0.66125	0.010	-3.06437	20.00000	Averaged	
68 Benzo(a)anthracene	1.17992	1.20504	1.20504	0.800	2.12893	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.41866	0.43300	0.43300	0.010	3.42668	20.00000	Averaged	
71 Chrysene	1.12060	1.12435	1.12435	0.700	0.33411	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.57975	0.56850	0.56850	0.010	-1.94164	20.00000	Averaged	
73 Di-n-octylphthalate	0.96321	0.98071	0.98071	0.010	1.81678	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.23129	1.18928	1.18928	0.700	-3.41208	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.22313	1.26083	1.26083	0.700	3.08172	20.00000	Averaged	

01/19/10

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i Injection Date: 18-JAN-2010 13:38
Lab File ID: 01181001.d Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Analysis Type: Init. Cal. Times: 13:14 17:02
Lab Sample ID: CC0118 Quant Type: ISTD
Method: /chem3/nt4.i/20100118.b/SW846100107.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
76 Benzo(a)pyrene	1.11269	1.12511	1.12511	0.700	1.11627	20.00000	Averaged	
78 Indeno(1,2,3-cd)pyrene	1.27842	1.23908	1.23908	0.500	-3.07722	20.00000	Averaged	
79 Dibenzo(a,h)anthracene	1.06934	1.03360	1.03360	0.400	-3.34234	20.00000	Averaged	
80 Benzo(g,h,i)perylene	1.14165	1.01239	1.01239	0.500	-11.32166	20.00000	Averaged	
90 N-Nitrosodimethylamine	0.68435	0.67982	0.67982	0.010	-0.66204	20.00000	Averaged	
103 Pyridine	1.18141	1.25351	1.25351	0.010	6.10313	20.00000	Averaged	
91 Aniline	1.67396	1.63188	1.63188	0.010	-2.51368	20.00000	Averaged	
105 1-methylnaphthalene	0.53046	0.56641	0.56641	0.010	6.77590	20.00000	Averaged	
93 Benzidine	13.65687	25.00000	0.20376	0.010	-45.37254	20.00000	Quadratic	<- NTC
111 Azobenzene (1,2-DP-Hydrazin	1.11366	1.17012	1.17012	0.010	5.06924	20.00000	Averaged	
143 1,4-Dioxane	0.44981	0.44311	0.44311	0.010	-1.48870	20.00000	Averaged	
$ 137 d8-1,4-Dioxane	0.45562	0.42767	0.42767	0.010	-6.13439	20.00000	Averaged	
144 alpha-Terpineol	0.14164	0.14995	0.14995	0.010	5.86328	20.00000	Averaged	
98 Retene	0.58145	0.57727	0.57727	0.010	-0.71880	20.00000	Averaged	
133 Butylatedhydroxytoluene	0.95957	1.05272	1.05272	0.010	9.70727	20.00000	Averaged	
115 Tributyl Phosphate	0.91559	0.94886	0.94886	0.010	3.63406	20.00000	Averaged	
116 Dibutyl Phenyl Phosphate	0.69239	0.76347	0.76347	0.010	10.26536	20.00000	Averaged	
117 Butyl Diphenyl Phosphate	0.27046	0.25373	0.25373	0.010	-6.18598	20.00000	Averaged	
118 Triphenyl Phosphate	0.20332	0.20252	0.20252	0.010	-0.39532	20.00000	Averaged	
123 Acetophenone	0.64261	0.65156	0.65156	0.010	1.39415	20.00000	Averaged	
179 n-Decane	1.10322	1.12100	1.12100	0.010	1.61169	20.00000	Averaged	
180 n-Octadecane	0.39776	0.38544	0.38544	0.010	-3.09683	20.00000	Averaged	
168 Pentachlorobenzene	0.38812	0.41405	0.41405	0.010	6.68064	20.00000	Averaged	
113 Diphenyl Oxide	0.71663	0.70421	0.70421	0.010	-1.73405	20.00000	Averaged	
112 Biphenyl	1.24279	1.29901	1.29901	0.010	4.52328	20.00000	Averaged	

01/19/10

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100118.b/01181001.d
Lab Smp Id: CC0118 Client Smp ID: CC0118
Inj Date : 18-JAN-2010 13:38
Operator : JZ Inst ID: nt4.i
Smp Info : CC0118
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100118.b/SW846100107.m
Meth Date : 18-Jan-2010 15:26 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

JZ 01/18/10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.666	6.666	(0.775)	308704	25.0000	25.10
$	2 Phenol-d5	99	8.158	8.158	(0.949)	323035	25.0000	25.68
	3 Phenol	94	8.181	8.181	(0.951)	454094	25.0000	26.89
$	5 2-Chlorophenol-d4	132	8.305	8.305	(0.966)	314628	25.0000	25.29
	4 Bis(2-Chloroethyl)ether	93	8.246	8.246	(0.959)	315893	25.0000	24.36
	6 2-Chlorophenol	128	8.334	8.334	(0.969)	385737	25.0000	26.88
	7 1,3-Dichlorobenzene	146	8.540	8.540	(0.993)	397345	25.0000	25.51
*	8 1,4-Dichlorobenzene-d4	152	8.598	8.598	(1.000)	224637	20.0000	
	9 1,4-Dichlorobenzene	146	8.628	8.628	(1.003)	408833	25.0000	25.80
$	10 1,2-Dichlorobenzene-d4	152	8.898	8.898	(1.035)	221828	25.0000	25.10
	12 1,2-Dichlorobenzene	146	8.921	8.921	(1.038)	385800	25.0000	26.02
	11 Benzyl alcohol	108	8.868	8.868	(1.031)	235250	25.0000	28.98
	14 2,2'-oxybis(1-Chloropropane)	45	9.115	9.115	(1.060)	368423	25.0000	24.90
	13 2-Methylphenol	108	9.103	9.103	(1.059)	330831	25.0000	27.45
	17 Hexachloroethane	117	9.409	9.409	(1.094)	167606	25.0000	25.60
	16 N-Nitroso-di-n-propylamine	70	9.333	9.333	(1.085)	236036	25.0000	25.44
	15 4-Methylphenol	108	9.333	9.333	(1.085)	350791	25.0000	27.94
$	18 Nitrobenzene-d5	82	9.526	9.526	(0.894)	372628	25.0000	26.08
	19 Nitrobenzene	77	9.556	9.556	(0.897)	384696	25.0000	26.47
	20 Isophorone	82	9.926	9.926	(0.932)	554058	25.0000	24.70
	21 2-Nitrophenol	139	10.073	10.073	(0.945)	210441	25.0000	26.49
	22 2,4-Dimethylphenol	107	10.173	10.173	(0.955)	393612	25.0000	26.98
	23 Bis(2-Chloroethoxy)methane	93	10.302	10.302	(0.967)	382970	25.0000	24.49
	24 Benzoic acid	105	10.402	10.402	(0.976)	468985	50.0000	61.61
	25 2,4-Dichlorophenol	162	10.460	10.460	(0.982)	320160	25.0000	27.77
	26 1,2,4-Trichlorobenzene	180	10.590	10.590	(0.994)	318930	25.0000	25.99
*	27 Naphthalene-d8	136	10.654	10.654	(1.000)	827743	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	28 Naphthalene	128	10.684	10.684	(1.003)	1040224	25.0000	26.51
	29 4-Chloroaniline	127	10.813	10.813	(1.015)	409107	25.0000	24.19
	30 Hexachlorobutadiene	225	10.983	10.983	(1.031)	182774	25.0000	26.51
	31 4-Chloro-3-methylphenol	107	11.629	11.629	(1.092)	347295	25.0000	28.19
	32 2-Methylnaphthalene	141	11.806	11.806	(1.108)	589962	25.0000	26.55
	33 Hexachlorocyclopentadiene	237	12.182	12.182	(0.900)	166738	25.0000	21.62
	34 2,4,6-Trichlorophenol	196	12.323	12.323	(0.911)	230234	25.0000	26.10
	35 2,4,5-Trichlorophenol	196	12.393	12.393	(0.916)	240928	25.0000	26.93
$	36 2-Fluorobiphenyl	172	12.446	12.446	(0.920)	725905	25.0000	24.36
	37 2-Chloronaphthalene	162	12.599	12.599	(0.931)	687452	25.0000	25.57
	38 2-Nitroaniline	65	12.822	12.822	(0.947)	208725	25.0000	25.15
	39 Dimethylphthalate	163	13.174	13.174	(0.974)	801839	25.0000	25.61
	40 Acenaphthylene	152	13.286	13.286	(0.982)	1064491	25.0000	25.79
	41 2,6-Dinitrotoluene	165	13.280	13.280	(0.981)	194946	25.0000	27.18
*	42 Acenaphthene-d10	164	13.533	13.533	(1.000)	516264	20.0000	
	43 3-Nitroaniline	138	12.822	12.822	(0.947)	255085	25.0000	25.23
	44 Acenaphthene	153	13.586	13.586	(1.004)	696747	25.0000	25.57
	45 2,4-Dinitrophenol	184	13.668	13.668	(1.010)	178094	50.0000	42.48
	46 Dibenzofuran	168	13.850	13.850	(1.023)	966042	25.0000	26.03
	47 4-Nitrophenol	109	13.821	13.821	(1.021)	151698	25.0000	33.81
	48 2,4-Dinitrotoluene	165	13.915	13.915	(1.028)	268585	25.0000	27.61
	50 Diethylphthalate	149	14.332	14.332	(1.059)	932210	25.0000	28.00
	49 Fluorene	166	14.414	14.414	(1.065)	855520	25.0000	28.17
	51 4-Chlorophenyl-phenylether	204	14.420	14.420	(1.066)	389958	25.0000	28.29
	52 4-Nitroaniline	138	14.514	14.514	(1.072)	217816	25.0000	27.32
	53 4,6-Dinitro-2-methylphenol	198	14.584	14.584	(0.915)	306025	50.0000	50.81
	54 N-Nitrosodiphenylamine	169	14.625	14.625	(0.918)	491423	25.0000	23.33
$	55 2,4,6-Tribromophenol	330	14.843	14.843	(1.097)	91612	25.0000	29.84(M)
	56 4-Bromophenyl-phenylether	248	15.207	15.207	(0.954)	221011	25.0000	24.18
	57 Hexachlorobenzene	284	15.448	15.448	(0.969)	226419	25.0000	24.89
	58 Pentachlorophenol	266	15.747	15.747	(0.988)	111167	25.0000	35.55
*	59 Phenanthrene-d10	188	15.935	15.935	(1.000)	932152	20.0000	
	60 Phenanthrene	178	15.977	15.977	(1.003)	1234492	25.0000	25.47
	61 Anthracene	178	16.047	16.047	(1.007)	1245425	25.0000	26.09
	62 Carbazole	167	16.323	16.323	(1.024)	810604	25.0000	28.38
	63 Di-n-butylphthalate	149	16.993	16.993	(1.066)	1572272	25.0000	27.33
	64 Fluoranthene	202	17.933	17.933	(1.125)	1410395	25.0000	29.61
	65 Pyrene	202	18.291	18.291	(0.902)	1468750	25.0000	22.90
$	66 Terphenyl-d14	244	18.579	18.579	(0.916)	874648	25.0000	23.42
	67 Butylbenzylphthalate	149	19.437	19.437	(0.958)	832503	25.0000	24.23
	68 Benzo(a)anthracene	228	20.265	20.265	(0.999)	1517128	25.0000	25.53
*	69 Chrysene-d12	240	20.288	20.288	(1.000)	1007190	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.247	20.247	(0.998)	545145	25.0000	25.86
	71 Chrysene	228	20.329	20.329	(1.002)	1415539	25.0000	25.08
	72 bis(2-Ethylhexyl)phthalate	149	20.418	20.418	(0.956)	1181855	25.0000	24.51
*	134 Di-n-octylphthalate-d4	153	21.357	21.357	(1.000)	1663134	20.0000	
	73 Di-n-octylphthalate	149	21.369	21.369	(1.001)	2038806	25.0000	25.45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.939	21.939	(0.976)	1507454	25.0000	24.15
75	Benzo(k)fluoranthene	252	21.968	21.968	(0.977)	1598147	25.0000	25.77
76	Benzo(a)pyrene	252	22.397	22.397	(0.996)	1426125	25.0000	25.28
* 77	Perylene-d12	264	22.479	22.479	(1.000)	1014030	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.295	24.295	(1.081)	1570583	25.0000	24.23
79	Dibenzo(a,h)anthracene	278	24.306	24.306	(1.081)	1310128	25.0000	24.16
80	Benzo(g,h,i)perylene	276	24.806	24.806	(1.103)	1283245	25.0000	22.17
90	N-Nitrosodimethylamine	74	4.128	4.128	(0.480)	190890	25.0000	24.83
103	Pyridine	79	4.104	4.104	(0.477)	351981	25.0000	26.53
91	Aniline	93	8.152	8.152	(0.948)	458226	25.0000	24.37
105	1-methylnaphthalene	141	11.982	11.982	(1.125)	586050	25.0000	26.69
93	Benzidine	184	18.156	18.156	(0.895)	256525	25.0000	13.66
111	Azobenzene (1,2-DP-Hydrazine)	77	14.678	14.678	(1.085)	755113	25.0000	26.27
143	1,4-Dioxane	88	3.341	3.341	(0.389)	124425	25.0000	24.63
$ 137	d8-1,4-Dioxane	96	3.276	3.276	(0.381)	120089	25.0000	23.47
144	alpha-Terpineol	59	10.690	10.690	(1.003)	155146	25.0000	26.47
98	Retene	219	18.837	18.837	(0.928)	726775	25.0000	24.82
133	Butylatedhydroxytoluene	205	13.674	13.674	(1.010)	679351	25.0000	27.43
115	Tributyl Phosphate	99	14.690	14.690	(0.922)	1105601	25.0000	25.91
116	Dibutyl Phenyl Phosphate	175	16.435	16.435	(1.031)	889583	25.0000	27.57
117	Butyl Diphenyl Phosphate	94	18.138	18.138	(0.894)	319444	25.0000	23.45
118	Triphenyl Phosphate	326	19.760	19.760	(0.974)	254971	25.0000	24.90
123	Acetophenone	105	9.286	9.286	(0.872)	674160	25.0000	25.35
179	n-Decane	57	8.404	8.404	(0.977)	314772	25.0000	25.40
180	n-Octadecane	57	15.789	15.789	(0.991)	449116	25.0000	24.23
168	Pentachlorobenzene	250	13.891	13.891	(1.026)	267197	25.0000	26.67
113	Diphenyl Oxide	170	12.769	12.769	(0.944)	454445	25.0000	24.57
112	Biphenyl	154	12.587	12.587	(0.930)	838287	25.0000	26.13

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01181001.d
Lab Smp Id: CC0118
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-

Calibration Date: 18-JAN-2010
Calibration Time: 14:12
Client Smp ID: CC0118
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	224637	-21.49
27 Naphthalene-d8	1035557	517778	2071114	827743	-20.07
42 Acenaphthene-d10	594267	297134	1188534	516264	-13.13
59 Phenanthrene-d10	951721	475860	1903442	932152	-2.06
69 Chrysene-d12	794862	397431	1589724	1007190	26.71
134 Di-n-octylphthala	1280700	640350	2561400	1663134	29.86
77 Perylene-d12	826094	413047	1652188	1014030	22.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.60	8.10	9.10	8.60	0.00
27 Naphthalene-d8	10.65	10.15	11.15	10.65	0.00
42 Acenaphthene-d10	13.53	13.03	14.03	13.53	0.00
59 Phenanthrene-d10	15.94	15.44	16.44	15.94	0.00
69 Chrysene-d12	20.29	19.79	20.79	20.29	0.00
134 Di-n-octylphthala	21.36	20.86	21.86	21.36	0.00
77 Perylene-d12	22.48	21.98	22.98	22.48	0.00

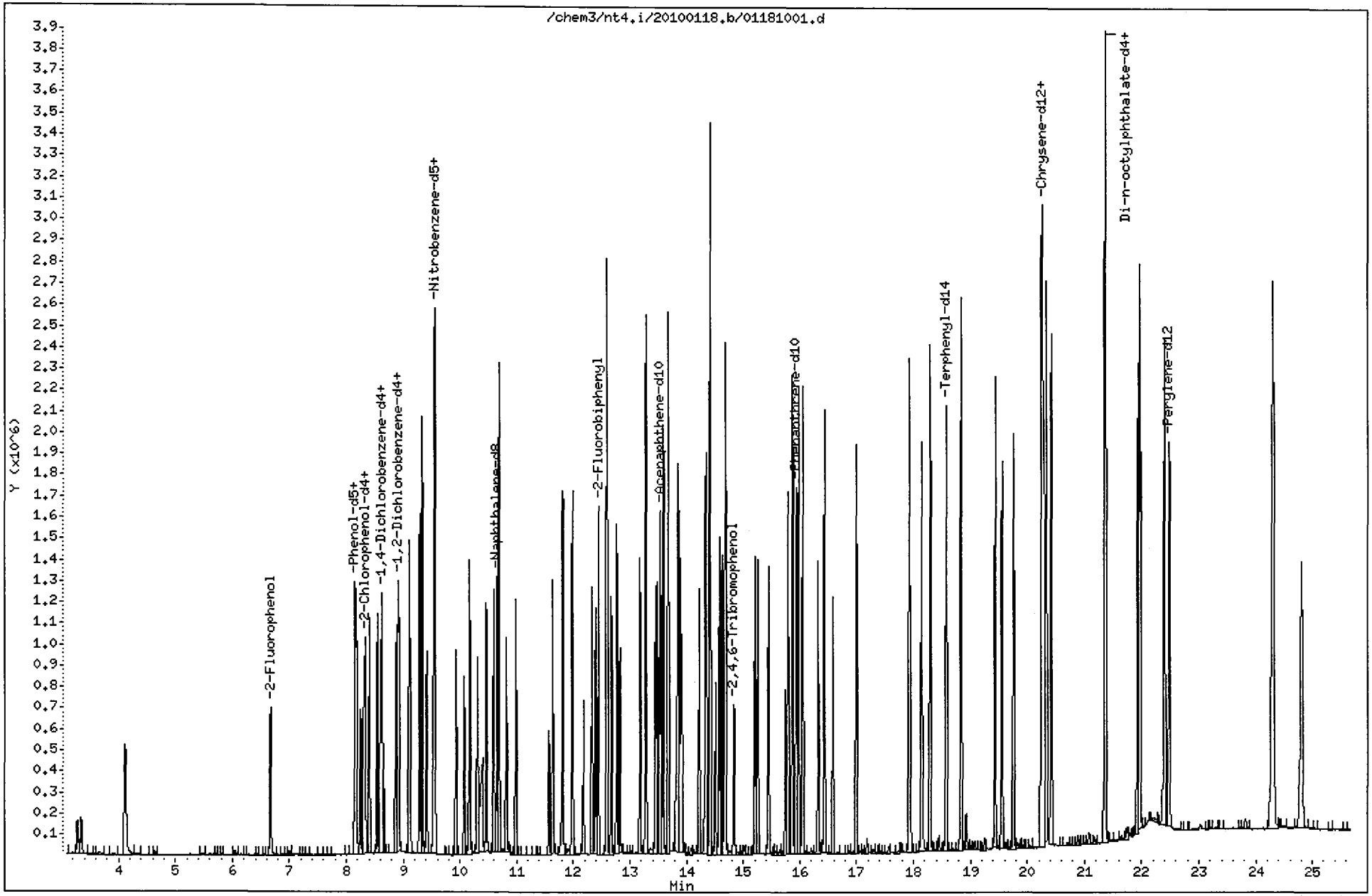
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100118.b/01181001.d
Date : 18-JAN-2010 13:38
Client ID: CC0118
Sample Info: CC0118

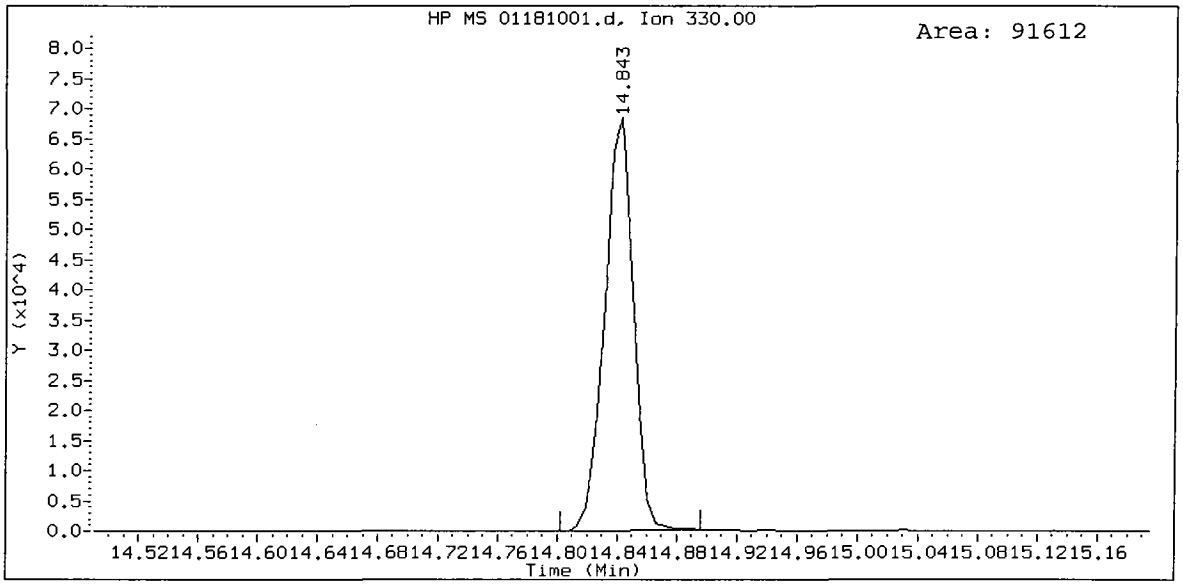
Column phase: ZB-5msi

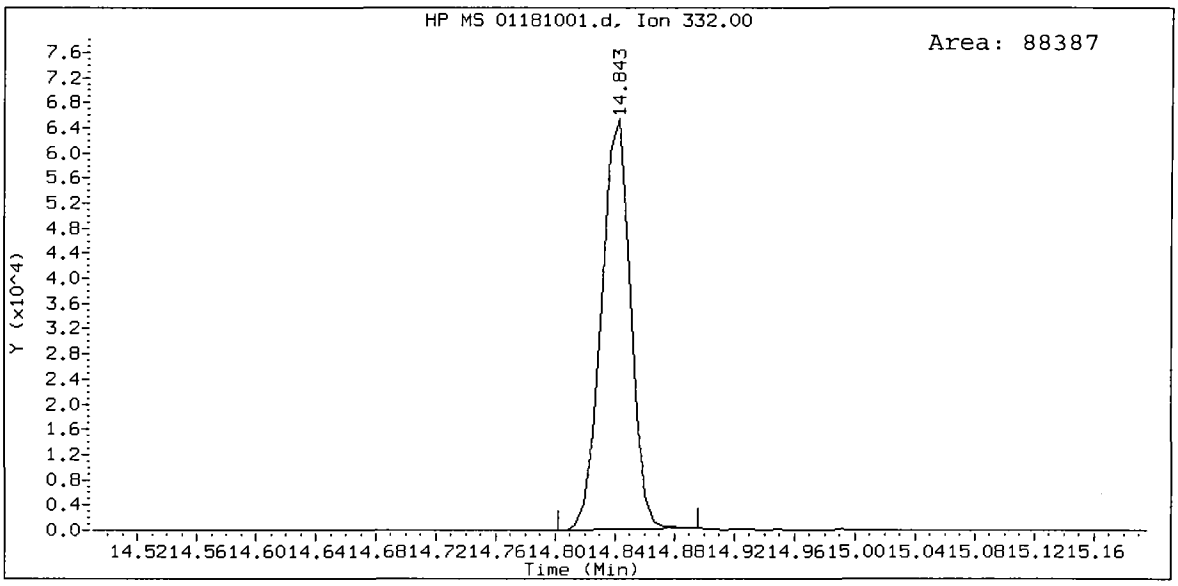
Instrument: nt4.i

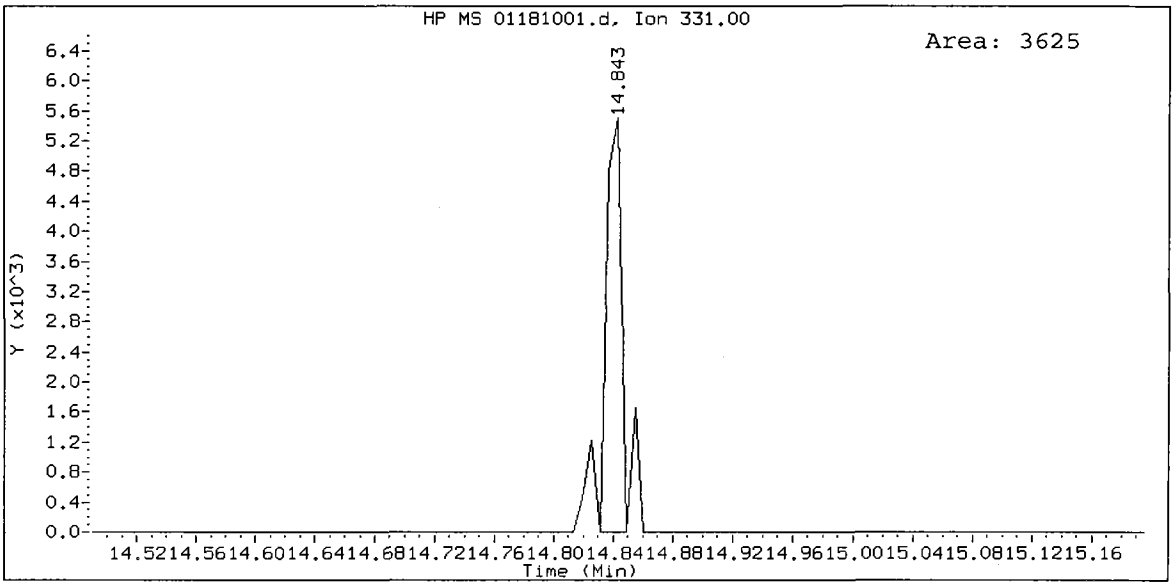
Operator: JZ
Column diameter: 0.32



CC0118, /chem3/nt4.i/20100118.b/01181001.d
2,4,6-Tribromophenol Amount: 29.84







7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDERPACIFIC GROUNDWATE

ARI Job No: QF10 Project: POS-LORA LAKE APTS INTERIMINA

Instrument ID: NT4 Cont. Calib. Date: 01/19/10

Init. Calib. Date: 01/07/10 Cont. Calib. Time: 1217

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	0.948	1.015	0.700	AVRG	7.1
2-Methylnaphthalene	0.537	0.570	0.400	AVRG	6.1
Acenaphthylene	1.599	1.652	0.900	AVRG	3.3
Acenaphthene	1.056	1.091	0.900	AVRG	3.3
Dibenzofuran	1.438	1.499	0.800	AVRG	4.2
Fluorene	1.177	1.303	0.900	AVRG	10.7
Phenanthrene	1.040	1.081	0.700	AVRG	3.9
Anthracene	1.024	1.061	0.700	AVRG	3.6
Fluoranthene	1.022	1.102	0.600	AVRG	7.8
Pyrene	1.274	1.233	0.600	AVRG	-3.2
Benzo(a)anthracene	1.180	1.220	0.800	AVRG	3.4
Chrysene	1.120	1.124	0.700	AVRG	0.4
Benzo(b)fluoranthene	1.231	1.288	0.700	AVRG	4.6
Benzo(k)fluoranthene	1.223	1.298	0.700	AVRG	6.1
Benzo(a)pyrene	1.113	1.139	0.700	AVRG	2.3
Indeno(1,2,3-cd)pyrene	1.278	1.278	0.500	AVRG	0.0
Dibenzo(a,h)anthracene	1.069	1.062	0.400	AVRG	-0.6
Benzo(g,h,i)perylene	1.141	1.040	0.500	AVRG	-8.8
1-methylnaphthalene	0.530	0.561	0.010	AVRG	5.8
Terphenyl-d14	0.741	0.714	0.010	AVRG	-3.6
2-Fluorobiphenyl	1.154	1.163	0.010	AVRG	0.8

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i
Lab File ID: 01191001.d
Analysis Type:
Lab Sample ID: CC0119
Method: /chem3/nt4.i/20100119.b/SW846100107.m

Injection Date: 19-JAN-2010 12:17
Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Init. Cal. Times: 13:14 17:02
Quant Type: ISTD

AZ 01/19/10

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 2-Fluorophenol	1.09483	1.08441	1.08441	0.010	-0.95192	20.00000	Averaged	
$ 2 Phenol-d5	1.11990	1.17011	1.17011	0.010	4.48423	20.00000	Averaged	
3 Phenol	1.50342	1.61290	1.61290	0.100	7.28230	20.00000	Averaged	
$ 5 2-Chlorophenol-d4	1.10762	1.12745	1.12745	0.010	1.79037	20.00000	Averaged	
4 Bis(2-Chloroethyl)ether	1.15452	1.12067	1.12067	0.700	-2.93152	20.00000	Averaged	
6 2-Chlorophenol	1.27752	1.37953	1.37953	0.800	7.98565	20.00000	Averaged	
7 1,3-Dichlorobenzene	1.38671	1.41841	1.41841	0.010	2.28581	20.00000	Averaged	
9 1,4-Dichlorobenzene	1.41092	1.44656	1.44656	0.010	2.52582	20.00000	Averaged	
$ 10 1,2-Dichlorobenzene-d4	0.78674	0.79801	0.79801	0.010	1.43303	20.00000	Averaged	
12 1,2-Dichlorobenzene	1.32027	1.36762	1.36762	0.010	3.58606	20.00000	Averaged	
11 Benzyl alcohol	0.72276	0.83337	0.83337	0.010	15.30287	20.00000	Averaged	
14 2,2'-oxybis(1-Chloropropane	1.31719	1.24025	1.24025	0.010	-5.84092	20.00000	Averaged	
13 2-Methylphenol	1.07303	1.16780	1.16780	0.700	8.83241	20.00000	Averaged	
17 Hexachloroethane	0.58300	0.59067	0.59067	0.300	1.31643	20.00000	Averaged	
16 N-Nitroso-di-n-propylamine	0.82594	0.84082	0.84082	0.500	1.80235	20.00000	Averaged	
15 4-Methylphenol	1.11772	1.26114	1.26114	0.600	12.83172	20.00000	Averaged	
$ 18 Nitrobenzene-d5	0.34525	0.36935	0.36935	0.010	6.98076	20.00000	Averaged	
19 Nitrobenzene	0.35117	0.37428	0.37428	0.200	6.58091	20.00000	Averaged	
20 Isophorone	0.54202	0.53635	0.53635	0.400	-1.04596	20.00000	Averaged	
21 2-Nitrophenol	0.19192	0.20814	0.20814	0.100	8.45469	20.00000	Averaged	
22 2,4-Dimethylphenol	0.35247	0.38955	0.38955	0.200	10.52032	20.00000	Averaged	
23 Bis(2-Chloroethoxy)methane	0.37788	0.37305	0.37305	0.050	-1.27690	20.00000	Averaged	
24 Benzoic acid	69.07107	50.00000	0.25433	0.010	38.14214	20.00000	Quadratic	<- NTC
25 2,4-Dichlorophenol	0.27855	0.31273	0.31273	0.100	12.26905	20.00000	Averaged	
26 1,2,4-Trichlorobenzene	0.29649	0.31468	0.31468	0.010	6.13737	20.00000	Averaged	
28 Naphthalene	0.94823	1.01524	1.01524	0.100	7.06677	20.00000	Averaged	
29 4-Chloroaniline	0.40861	0.39497	0.39497	0.010	-3.33954	20.00000	Averaged	
30 Hexachlorobutadiene	0.16660	0.18150	0.18150	0.010	8.94243	20.00000	Averaged	
31 4-Chloro-3-methylphenol	0.29772	0.32048	0.32048	0.200	7.64594	20.00000	Averaged	
32 2-Methylnaphthalene	0.53682	0.57018	0.57018	0.300	6.21434	20.00000	Averaged	
33 Hexachlorocyclopentadiene	0.29875	0.33784	0.33784	0.010	13.08675	20.00000	Averaged	
34 2,4,6-Trichlorophenol	0.34169	0.36726	0.36726	0.200	7.48278	20.00000	Averaged	
35 2,4,5-Trichlorophenol	0.34662	0.38977	0.38977	0.200	12.44736	20.00000	Averaged	
$ 36 2-Fluorobiphenyl	1.15459	1.16334	1.16334	0.010	0.75742	20.00000	Averaged	
37 2-Chloronaphthalene	1.04150	1.10461	1.10461	0.700	6.05973	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i Injection Date: 19-JAN-2010 12:17
Lab File ID: 01191001.d Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Analysis Type: Init. Cal. Times: 13:14 17:02
Lab Sample ID: CC0119 Quant Type: ISTD
Method: /chem3/nt4.i/20100119.b/SW846100107.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.32150	0.32592	0.32592	0.010	1.37457	20.00000	Averaged	
39 Dimethylphthalate	1.21299	1.22941	1.22941	0.010	1.35363	20.00000	Averaged	
40 Acenaphthylene	1.59924	1.65169	1.65169	0.900	3.27990	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.27789	0.30455	0.30455	0.100	9.59283	20.00000	Averaged	
43 3-Nitroaniline	0.39172	0.39834	0.39834	0.010	1.68898	20.00000	Averaged	
44 Acenaphthene	1.05579	1.09081	1.09081	0.100	3.31712	20.00000	Averaged	
45 2,4-Dinitrophenol	59.85439	50.00000	0.19634	0.030	19.70879	20.00000	Quadratic	
46 Dibenzofuran	1.43780	1.49868	1.49868	0.800	4.23437	20.00000	Averaged	
47 4-Nitrophenol	0.17382	0.23913	0.23913	0.010	37.56974	20.00000	Averaged	<- NTC
48 2,4-Dinitrotoluene	0.37681	0.39737	0.39737	0.200	5.45741	20.00000	Averaged	
50 Diethylphthalate	1.29000	1.38412	1.38412	0.010	7.29621	20.00000	Averaged	
49 Fluorene	1.17669	1.30282	1.30282	0.100	10.71937	20.00000	Averaged	
51 4-Chlorophenyl-phenylether	0.53395	0.60340	0.60340	0.100	13.00619	20.00000	Averaged	
52 4-Nitroaniline	0.30883	0.27552	0.27552	0.010	-10.78487	20.00000	Averaged	
53 4,6-Dinitro-2-methylphenol	0.12923	0.15385	0.15385	0.001	19.05267	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.45199	0.45208	0.45208	0.010	0.01945	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.11892	0.13650	0.13650	0.010	14.78406	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.19612	0.20070	0.20070	0.100	2.33799	20.00000	Averaged	
57 Hexachlorobenzene	0.19515	0.19995	0.19995	0.100	2.45878	20.00000	Averaged	
58 Pentachlorophenol	40.92685	25.00000	0.11211	0.010	63.70741	20.00000	Quadratic	<- NTC
60 Phenanthrene	1.04001	1.08120	1.08120	0.700	3.96082	20.00000	Averaged	
61 Anthracene	1.02426	1.06063	1.06063	0.700	3.55096	20.00000	Averaged	
62 Carbazole	0.61282	0.62031	0.62031	0.010	1.22173	20.00000	Averaged	
63 Di-n-butylphthalate	1.23440	1.26900	1.26900	0.010	2.80259	20.00000	Averaged	
64 Fluoranthene	1.02202	1.10219	1.10219	0.600	7.84382	20.00000	Averaged	
65 Pyrene	1.27365	1.23319	1.23319	0.600	-3.17666	20.00000	Averaged	
$ 66 Terphenyl-d14	0.74170	0.71446	0.71446	0.010	-3.67189	20.00000	Averaged	
67 Butylbenzylphthalate	0.68215	0.65556	0.65556	0.010	-3.89812	20.00000	Averaged	
68 Benzo(a)anthracene	1.17992	1.22050	1.22050	0.800	3.43933	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.41866	0.36885	0.36885	0.010	-11.89567	20.00000	Averaged	
71 Chrysene	1.12060	1.12454	1.12454	0.700	0.35133	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.57975	0.56831	0.56831	0.010	-1.97386	20.00000	Averaged	
73 Di-n-octylphthalate	0.96321	0.97406	0.97406	0.010	1.12691	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.23129	1.28780	1.28780	0.700	4.58912	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.22313	1.29825	1.29825	0.700	6.14099	20.00000	Averaged	

DZ 01/19/10

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt4.i Injection Date: 19-JAN-2010 12:17
Lab File ID: 01191001.d Init. Cal. Date(s): 07-JAN-2010 07-JAN-2010
Analysis Type: Init. Cal. Times: 13:14 17:02
Lab Sample ID: CC0119 Quant Type: ISTD
Method: /chem3/nt4.i/20100119.b/SW846100107.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
76 Benzo(a)pyrene	1.11269	1.13863	1.13863	0.700	2.33091	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.27842	1.27755	1.27755	0.500	-0.06831	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.06934	1.06189	1.06189	0.400	-0.69682	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.14165	1.03977	1.03977	0.500	-8.92347	20.00000	Averaged
90 N-Nitrosodimethylamine	0.68435	0.68303	0.68303	0.010	-0.19273	20.00000	Averaged
103 Pyridine	1.18141	1.21228	1.21228	0.010	2.61346	20.00000	Averaged
91 Aniline	1.67396	1.57783	1.57783	0.010	-5.74266	20.00000	Averaged
105 1-methylnaphthalene	0.53046	0.56107	0.56107	0.010	5.76972	20.00000	Averaged
111 Azobenzene (1,2-DP-Hydrazin	1.11366	1.11666	1.11666	0.010	0.26873	20.00000	Averaged
143 1,4-Dioxane	0.44981	0.41369	0.41369	0.010	-8.03069	20.00000	Averaged
$ 137 d8-1,4-Dioxane	0.45562	0.41343	0.41343	0.010	-9.26012	20.00000	Averaged
144 alpha-Terpineol	0.14164	0.15066	0.15066	0.010	6.36535	20.00000	Averaged
98 Retene	0.58145	0.59413	0.59413	0.010	2.18088	20.00000	Averaged
133 Butylatedhydroxytoluene	0.95957	1.08497	1.08497	0.010	13.06835	20.00000	Averaged
115 Tributyl Phosphate	0.91559	0.95419	0.95419	0.010	4.21596	20.00000	Averaged
116 Dibutyl Phenyl Phosphate	0.69239	0.72464	0.72464	0.010	4.65787	20.00000	Averaged
117 Butyl Diphenyl Phosphate	0.27046	0.25580	0.25580	0.010	-5.41996	20.00000	Averaged
118 Triphenyl Phosphate	0.20332	0.19984	0.19984	0.010	-1.71162	20.00000	Averaged
123 Acetophenone	0.64261	0.66479	0.66479	0.010	3.45242	20.00000	Averaged
179 n-Decane	1.10322	1.05329	1.05329	0.010	-4.52587	20.00000	Averaged
180 n-Octadecane	0.39776	0.39823	0.39823	0.010	0.11755	20.00000	Averaged
168 Pentachlorobenzene	0.38812	0.40995	0.40995	0.010	5.62428	20.00000	Averaged
113 Diphenyl Oxide	0.71663	0.72367	0.72367	0.010	0.98189	20.00000	Averaged
112 Biphenyl	1.24279	1.34170	1.34170	0.010	7.95844	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100119.b/01191001.d
Lab Smp Id: CC0119 Client Smp ID: CC0119
Inj Date : 19-JAN-2010 12:17
Operator : JZ Inst ID: nt4.i
Smp Info : CC0119,
Misc Info : 10-
Comment : 1ul Injection
Method : /chem3/nt4.i/20100119.b/SW846100107.m
Meth Date : 19-Jan-2010 16:13 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

01/19/10

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.642	6.642	(0.774)	464554	25.0000	24.76
$	2 Phenol-d5	99	8.140	8.140	(0.949)	501271	25.0000	26.12
	3 Phenol	94	8.158	8.158	(0.951)	690960	25.0000	26.82
$	5 2-Chlorophenol-d4	132	8.287	8.287	(0.966)	482996	25.0000	25.45
	4 Bis(2-Chloroethyl)ether	93	8.228	8.228	(0.959)	480090	25.0000	24.27
	6 2-Chlorophenol	128	8.310	8.310	(0.968)	590985	25.0000	27.00
	7 1,3-Dichlorobenzene	146	8.522	8.522	(0.993)	607638	25.0000	25.57
*	8 1,4-Dichlorobenzene-d4	152	8.581	8.581	(1.000)	342716	20.0000	
	9 1,4-Dichlorobenzene	146	8.604	8.604	(1.003)	619697	25.0000	25.63
$	10 1,2-Dichlorobenzene-d4	152	8.880	8.880	(1.035)	341865	25.0000	25.36
	12 1,2-Dichlorobenzene	146	8.898	8.898	(1.037)	585880	25.0000	25.90
	11 Benzyl alcohol	108	8.851	8.851	(1.031)	357011	25.0000	28.83
	14 2,2'-oxybis(1-Chloropropane)	45	9.097	9.097	(1.060)	531317	25.0000	23.54
	13 2-Methylphenol	108	9.086	9.086	(1.059)	500281	25.0000	27.21
	17 Hexachloroethane	117	9.385	9.385	(1.094)	253042	25.0000	25.33
	16 N-Nitroso-di-n-propylamine	70	9.315	9.315	(1.086)	360205	25.0000	25.45
	15 4-Methylphenol	108	9.315	9.315	(1.086)	540265	25.0000	28.21
$	18 Nitrobenzene-d5	82	9.509	9.509	(0.891)	566396	25.0000	26.75
	19 Nitrobenzene	77	9.538	9.538	(0.894)	573966	25.0000	26.65
	20 Isophorone	82	9.908	9.908	(0.928)	822497	25.0000	24.74
	21 2-Nitrophenol	139	10.049	10.049	(0.942)	319189	25.0000	27.11
	22 2,4-Dimethylphenol	107	10.149	10.149	(0.951)	597372	25.0000	27.63
	23 Bis(2-Chloroethoxy)methane	93	10.284	10.284	(0.964)	572077	25.0000	24.68
	24 Benzoic acid	105	10.407	10.407	(0.979)	780017	50.0000	69.07(M)
	25 2,4-Dichlorophenol	162	10.443	10.443	(0.979)	479573	25.0000	28.07
	26 1,2,4-Trichlorobenzene	180	10.566	10.566	(0.990)	482569	25.0000	26.53
*	27 Naphthalene-d8	136	10.631	10.631	(1.000)	1226801	20.0000	(H)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10.660	10.660	(0.999)	1556867	25.0000	26.77
	29 4-Chloroaniline	127	10.795	10.795	(1.012)	605685	25.0000	24.17
	30 Hexachlorobutadiene	225	10.960	10.960	(1.027)	278329	25.0000	27.24
	31 4-Chloro-3-methylphenol	107	11.606	11.606	(1.088)	491463	25.0000	26.91
	32 2-Methylnaphthalene	141	11.788	11.788	(1.105)	874379	25.0000	26.55
	33 Hexachlorocyclopentadiene	237	12.158	12.158	(0.900)	305998	25.0000	28.27
	34 2,4,6-Trichlorophenol	196	12.305	12.305	(0.910)	332640	25.0000	26.87
	35 2,4,5-Trichlorophenol	196	12.369	12.369	(0.915)	353028	25.0000	28.11
$	36 2-Fluorobiphenyl	172	12.422	12.422	(0.919)	1053679	25.0000	25.19
	37 2-Chloronaphthalene	162	12.575	12.575	(0.930)	1000489	25.0000	26.51
	38 2-Nitroaniline	65	12.798	12.798	(0.947)	295195	25.0000	25.34
	39 Dimethylphthalate	163	13.157	13.157	(0.973)	1113528	25.0000	25.34
	40 Acenaphthylene	152	13.262	13.262	(0.981)	1496003	25.0000	25.82
	41 2,6-Dinitrotoluene	165	13.257	13.257	(0.981)	275844	25.0000	27.40
*	42 Acenaphthene-d10	164	13.515	13.515	(1.000)	724591	20.0000	
	43 3-Nitroaniline	138	12.798	12.798	(0.947)	360791	25.0000	25.42
	44 Acenaphthene	153	13.568	13.568	(1.004)	987989	25.0000	25.83
	45 2,4-Dinitrophenol	184	13.650	13.650	(1.010)	355670	50.0000	59.85(M)
	46 Dibenzofuran	168	13.826	13.826	(1.023)	1357410	25.0000	26.06
	47 4-Nitrophenol	109	13.797	13.797	(1.021)	216587	25.0000	34.39
	48 2,4-Dinitrotoluene	165	13.897	13.897	(1.028)	359914	25.0000	26.36
	50 Diethylphthalate	149	14.314	14.314	(1.059)	1253649	25.0000	26.82
	49 Fluorene	166	14.390	14.390	(1.065)	1180019	25.0000	27.68
	51 4-Chlorophenyl-phenylether	204	14.396	14.396	(1.065)	546521	25.0000	28.25
	52 4-Nitroaniline	138	14.490	14.490	(1.072)	249552	25.0000	22.30
	53 4,6-Dinitro-2-methylphenol	198	14.567	14.567	(0.915)	454691	50.0000	59.53
	54 N-Nitrosodiphenylamine	169	14.602	14.602	(0.918)	668033	25.0000	25.00
$	55 2,4,6-Tribromophenol	330	14.819	14.819	(1.096)	123631	25.0000	28.70
	56 4-Bromophenyl-phenylether	248	15.183	15.183	(0.954)	296579	25.0000	25.58
	57 Hexachlorobenzene	284	15.424	15.424	(0.969)	295460	25.0000	25.61
	58 Pentachlorophenol	266	15.724	15.724	(0.988)	165671	25.0000	40.93
*	59 Phenanthrene-d10	188	15.912	15.912	(1.000)	1182161	20.0000	
	60 Phenanthrene	178	15.953	15.953	(1.003)	1597688	25.0000	25.99
	61 Anthracene	178	16.023	16.023	(1.007)	1567298	25.0000	25.89
	62 Carbazole	167	16.299	16.299	(1.024)	916632	25.0000	25.31
	63 Di-n-butylphthalate	149	16.975	16.975	(1.067)	1875200	25.0000	25.70
	64 Fluoranthene	202	17.909	17.909	(1.126)	1628705	25.0000	26.96
	65 Pyrene	202	18.273	18.273	(0.901)	1691167	25.0000	24.21
$	66 Terphenyl-d14	244	18.555	18.555	(0.915)	979800	25.0000	24.08
	67 Butylbenzylphthalate	149	19.419	19.419	(0.958)	899021	25.0000	24.03
	68 Benzo(a)anthracene	228	20.241	20.241	(0.999)	1673766	25.0000	25.86
*	69 Chrysene-d12	240	20.271	20.271	(1.000)	1097102	20.0000	
	70 3,3'-Dichlorobenzidine	252	20.229	20.229	(0.998)	505839	25.0000	22.03
	71 Chrysene	228	20.312	20.312	(1.002)	1542169	25.0000	25.09
	72 bis(2-Ethylhexyl)phthalate	149	20.400	20.400	(0.956)	1284896	25.0000	24.51
*	134 Di-n-octylphthalate-d4	153	21.340	21.340	(1.000)	1808730	20.0000	
	73 Di-n-octylphthalate	149	21.351	21.351	(1.001)	2202266	25.0000	25.28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.915	21.915	(0.976)	1674622	25.0000	26.15
75	Benzo(k)fluoranthene	252	21.951	21.951	(0.978)	1688213	25.0000	26.54
76	Benzo(a)pyrene	252	22.379	22.379	(0.997)	1480650	25.0000	25.58
* 77	Perylene-d12	264	22.456	22.456	(1.000)	1040303	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	24.265	24.265	(1.081)	1661297	25.0000	24.98
79	Dibenzo(a,h)anthracene	278	24.277	24.277	(1.081)	1380860	25.0000	24.83
80	Benzo(g,h,i)perylene	276	24.776	24.776	(1.103)	1352096	25.0000	22.77
90	N-Nitrosodimethylamine	74	4.122	4.122	(0.480)	292606	25.0000	24.95
103	Pyridine	79	4.087	4.087	(0.476)	519336	25.0000	25.65
91	Aniline	93	8.128	8.128	(0.947)	675934	25.0000	23.56
105	1-methylnaphthalene	141	11.958	11.958	(1.121)	860402	25.0000	26.44
111	Azobenzene (1,2-DP-Hydrazine)	77	14.655	14.655	(1.084)	1011400	25.0000	25.07
143	1,4-Dioxane	88	3.329	3.329	(0.388)	177222	25.0000	22.99
$ 137	d8-1,4-Dioxane	96	3.264	3.264	(0.380)	177112	25.0000	22.68
144	alpha-Terpineol	59	10.672	10.672	(1.000)	231033	25.0000	26.59
98	Retene	219	18.814	18.814	(0.928)	814776	25.0000	25.55
133	Butylatedhydroxytoluene	205	13.650	13.650	(1.010)	982700	25.0000	28.27
115	Tributyl Phosphate	99	14.666	14.666	(0.922)	1410003	25.0000	26.05
116	Dibutyl Phenyl Phosphate	175	16.411	16.411	(1.031)	1070802	25.0000	26.16
117	Butyl Diphenyl Phosphate	94	18.121	18.121	(0.894)	350802	25.0000	23.65
118	Triphenyl Phosphate	326	19.742	19.742	(0.974)	274062	25.0000	24.57
123	Acetophenone	105	9.268	9.268	(0.868)	1019458	25.0000	25.86
179	n-Decane	57	8.387	8.387	(0.977)	451223	25.0000	23.87
180	n-Octadecane	57	15.765	15.765	(0.991)	588465	25.0000	25.03
168	Pentachlorobenzene	250	13.867	13.867	(1.026)	371305	25.0000	26.41
113	Diphenyl Oxide	170	12.745	12.745	(0.943)	655455	25.0000	25.25
112	Biphenyl	154	12.563	12.563	(0.930)	1215227	25.0000	26.99

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01191001.d
Lab Smp Id: CC0119
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-

Calibration Date: 19-JAN-2010
Calibration Time: 12:17
Client Smp ID: CC0119
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	286117	143058	572234	342716	19.78
27 Naphthalene-d8	1035557	517778	2071114	1226801	18.47
42 Acenaphthene-d10	594267	297134	1188534	724591	21.93
59 Phenanthrene-d10	951721	475860	1903442	1182161	24.21
69 Chrysene-d12	794862	397431	1589724	1097102	38.02
134 Di-n-octylphthala	1280700	640350	2561400	1808730	41.23
77 Perylene-d12	826094	413047	1652188	1040303	25.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.58	8.08	9.08	8.58	0.00
27 Naphthalene-d8	10.63	10.13	11.13	10.63	0.00
42 Acenaphthene-d10	13.52	13.02	14.02	13.52	0.00
59 Phenanthrene-d10	15.91	15.41	16.41	15.91	0.00
69 Chrysene-d12	20.27	19.77	20.77	20.27	0.00
134 Di-n-octylphthala	21.34	20.84	21.84	21.34	0.00
77 Perylene-d12	22.46	21.96	22.96	22.46	0.00

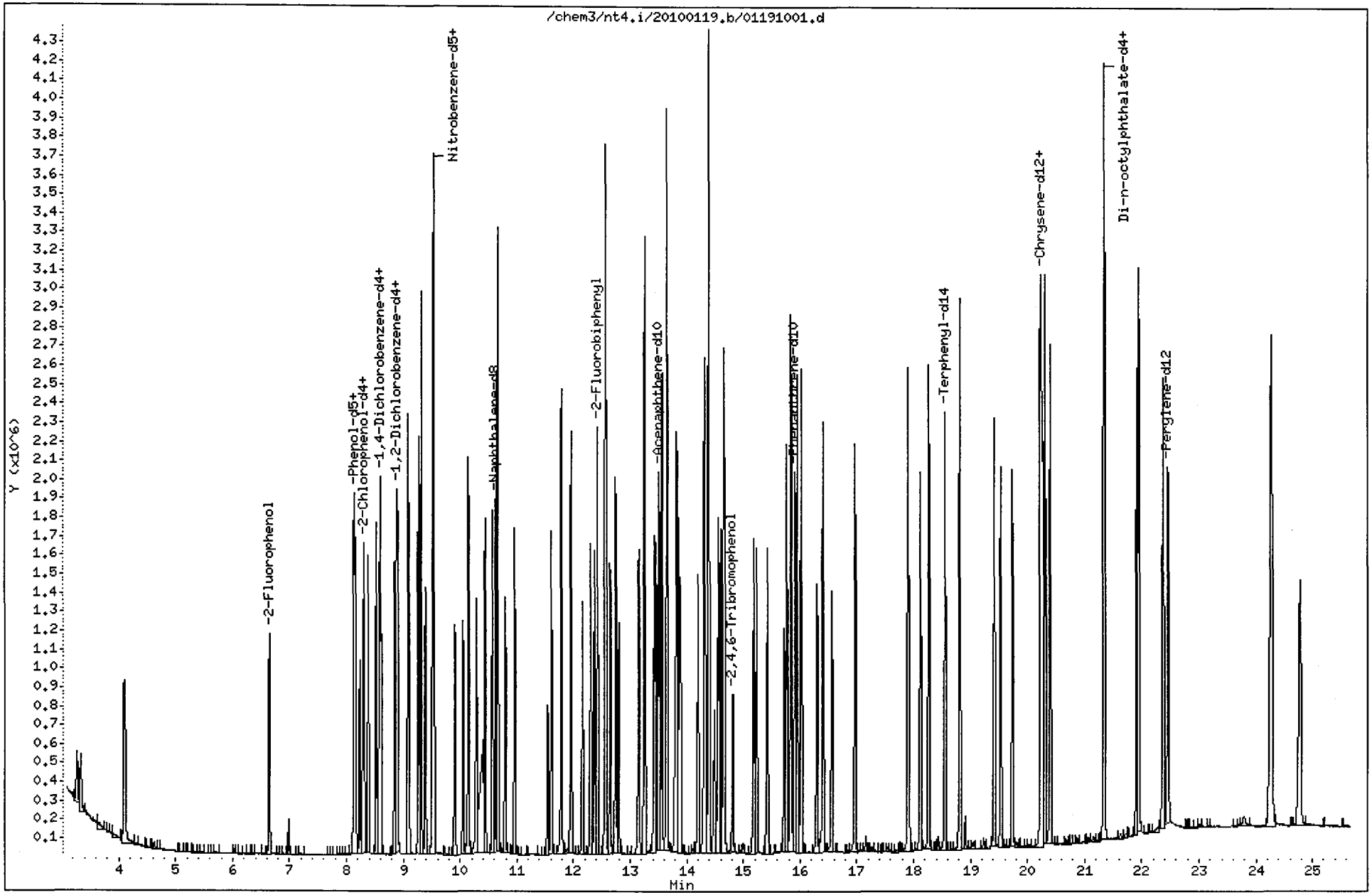
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt4.i/20100119.b/01191001.d
Date : 19-JAN-2010 12:17
Client ID: CC0119
Sample Info: CC0119,

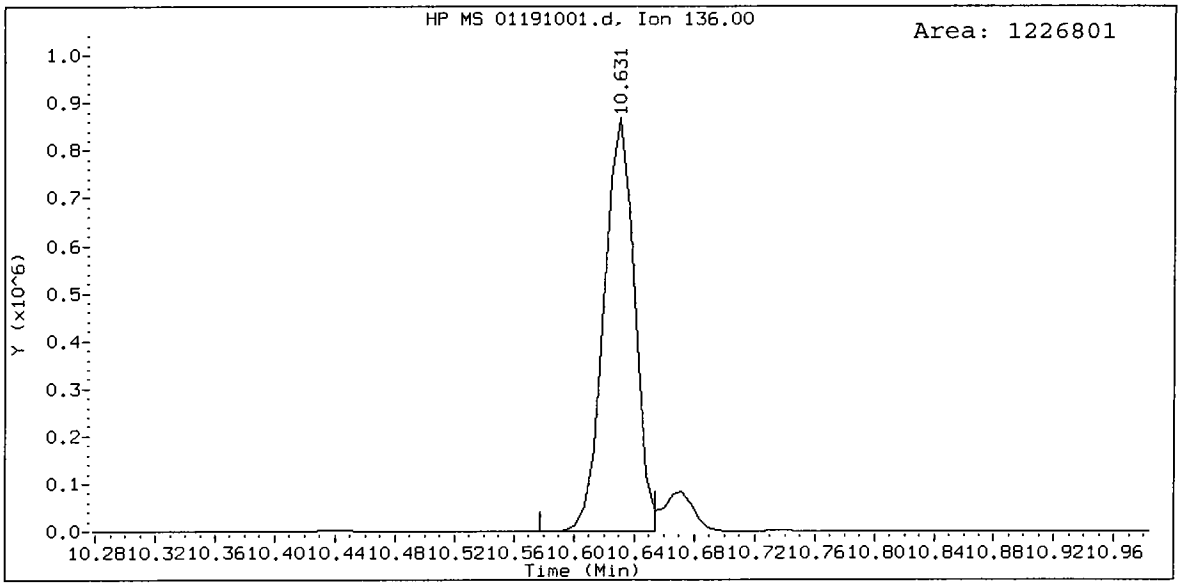
Instrument: nt4.i

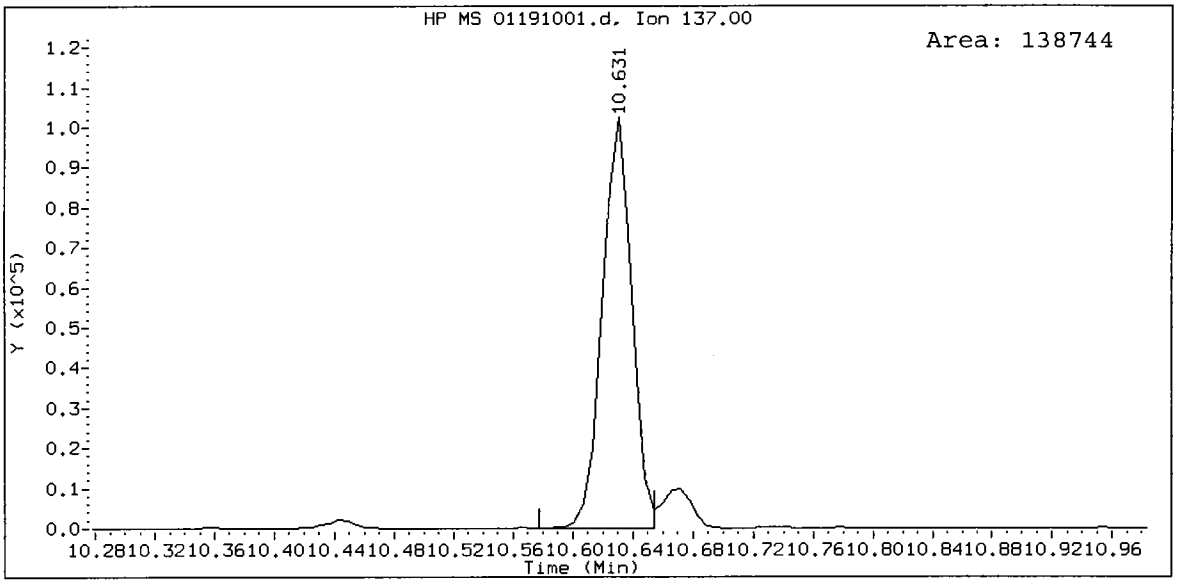
Operator: JZ
Column diameter: 0.32

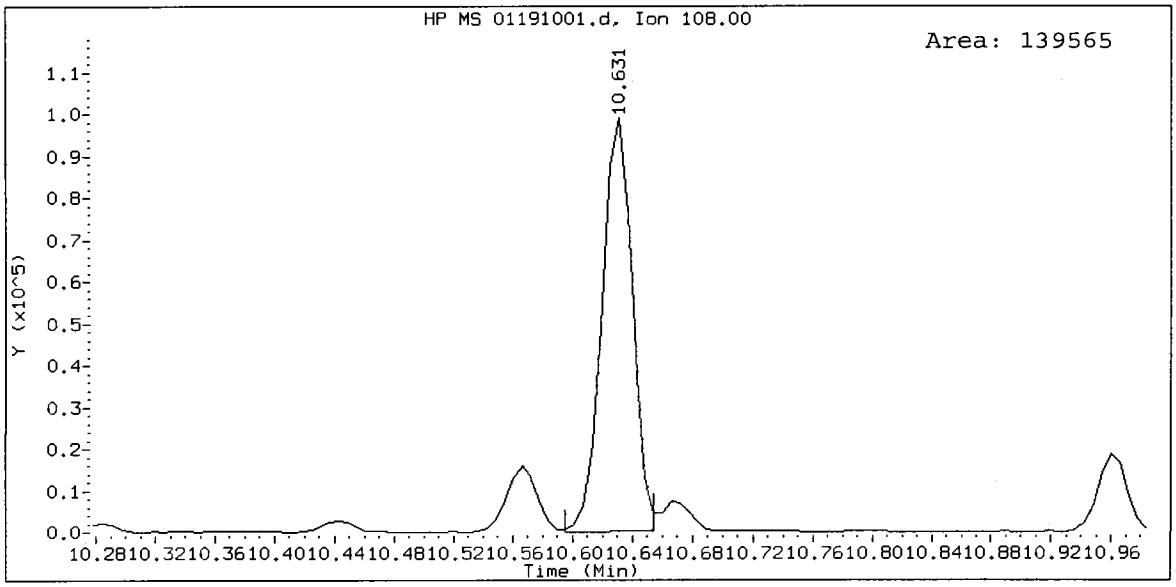
Column phase: ZB-5msi



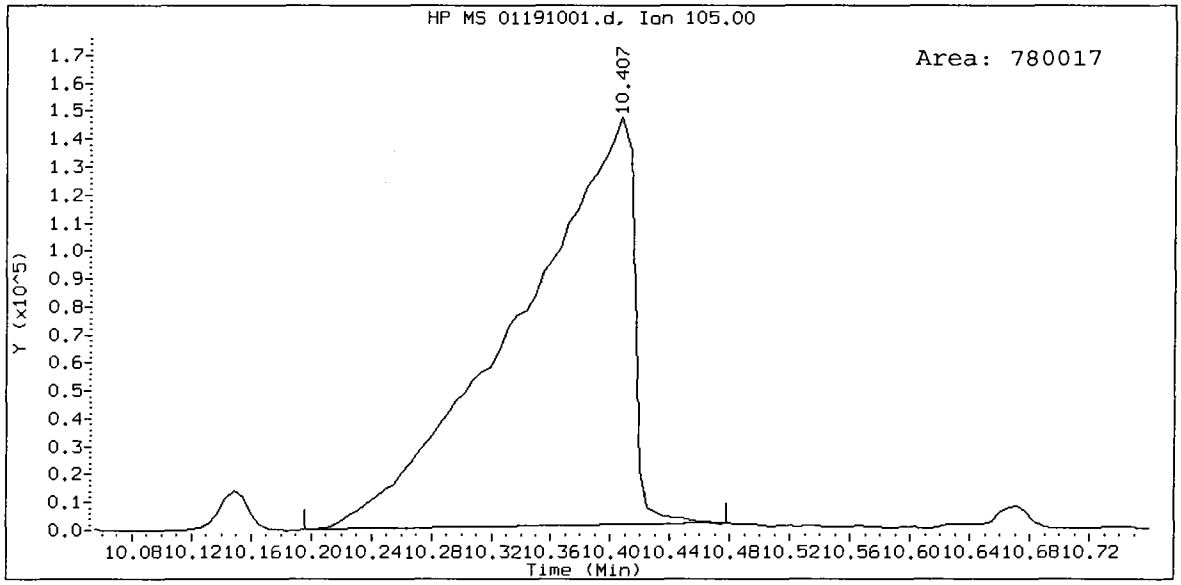
CC0119, /chem3/nt4.i/20100119.b/01191001.d
Naphthalene-d8 Amount: 20.00

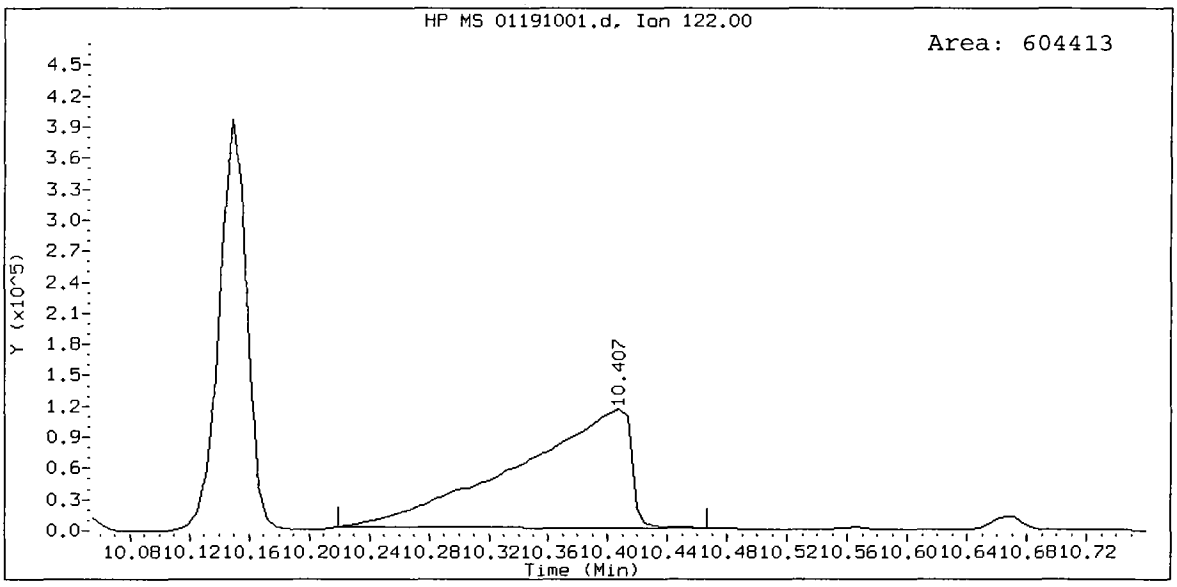


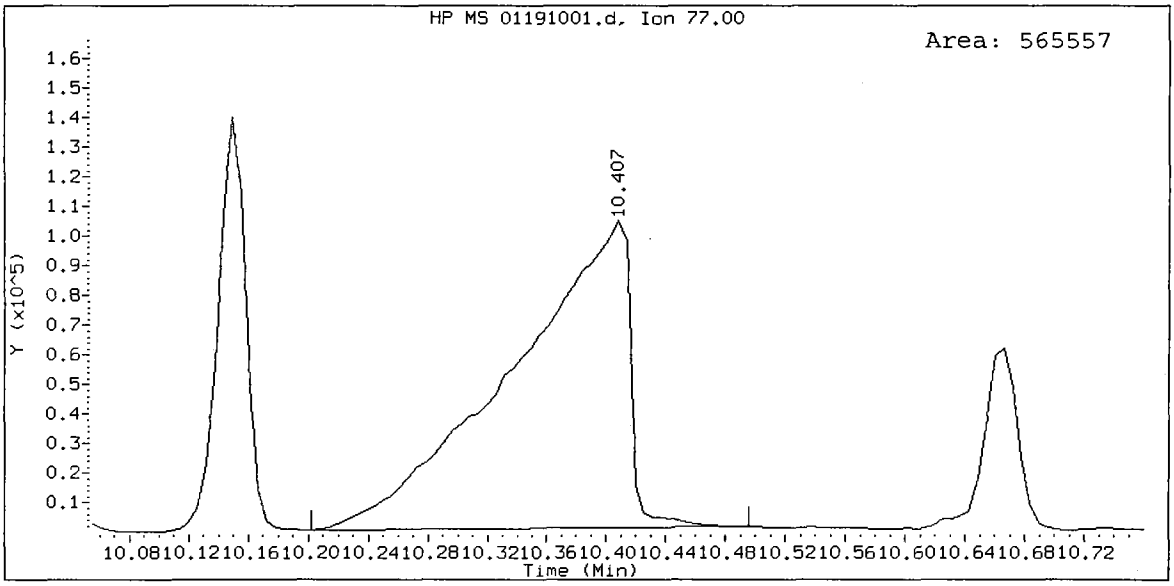




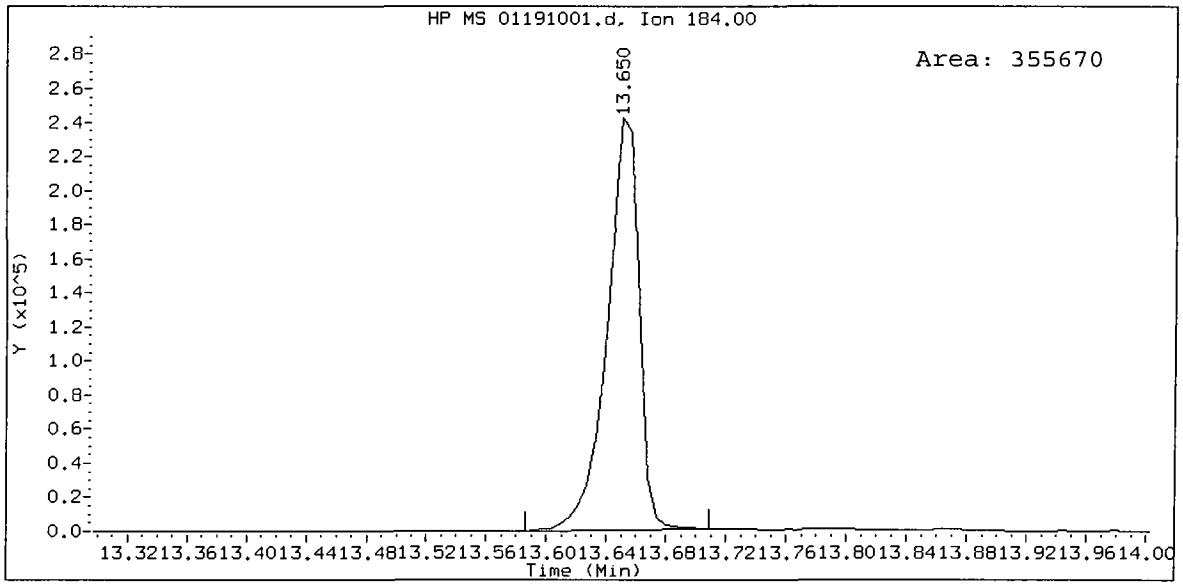
CC0119, /chem3/nt4.i/20100119.b/01191001.d
Benzoic acid Amount: 69.07

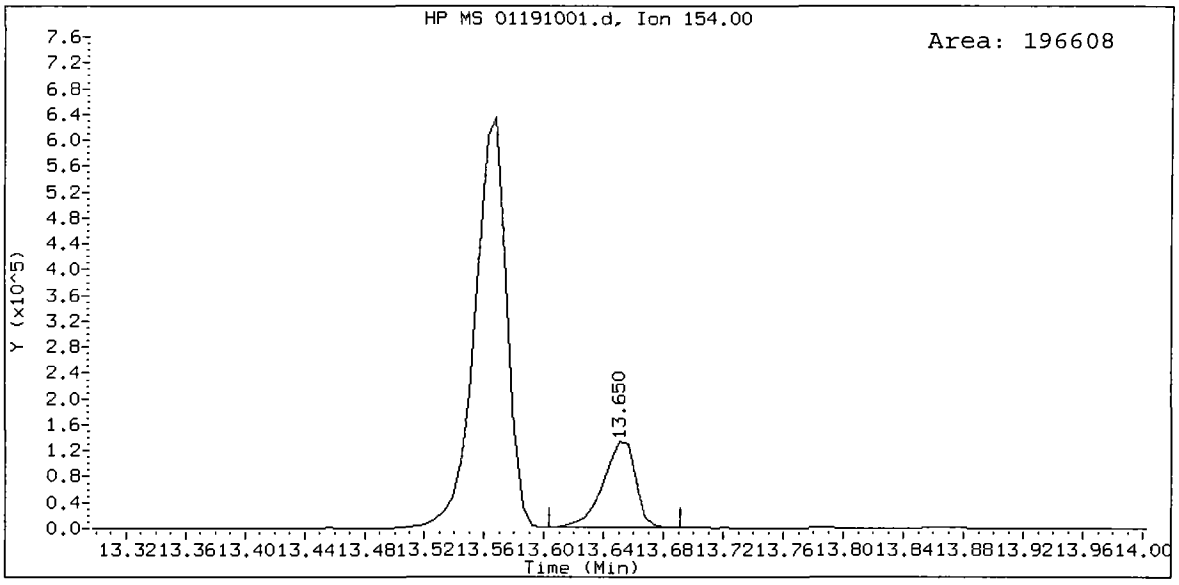


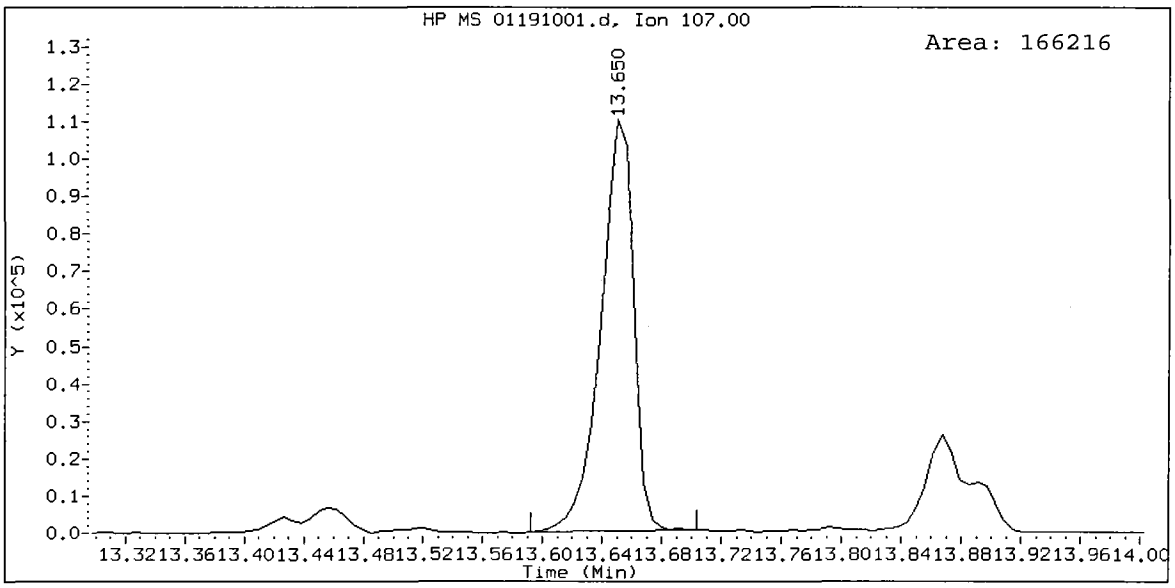




CC0119, /chem3/nt4.i/20100119.b/01191001.d
2,4-Dinitrophenol Amount: 59.85







Semivolatile PAH Analysis
QC Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Data File: /chem3/nt4.i/20100107.b/tune.b/01071001.d

Date : 07-JAN-2010 12:18

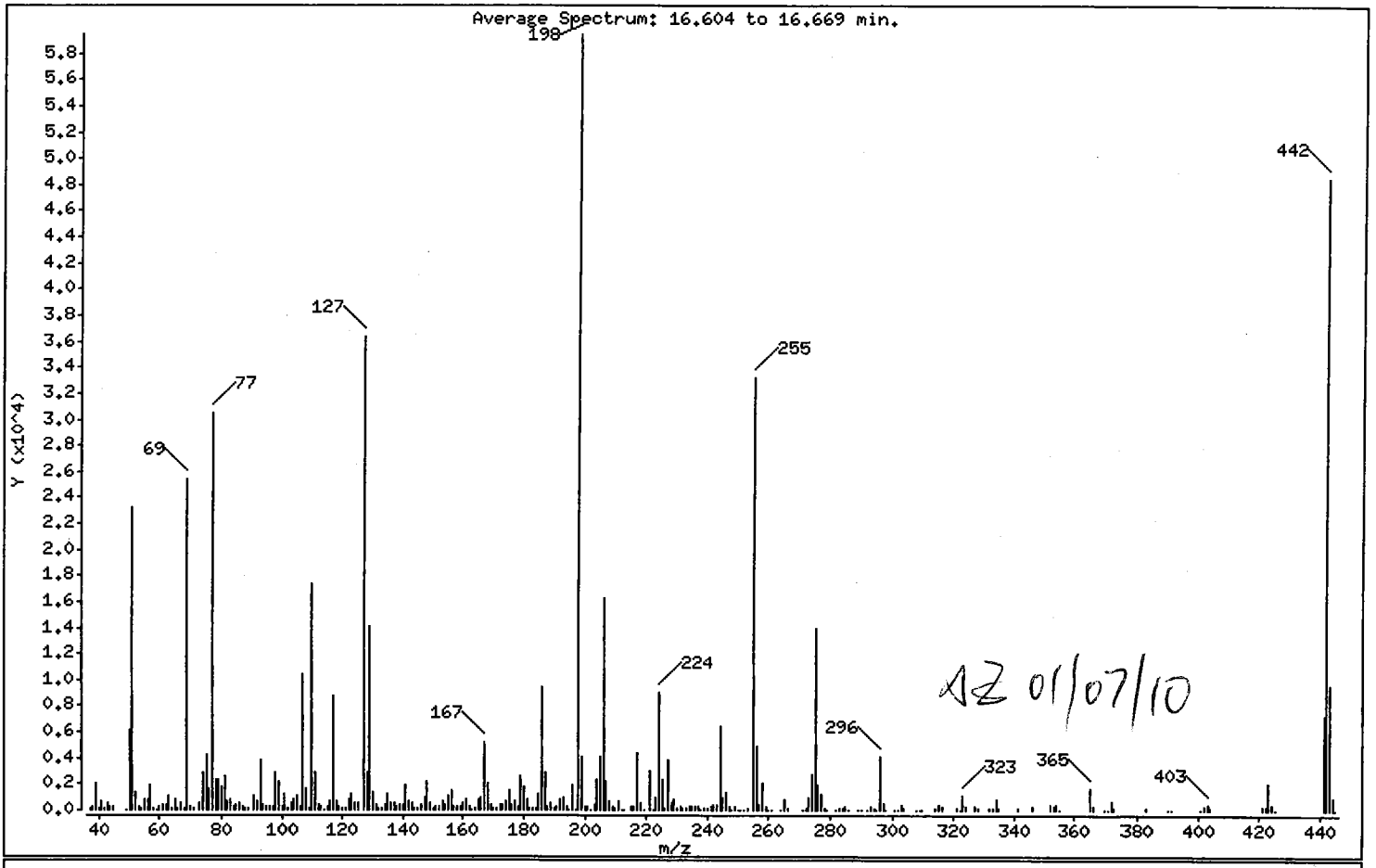
Client ID: DFTPP0107 Instrument: nt4.i

Sample Info: DFTPP0107

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

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	39.06
68	Less than 2.00% of mass 69	0.12 (0.28)
69	Mass 69 relative abundance	42.65
70	Less than 2.00% of mass 69	0.38 (0.88)
127	25.00 - 75.00% of mass 198	61.11
197	Less than 1.00% of mass 198	0.02
199	5.00 - 9.00% of mass 198	6.97
275	10.00 - 30.00% of mass 198	23.45
365	Greater than 0.75% of mass 198	2.71
441	Present, but less than mass 443	12.19
442	40.00 - 110.00% of mass 198	81.53
443	15.00 - 24.00% of mass 442	16.08 (19.73)

Data File: /chem3/nt4.i/20100107.b/tune.b/01071001.d

Date : 07-JAN-2010 12:18

Client ID: DFTPP0107 Instrument: nt4.i

Sample Info: DFTPP0107

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01071001.d

Spectrum: Average Spectrum: 16.604 to 16.669 min.

Location of Maximum: 198.00

Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	104	115.00	268	189.00	602	271.00	63
38.00	336	116.00	645	190.00	92	272.00	87
39.00	2070	117.00	8709	191.00	286	273.00	978
40.00	166	118.00	685	192.00	809	274.00	2670
41.00	720	119.00	238	193.00	898	275.00	13944
42.00	185	120.00	172	194.00	211	276.00	1850
43.00	508	121.00	193	195.00	62	277.00	1254
44.00	306	122.00	825	196.00	1969	278.00	191
45.00	272	123.00	1200	197.00	13	279.00	12
49.00	56	124.00	486	198.00	59456	282.00	20
50.00	6211	125.00	496	199.00	4142	283.00	182
51.00	23224	127.00	36336	200.00	340	284.00	94
52.00	1330	128.00	2929	201.00	291	285.00	243
53.00	269	129.00	14044	202.00	65	286.00	29
54.00	103	130.00	1357	203.00	473	289.00	46
55.00	753	131.00	411	204.00	2365	290.00	27
56.00	791	132.00	119	205.00	4098	292.00	43
57.00	1924	133.00	156	206.00	16290	293.00	275
58.00	85	134.00	466	207.00	2202	294.00	73
59.00	13	135.00	1248	208.00	633	295.00	15
60.00	321	136.00	487	209.00	207	296.00	4038
61.00	399	137.00	580	210.00	175	297.00	571
62.00	386	138.00	211	211.00	702	298.00	18
63.00	1037	139.00	403	212.00	39	301.00	39
64.00	170	140.00	408	213.00	14	302.00	56
65.00	755	141.00	1914	215.00	231	303.00	442
66.00	86	142.00	623	216.00	278	304.00	97
67.00	485	143.00	493	217.00	4361	308.00	19
68.00	72	144.00	140	218.00	583	309.00	29
69.00	25360	145.00	148	219.00	48	310.00	15
70.00	223	146.00	363	221.00	2972	314.00	188
71.00	163	147.00	977	222.00	56	315.00	439
73.00	490	148.00	2241	223.00	996	316.00	244
74.00	2865	149.00	508	224.00	8980	321.00	139
75.00	4220	150.00	179	225.00	2329	322.00	18

Data File: /chem3/nt4.i/20100107.b/tune.br/01071001.d

Date : 07-JAN-2010 12:18

Client ID: DFTPP0107 Instrument: nt4.i

Sample Info: DFTPP0107

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01071001.d

Spectrum: Average Spectrum: 16.604 to 16.669 min.

Location of Maximum: 198.00

Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	1627	151.00	257	226.00	100	323.00	1143
77.00	30424	152.00	214	227.00	3860	324.00	244
78.00	2316	153.00	646	228.00	560	327.00	238
79.00	2323	154.00	478	229.00	779	328.00	92
80.00	1729	155.00	1074	230.00	120	332.00	82
81.00	2565	156.00	1523	231.00	288	333.00	94
82.00	691	157.00	326	232.00	71	334.00	790
83.00	794	158.00	337	233.00	89	335.00	180
84.00	210	159.00	296	234.00	234	341.00	133
85.00	410	160.00	543	235.00	278	346.00	295
86.00	609	161.00	839	236.00	249	352.00	343
87.00	339	162.00	253	237.00	320	353.00	283
88.00	141	163.00	59	238.00	45	354.00	365
89.00	94	164.00	106	239.00	142	355.00	44
91.00	1109	165.00	779	240.00	95	365.00	1611
92.00	716	166.00	894	241.00	230	366.00	261
93.00	3781	167.00	5241	242.00	466	370.00	13
94.00	372	168.00	2037	243.00	351	371.00	39
95.00	315	169.00	345	244.00	6402	372.00	617
96.00	291	170.00	124	245.00	889	373.00	127
97.00	229	171.00	187	246.00	1344	383.00	126
98.00	2851	172.00	348	247.00	282	390.00	53
99.00	2187	173.00	416	248.00	45	391.00	16
100.00	225	174.00	750	249.00	260	401.00	30
101.00	1249	175.00	1558	250.00	30	402.00	230
102.00	100	176.00	429	251.00	52	403.00	347
103.00	481	177.00	654	252.00	15	404.00	110
104.00	861	178.00	258	253.00	194	421.00	293
105.00	1143	179.00	2635	255.00	33152	422.00	261
106.00	217	180.00	1746	256.00	4880	423.00	2069
107.00	10402	181.00	831	257.00	373	424.00	418
108.00	1632	182.00	167	258.00	2009	425.00	13
109.00	156	183.00	70	259.00	311	441.00	7247
110.00	17296	184.00	199	260.00	17	442.00	48472
111.00	2846	185.00	1274	261.00	36	443.00	9562

Data File: /chem3/nt4.i/20100107.b/tune.b/01071001.d

Date : 07-JAN-2010 12:18

Client ID: DFTPP0107 Instrument: nt4.i

Sample Info: DFTPP0107

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01071001.d
Spectrum: Average Spectrum: 16.604 to 16.669 min.
Location of Maximum: 198.00
Number of points: 291

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	403	186.00	9393	264.00	36	444.00	895
113.00	224	187.00	2812	265.00	798	445.00	43
114.00	27	188.00	303	266.00	145		

Data File: /chem3/nt4.i/20100107.b/tune.b/01071001.d

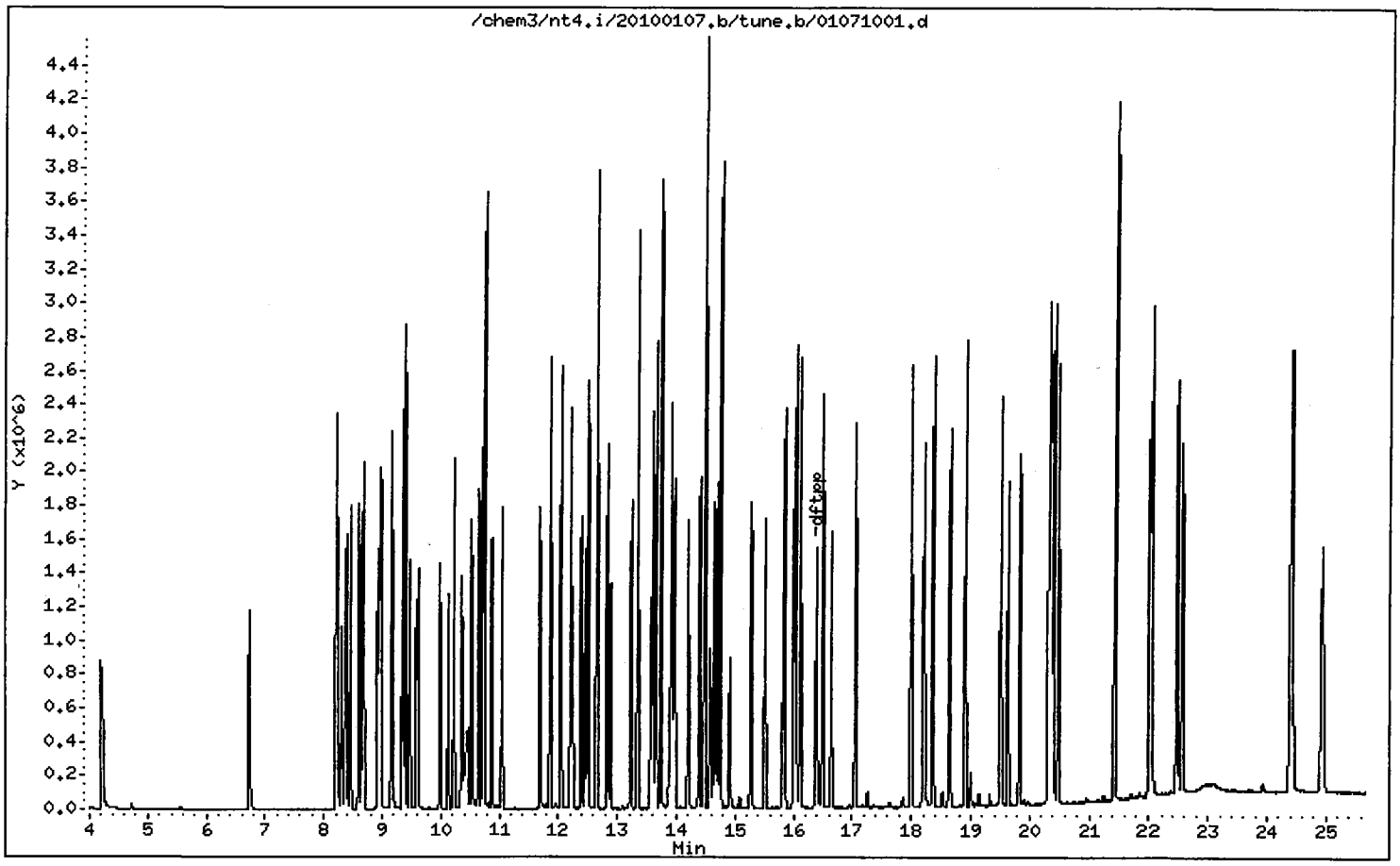
Date : 07-JAN-2010 12:18

Client ID: DFTPP0107 Instrument: nt4.i

Sample Info: DFTPP0107

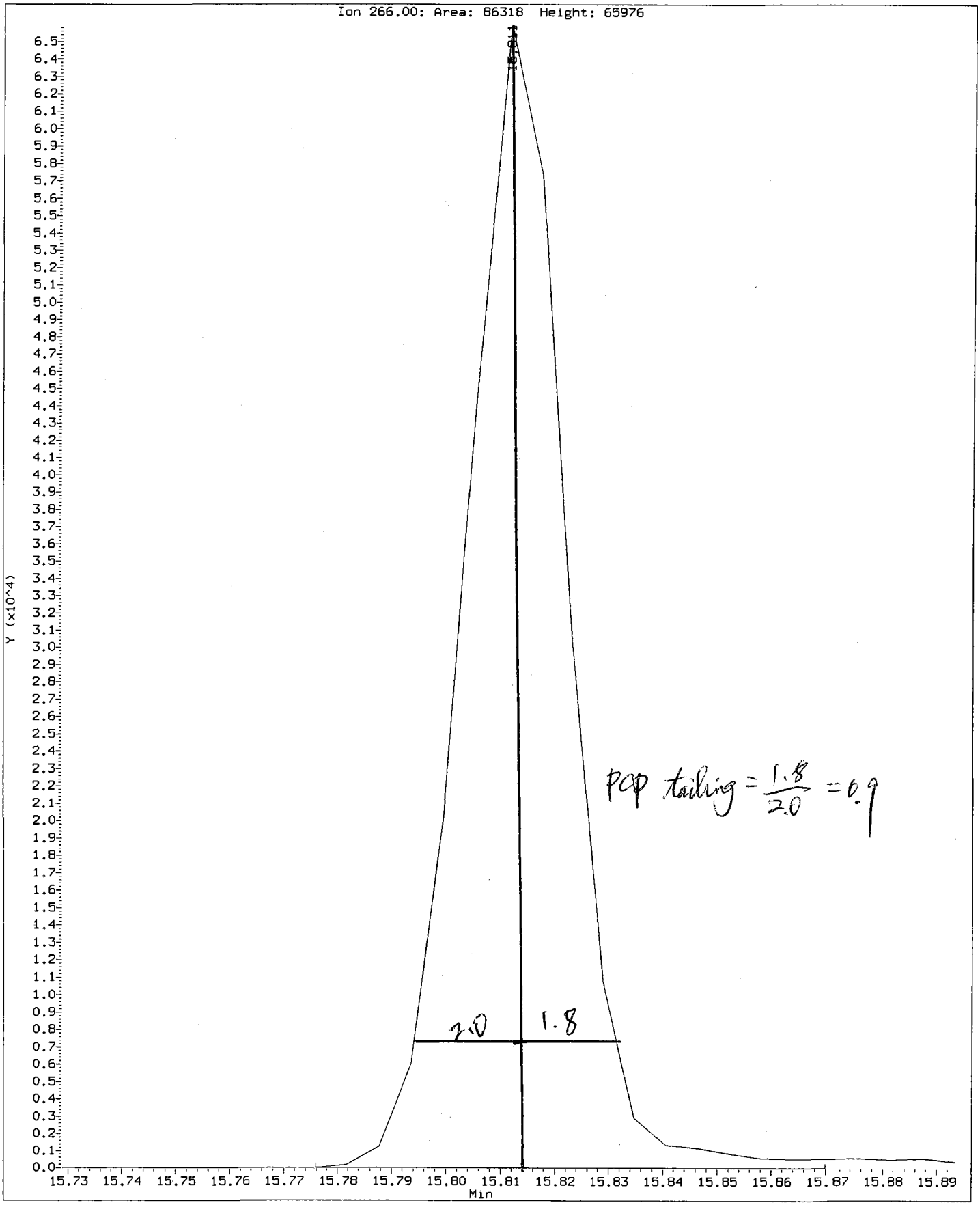
Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32



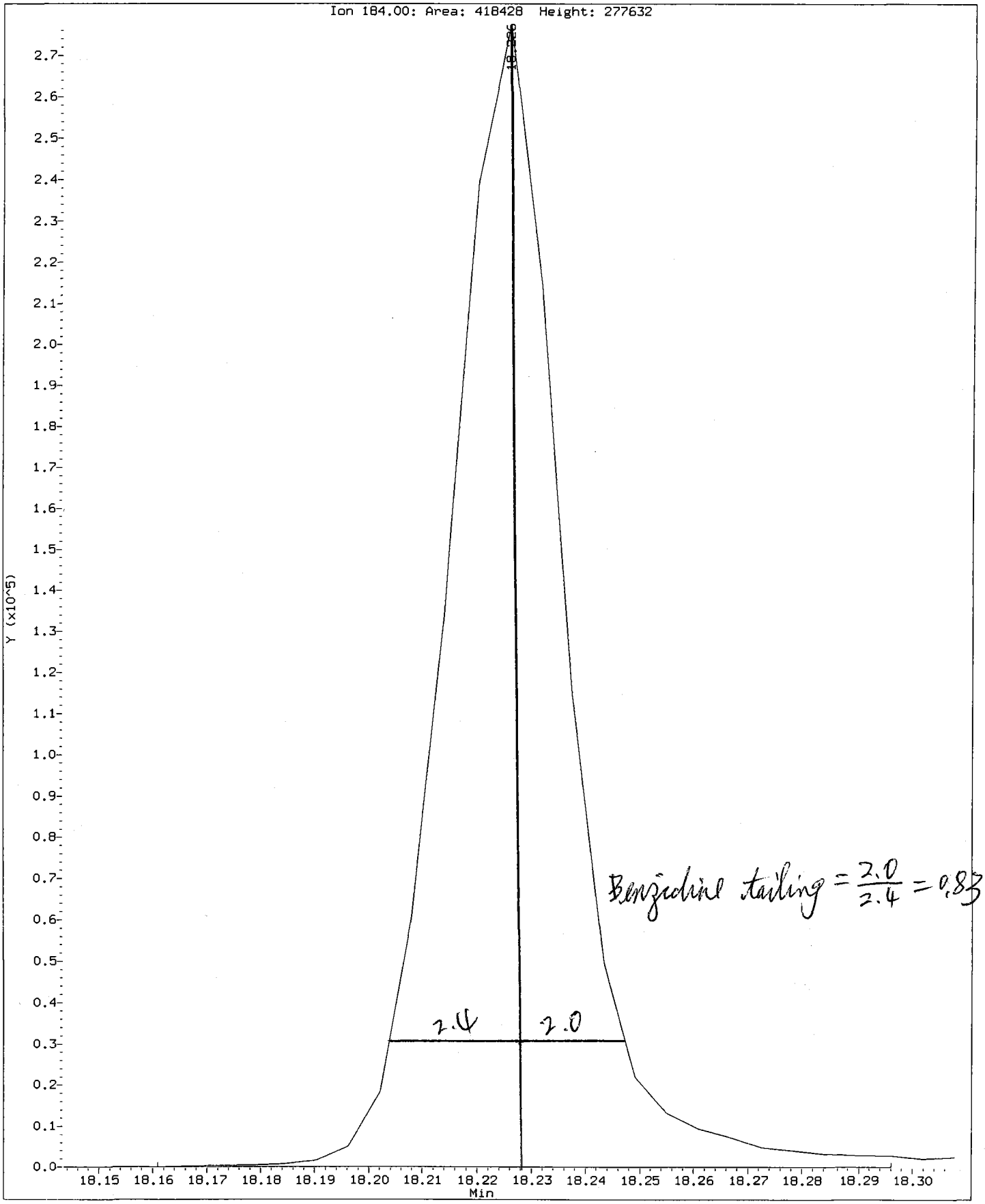
Data File: /chem3/nt4.i/20100107.b/ddt.b/01071001.d
Injection Date: 07-JAN-2010 12:18
Instrument: nt4.i
Client Sample ID: DDTO107

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20100107.b/ddt.b/01071001.d
Injection Date: 07-JAN-2010 12:18
Instrument: nt4.i
Client Sample ID: DDT0107

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt4.i/20100107.b/ddt.b/01071001.d ARI ID: DDT0107
Method: /chem3/nt4.i/20100107.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 07-JAN-2010 12:18 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	15.811	86318
Benzidine	18.226	418428
4,4'-DDE	----	----
4,4'-DDD	19.148	20539
4,4'-DDT	19.624	501076

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 20539) * 100}{(0 + 20539 + 501076)}$$

DDT Percent Breakdown = 3.9 %

01/07/10

QF10:00482

Data File: /chem3/nt4.i/20100118.b/tune.b/01181001.d

Date : 18-JAN-2010 13:38

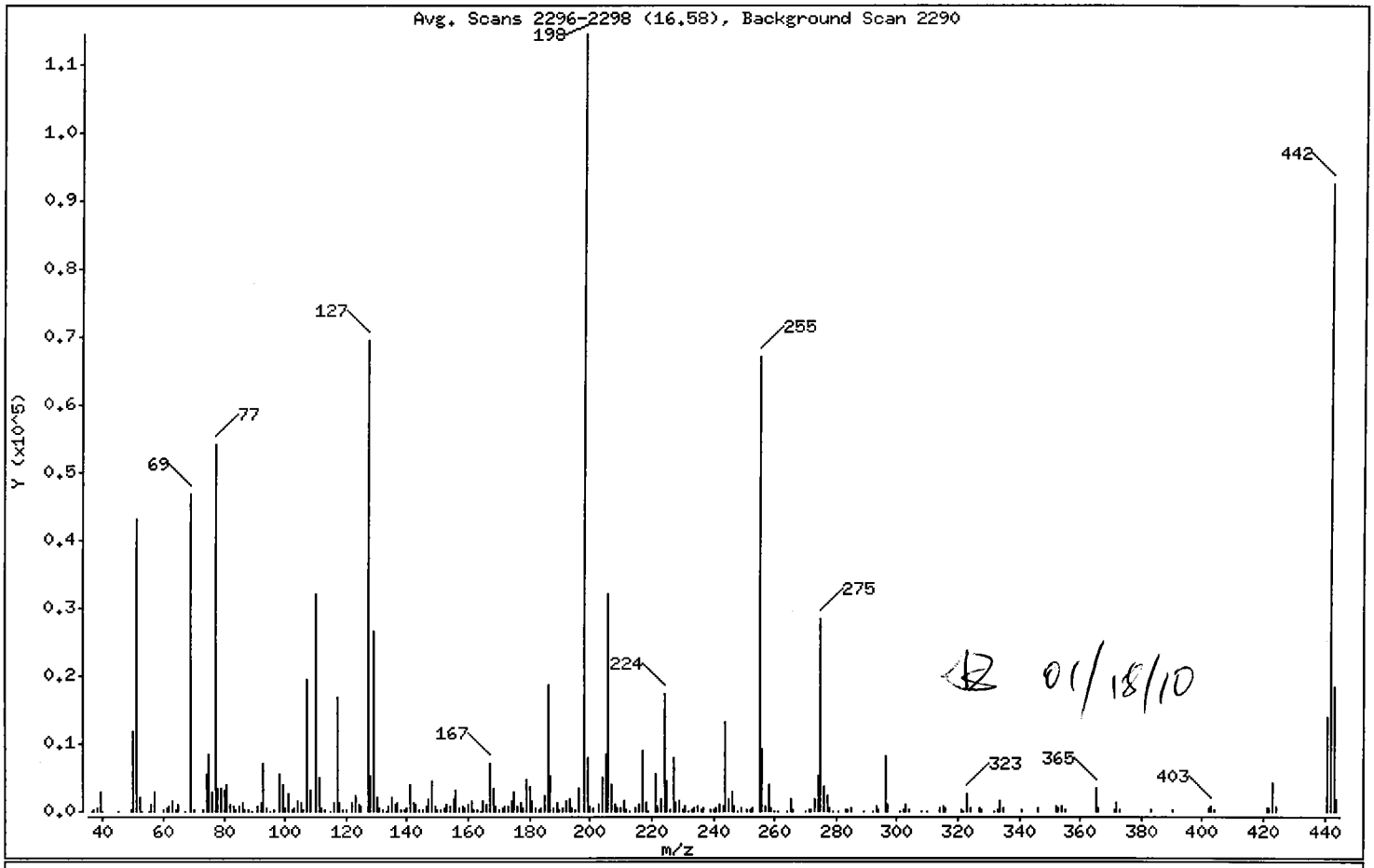
Client ID: DFTPP0118 Instrument: nt4.i

Sample Info: DFTPP0118

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

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	37.59
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	40.89
70	Less than 2.00% of mass 69	0.33 (0.80)
127	25.00 - 75.00% of mass 198	60.58
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.94
275	10.00 - 30.00% of mass 198	24.92
365	Greater than 0.75% of mass 198	2.99
441	Present, but less than mass 443	12.11
442	40.00 - 110.00% of mass 198	80.81
443	15.00 - 24.00% of mass 442	15.98 (19.78)

Data File: /chem3/nt4.i/20100118.b/tune.b/01181001.d

Date : 18-JAN-2010 13:38

Client ID: DFTPP0118 Instrument: nt4.i

Sample Info: DFTPP0118

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01181001.d
Spectrum: Avg. Scans 2296-2298 (16.58), Background Scan 2290
Location of Maximum: 198.00
Number of points: 265

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	67	122.00	1403	190.00	302	266.00	293
37.00	248	123.00	2380	191.00	596	270.00	50
38.00	641	124.00	1025	192.00	1656	271.00	179
39.00	2996	125.00	910	193.00	1909	272.00	248
40.00	122	127.00	69296	194.00	477	273.00	1962
45.00	70	128.00	5132	195.00	370	274.00	5369
49.00	303	129.00	26528	196.00	3348	275.00	28504
50.00	11895	130.00	2176	198.00	114384	276.00	3809
51.00	43000	131.00	427	199.00	7942	277.00	2456
52.00	2046	132.00	306	200.00	810	278.00	422
53.00	36	133.00	67	201.00	517	279.00	64
55.00	21	134.00	836	203.00	1145	281.00	51
56.00	1026	135.00	2082	204.00	4878	283.00	293
57.00	3014	136.00	1074	205.00	8433	284.00	235
60.00	134	137.00	1301	206.00	32208	285.00	489
61.00	598	138.00	202	207.00	4036	289.00	58
62.00	742	139.00	203	208.00	1174	292.00	130
63.00	1671	140.00	497	209.00	464	293.00	664
64.00	305	141.00	3906	210.00	428	294.00	132
65.00	1028	142.00	1236	211.00	1529	296.00	8121
67.00	113	143.00	989	212.00	206	297.00	1163
69.00	46776	144.00	237	213.00	72	301.00	53
70.00	372	145.00	367	215.00	423	302.00	162
73.00	182	146.00	837	216.00	937	303.00	1030
74.00	5397	147.00	1818	217.00	8976	304.00	285
75.00	8309	148.00	4500	218.00	1186	308.00	108
76.00	3001	149.00	867	219.00	67	310.00	79
77.00	54216	150.00	303	221.00	5481	314.00	413
78.00	3450	151.00	376	222.00	791	315.00	864
79.00	3474	152.00	474	223.00	1908	316.00	505
80.00	3080	153.00	1008	224.00	17264	321.00	218
81.00	4027	154.00	869	225.00	4401	322.00	55
82.00	1058	155.00	1947	226.00	147	323.00	2502
83.00	861	156.00	3094	227.00	7954	324.00	501
84.00	159	157.00	627	228.00	1243	327.00	465

Data File: /chem3/nt4.i/20100118.b/tune.b/01181001.d

Date : 18-JAN-2010 13:38

Client ID: DFTPP0118 Instrument: nt4.i

Sample Info: DFTPP0118

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01181001.d
Spectrum: Avg. Scans 2296-2298 (16.58), Background Scan 2290
Location of Maximum: 198.00
Number of points: 265

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	869	158.00	676	229.00	1674	328.00	299
86.00	1306	159.00	553	230.00	300	332.00	86
87.00	385	160.00	1163	231.00	682	333.00	270
88.00	173	161.00	1563	232.00	116	334.00	1521
89.00	122	162.00	385	233.00	201	335.00	455
91.00	788	163.00	260	234.00	537	341.00	347
92.00	1257	164.00	70	235.00	689	346.00	470
93.00	6978	165.00	1463	236.00	373	352.00	678
94.00	408	166.00	950	237.00	592	353.00	429
95.00	31	167.00	7022	239.00	349	354.00	665
96.00	274	168.00	3415	240.00	235	355.00	224
98.00	5418	169.00	693	241.00	447	365.00	3425
99.00	4027	170.00	265	242.00	1079	366.00	506
100.00	434	171.00	474	243.00	727	371.00	167
101.00	2518	172.00	740	244.00	13042	372.00	1346
102.00	210	173.00	831	245.00	1799	373.00	319
103.00	563	174.00	1619	246.00	2886	383.00	276
104.00	1581	175.00	2858	247.00	734	390.00	141
105.00	1336	176.00	700	248.00	57	402.00	438
106.00	223	177.00	1262	249.00	487	403.00	756
107.00	19424	178.00	492	251.00	213	404.00	202
108.00	3134	179.00	4761	252.00	203	421.00	595
110.00	32208	180.00	3576	253.00	488	422.00	558
111.00	5107	181.00	1618	255.00	67056	423.00	4181
112.00	617	182.00	442	256.00	9286	424.00	862
113.00	357	183.00	292	257.00	689	441.00	13850
115.00	69	184.00	516	258.00	3963	442.00	92432
116.00	1195	185.00	2466	259.00	639	443.00	18280
117.00	16856	186.00	18760	260.00	69	444.00	1787
118.00	1274	187.00	5302	261.00	68		
119.00	152	188.00	595	264.00	51		
120.00	317	189.00	1340	265.00	1711		

Data File: /chem3/nt4.i/20100118.b/tune.b/01181001.d

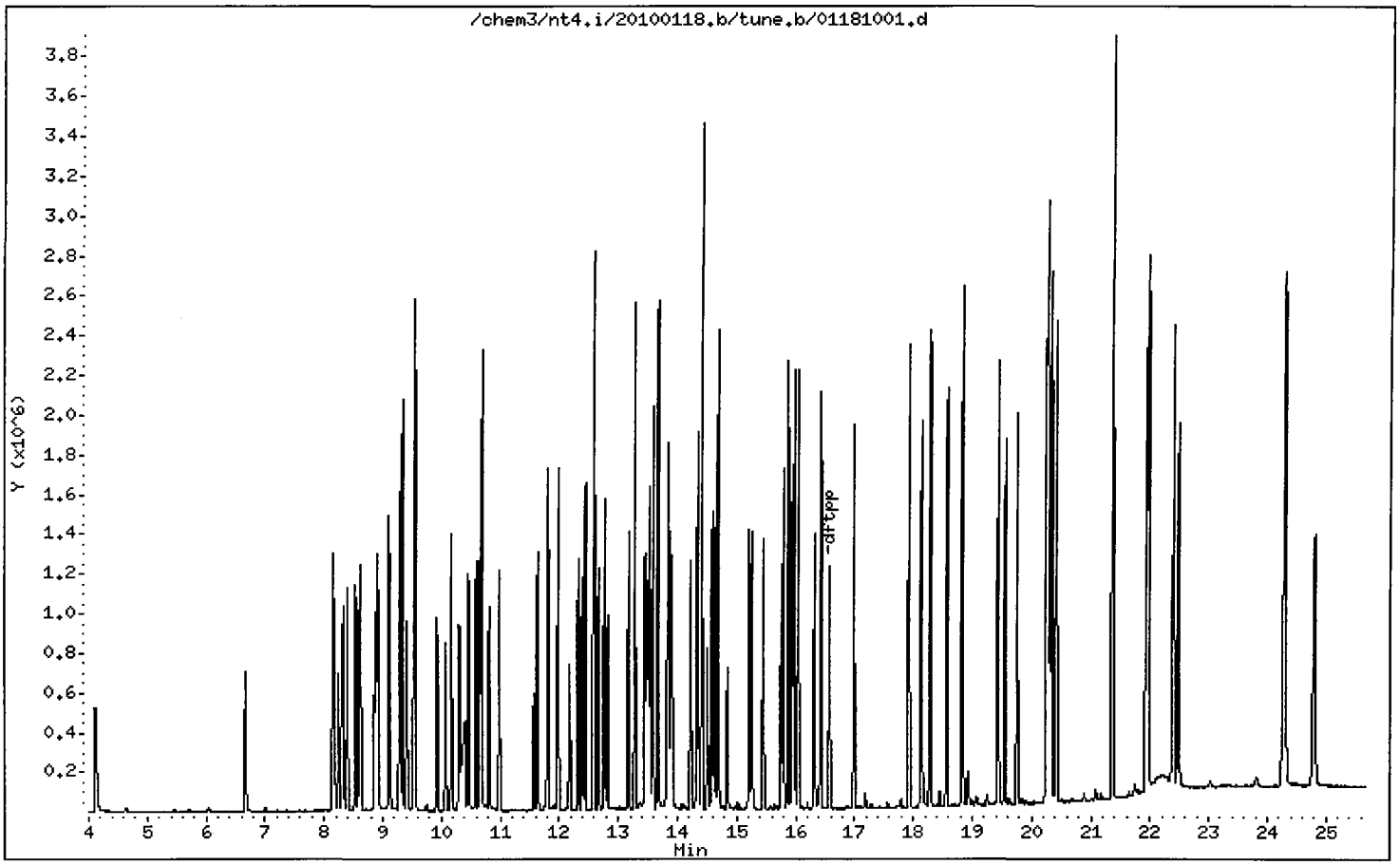
Date : 18-JAN-2010 13:38

Client ID: DFTPP0118 Instrument: nt4.i

Sample Info: DFTPP0118

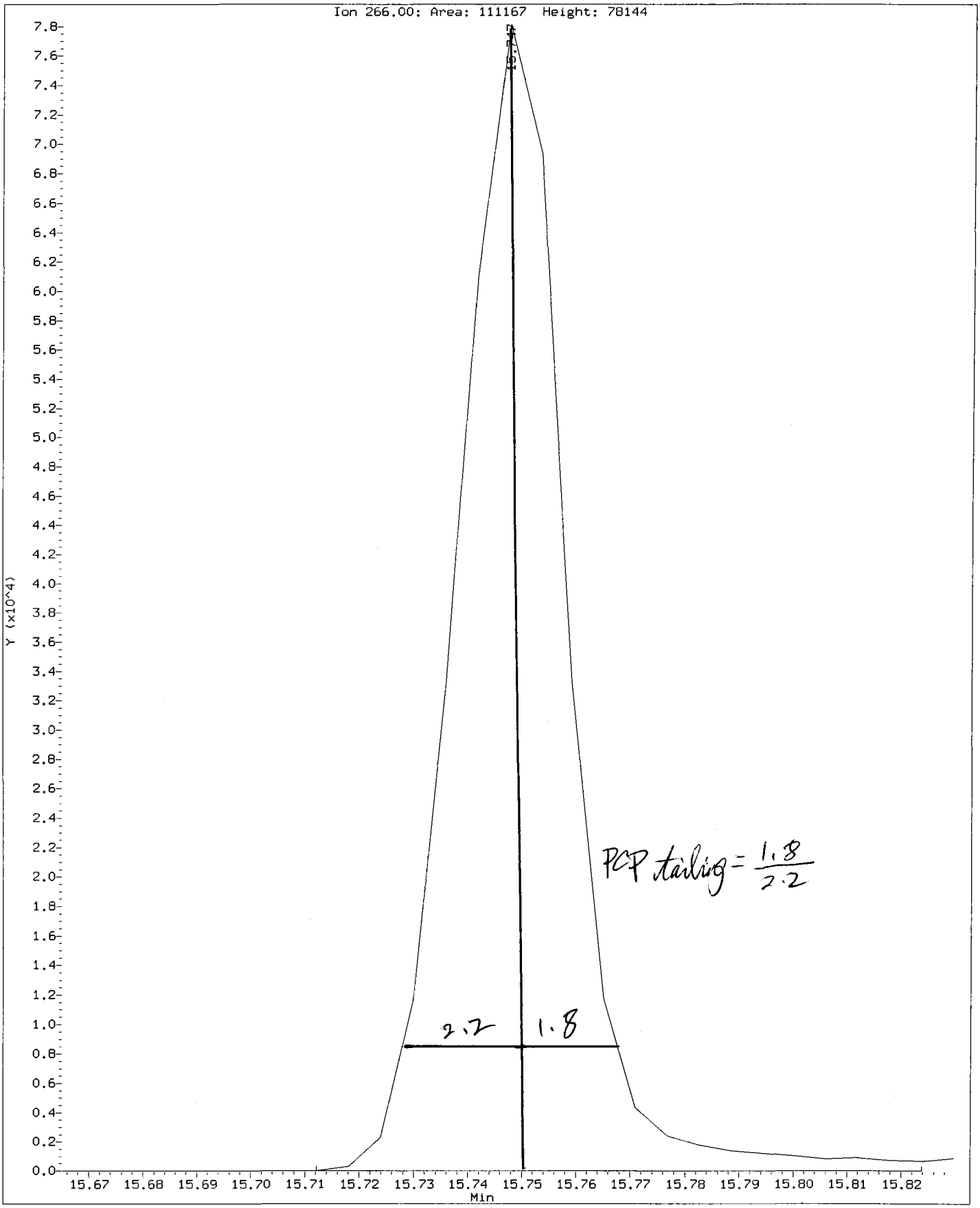
Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32



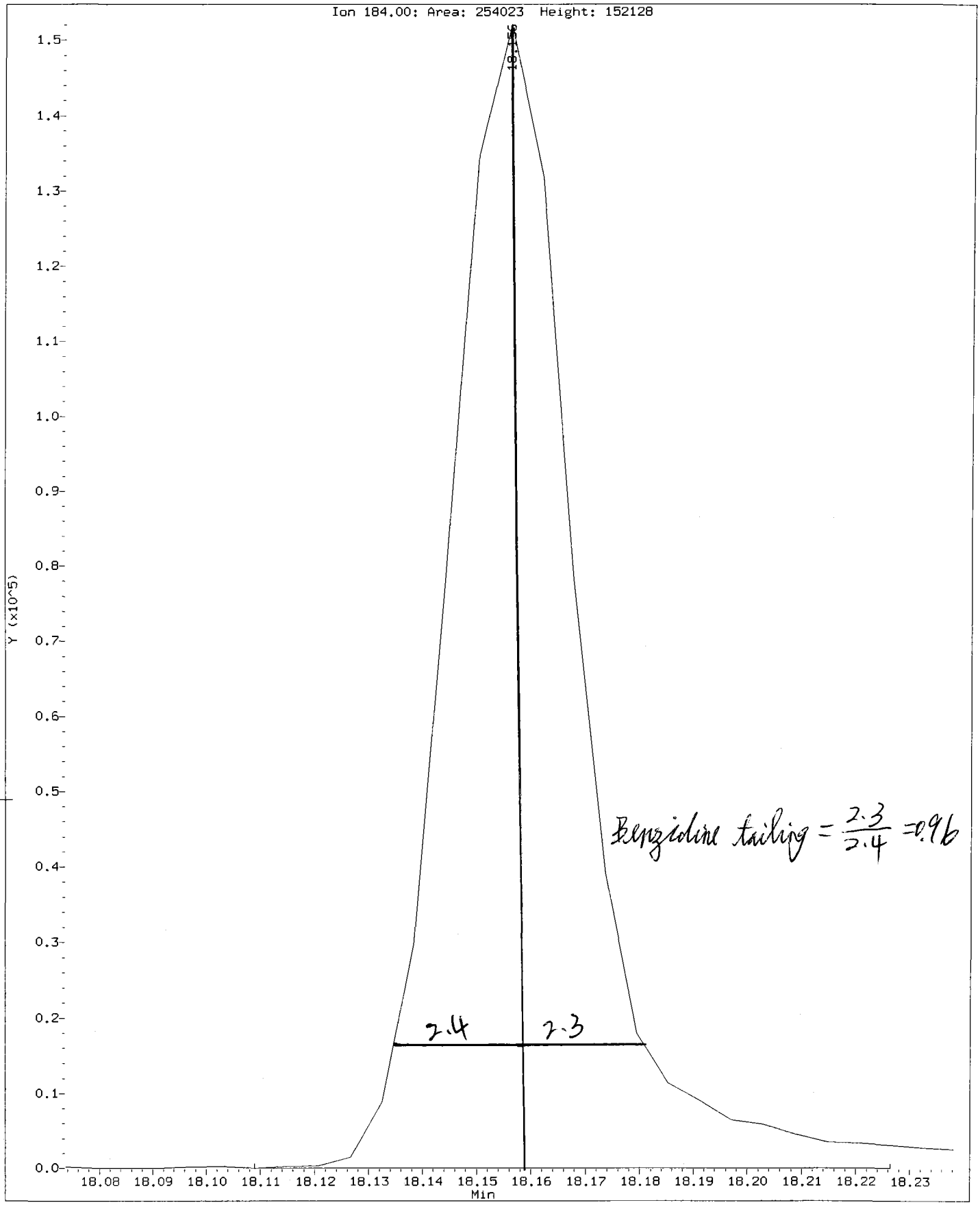
Data File: /chem3/nt4.i/20100118.b/ddt.b/01181001.d
Injection Date: 18-JAN-2010 13:38
Instrument: nt4.i
Client Sample ID: CC0118

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt4.i/20100118.b/ddt.b/01181001.d
Injection Date: 18-JAN-2010 13:38
Instrument: nt4.i
Client Sample ID: CC0118

Compound: Benzidine
CAS Number:



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt4.i/20100118.b/ddt.b/01181001.d ARI ID: CC0118
Method: /chem3/nt4.i/20100118.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 18-JAN-2010 13:38 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	15.747	111167
Benzidine	18.156	254023
4,4'-DDE	----	----
4,4'-DDD	19.078	11037
4,4'-DDT	19.554	462380

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 11037) * 100}{(0 + 11037 + 462380)}$$

DDT Percent Breakdown = 2.3 %

01/18/10

Data File: /chem3/nt4.i/20100119.b/tune.b/01191001.d

Date : 19-JAN-2010 12:17

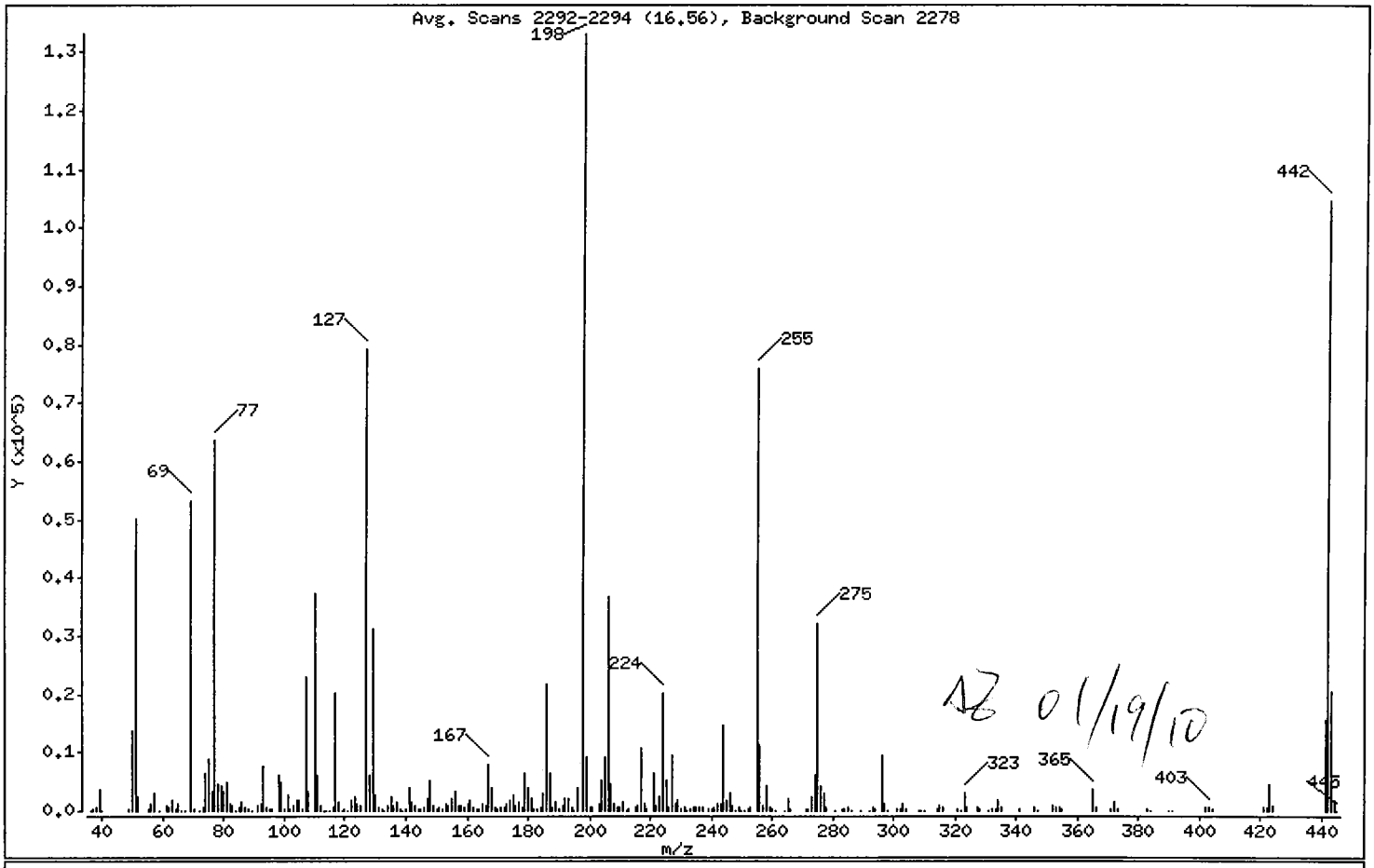
Client ID: DFTPP0119 Instrument: nt4.i

Sample Info: DFTPP0119,

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

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	37.78
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	40.11
70	Less than 2.00% of mass 69	0.19 (0.48)
127	25.00 - 75.00% of mass 198	59.64
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.85
275	10.00 - 30.00% of mass 198	24.10
365	Greater than 0.75% of mass 198	2.83
441	Present, but less than mass 443	11.69
442	40.00 - 110.00% of mass 198	78.72
443	15.00 - 24.00% of mass 442	15.38 (19.53)

Data File: /chem3/nt4.i/20100119.b/tune.b/01191001.d

Date : 19-JAN-2010 12:17

Client ID: DFTPP0119 Instrument: nt4.i

Sample Info: DFTPP0119,

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01191001.d
Spectrum: Avg. Scans 2292-2294 (16,56), Background Scan 2278
Location of Maximum: 198.00
Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	54	122.00	1704	192.00	2070	273.00	2297
37.00	317	123.00	2599	193.00	2258	274.00	6046
38.00	664	124.00	1173	194.00	546	275.00	32104
39.00	3543	125.00	845	195.00	43	276.00	4191
40.00	35	127.00	79432	196.00	3965	277.00	2963
49.00	339	128.00	6158	198.00	133184	278.00	501
50.00	13679	129.00	31152	199.00	9120	281.00	39
51.00	50312	130.00	2723	200.00	740	283.00	384
52.00	2600	131.00	499	201.00	669	284.00	244
55.00	187	132.00	377	203.00	1173	285.00	539
56.00	1263	133.00	101	204.00	5316	286.00	56
57.00	2914	134.00	969	205.00	9180	289.00	62
59.00	144	135.00	2440	206.00	36760	292.00	50
61.00	800	136.00	1027	207.00	4539	293.00	653
62.00	724	137.00	1511	208.00	1368	294.00	175
63.00	1977	138.00	220	209.00	556	296.00	9514
64.00	399	139.00	16	210.00	586	297.00	1216
65.00	1238	140.00	270	211.00	1596	298.00	51
66.00	138	141.00	4060	212.00	105	301.00	167
67.00	69	142.00	1468	213.00	163	302.00	188
69.00	53416	143.00	986	215.00	553	303.00	1129
70.00	257	144.00	333	216.00	1068	304.00	308
72.00	50	145.00	155	217.00	10685	308.00	85
73.00	467	146.00	679	218.00	1316	309.00	64
74.00	6462	147.00	2001	219.00	249	310.00	73
75.00	8921	148.00	5212	221.00	6419	314.00	442
76.00	3218	149.00	995	222.00	1033	315.00	1052
77.00	63712	150.00	341	223.00	2492	316.00	534
78.00	4649	151.00	663	224.00	20248	321.00	326
79.00	4194	152.00	217	225.00	5179	322.00	58
80.00	3370	153.00	1092	226.00	688	323.00	2992
81.00	4823	154.00	833	227.00	9373	324.00	489
82.00	1178	155.00	2189	228.00	1202	327.00	561
83.00	1021	156.00	3414	229.00	1847	328.00	286
84.00	36	157.00	773	230.00	309	331.00	65

Data File: /chem3/nt4.i/20100119.b/tune.b/01191001.d

Date : 19-JAN-2010 12:17

Client ID: DFTPP0119 Instrument: nt4.i

Sample Info: DFTPP0119,

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 01191001.d
Spectrum: Avg. Scans 2292-2294 (16.56), Background Scan 2278
Location of Maximum: 198.00
Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	702	158.00	834	231.00	699	332.00	271
86.00	1387	159.00	649	232.00	60	333.00	166
87.00	583	160.00	1363	233.00	271	334.00	1778
88.00	225	161.00	1940	234.00	621	335.00	468
89.00	15	162.00	609	235.00	664	341.00	361
91.00	1068	163.00	272	236.00	548	346.00	664
92.00	1147	164.00	352	237.00	649	347.00	50
93.00	7725	165.00	1314	239.00	384	352.00	782
94.00	584	166.00	846	240.00	331	353.00	520
95.00	178	167.00	7808	241.00	564	354.00	715
96.00	352	168.00	3889	242.00	1100	355.00	178
98.00	6180	169.00	765	243.00	1211	365.00	3771
99.00	4978	170.00	344	244.00	14777	366.00	571
100.00	415	171.00	463	245.00	1885	371.00	154
101.00	2847	172.00	757	246.00	3148	372.00	1487
102.00	214	173.00	1127	247.00	787	373.00	320
103.00	1012	174.00	1685	248.00	141	383.00	384
104.00	1806	175.00	2858	249.00	563	384.00	51
105.00	1781	176.00	907	250.00	125	390.00	110
106.00	250	177.00	1447	251.00	50	391.00	51
107.00	22824	178.00	567	252.00	197	402.00	468
108.00	3415	179.00	6325	253.00	478	403.00	742
110.00	37224	180.00	4124	255.00	75880	404.00	296
111.00	6131	181.00	2005	256.00	11180	421.00	629
112.00	795	182.00	233	257.00	894	422.00	651
113.00	99	183.00	275	258.00	4331	423.00	4628
114.00	2	184.00	657	259.00	752	424.00	849
115.00	48	185.00	2962	260.00	259	441.00	15565
116.00	650	186.00	21608	261.00	59	442.00	104848
117.00	20112	187.00	6421	264.00	137	443.00	20480
118.00	1452	188.00	718	265.00	2116	444.00	1878
119.00	123	189.00	1450	266.00	176	445.00	134
120.00	389	190.00	320	271.00	191		
121.00	61	191.00	821	272.00	246		

Data File: /chem3/nt4.i/20100119.b/tune.b/01191001.d

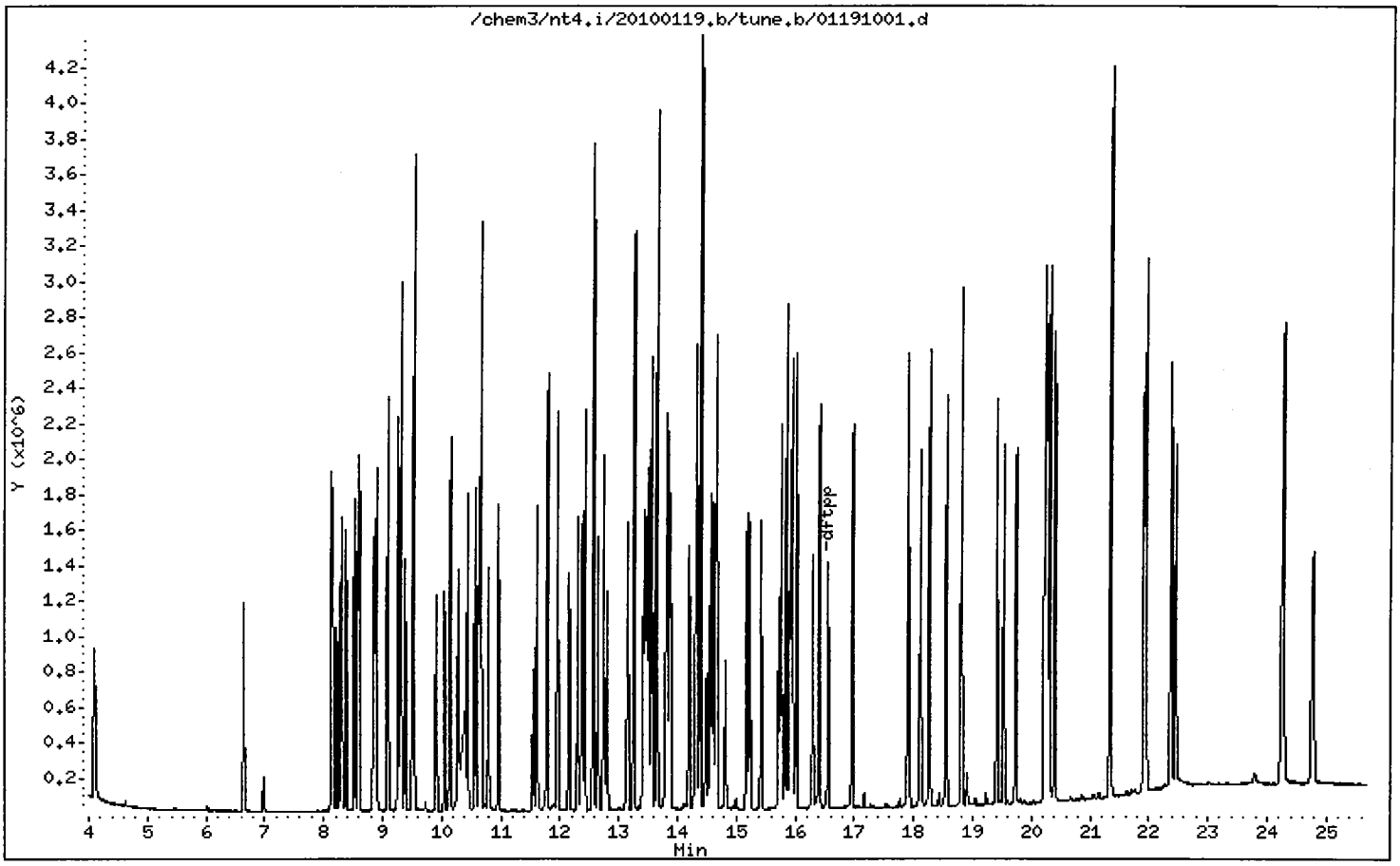
Date : 19-JAN-2010 12:17

Client ID: DFTPP0119 Instrument: nt4.i

Sample Info: DFTPP0119,

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt4.i/20100119.b/ddt.b/01191001.d ARI ID: CC0119
Method: /chem3/nt4.i/20100119.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 19-JAN-2010 12:17 Instrument: nt4.i

COMPOUND	RT	AREA
Pentachlorophenol	15.724	165671
Benzidine	18.132	33675
4,4'-DDE	----	----
4,4'-DDD	19.055	11698
4,4'-DDT	19.536	528657

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 11698) * 100}{(0 + 11698 + 528657)}$$

DDT Percent Breakdown = 2.2 %

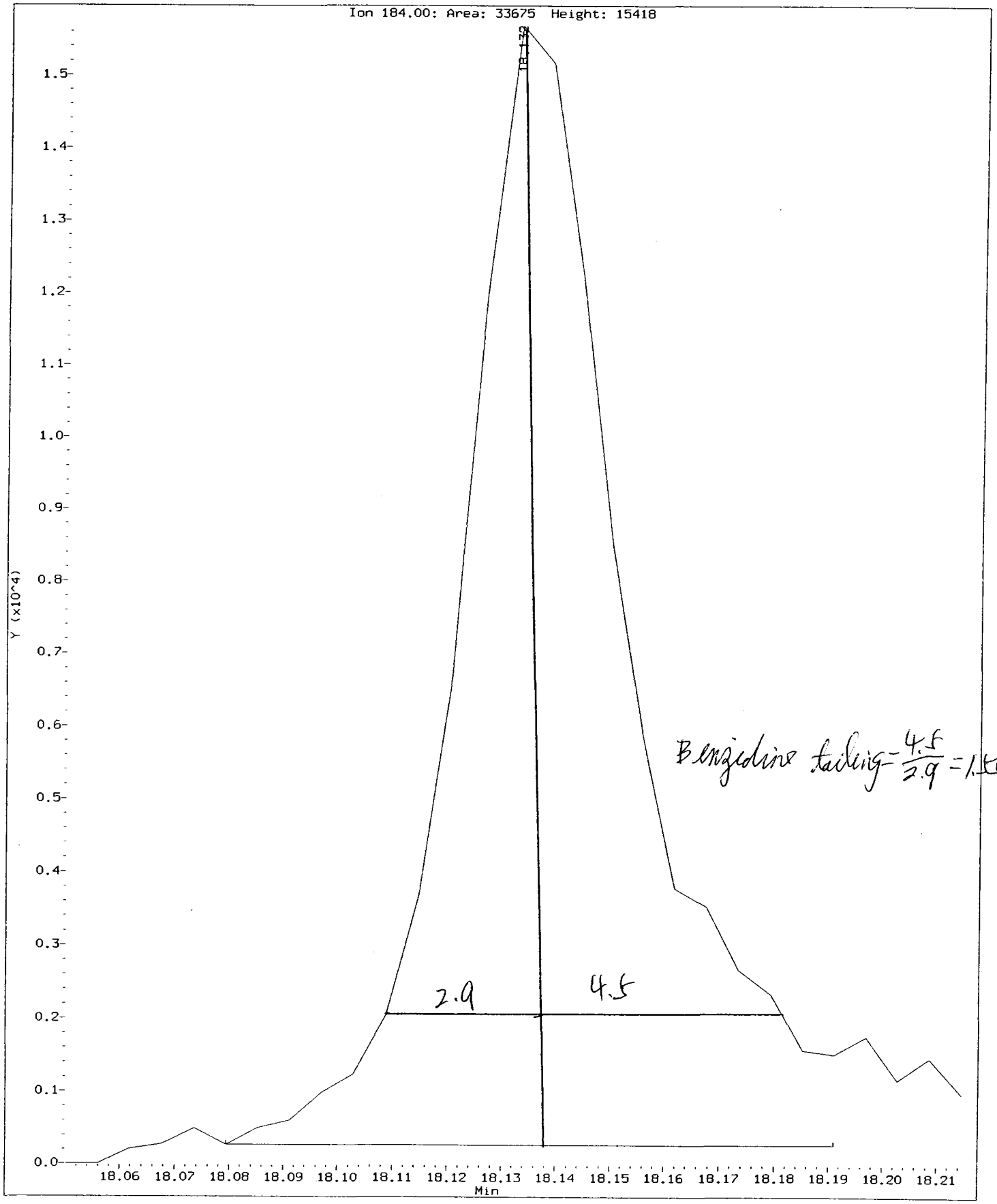
OK

01/19/10

QF10:20492

Data File: /chem3/nt4.i/20100119.b/ddt.b/01191001.d
Injection Date: 19-JAN-2010 12:17
Instrument: nt4.i
Client Sample ID: CC0119

Compound: Benzidine
CAS Number:

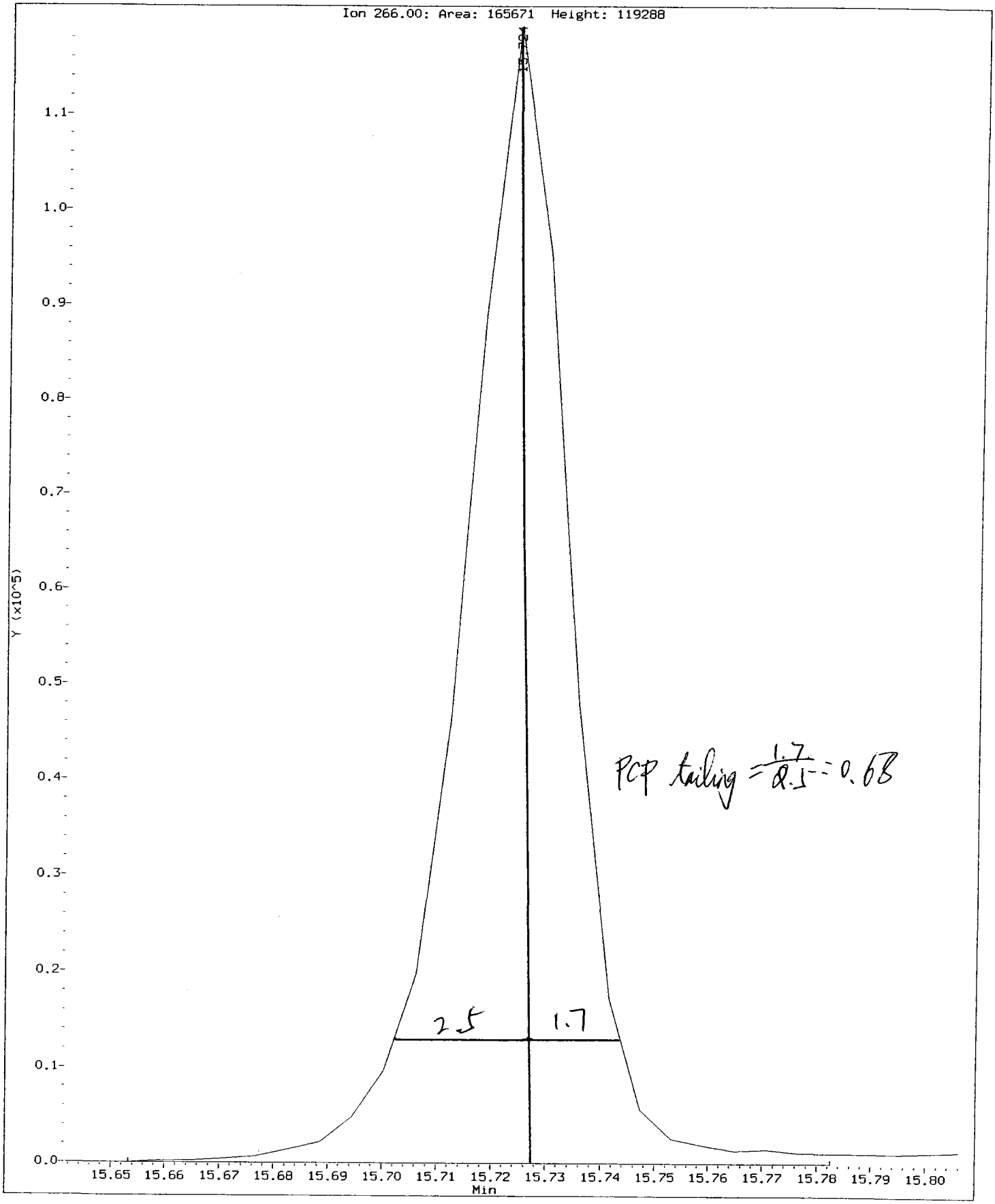


Benzidine tailing - $\frac{4.5}{2.9} = 1.55$

QF10:00493

Data File: /chem3/nt4.i/20100119.b/ddt.b/01191001.d
Injection Date: 19-JAN-2010 12:17
Instrument: nt4.i
Client Sample ID: CC0119

Compound: Pentachlorophenol
CAS Number: 87-86-5



QF10:0604

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: MB-011410
METHOD BLANK

Lab Sample ID: MB-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/14/10
Date Analyzed: 01/18/10 17:38
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
86-73-7	Fluorene	20	< 20 U
85-01-8	Phenanthrene	20	< 20 U
120-12-7	Anthracene	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U
132-64-9	Dibenzofuran	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	88.4%
2-Fluorobiphenyl	71.6%

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100118.b/01181007.d
Lab Smp Id: QF10MBS1 Client Smp ID: QF10MBS1
Inj Date : 18-JAN-2010 17:38
Operator : JZ Inst ID: nt4.i
Smp Info : QF10MBS1,
Misc Info : 10-690
Comment : 1ul Injection
Method : /chem3/nt4.i/20100118.b/SW846100107.m
Meth Date : 18-Jan-2010 18:53 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnamblcs.sub
Target Version: 3.50

01/18/10

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.644	10.654	(1.000)	818034	20.0000	
28 Naphthalene	128	Compound Not Detected.					
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
$ 36 2-Fluorobiphenyl	172	12.436	12.446	(0.919)	509789	17.8866	357.7
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	13.529	13.533	(1.000)	493700	20.0000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	15.925	15.935	(1.000)	844560	20.0000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	66 Terphenyl-d14	244	18.569	18.579	(0.916)	730110	22.1265	442.5
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	20.278	20.288	(1.000)	889769	20.0000	
	71 Chrysene	228	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	22.469	22.479	(1.000)	899718	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01181007.d
Lab Smp Id: QF10MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 13:38
Client Smp ID: QF10MBS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	818034	-21.01
42 Acenaphthene-d10	594267	297134	1188534	493700	-16.92
59 Phenanthrene-d10	951721	475860	1903442	844560	-11.26
69 Chrysene-d12	794862	397431	1589724	889769	11.94
77 Perylene-d12	826094	413047	1652188	899718	8.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.65	10.15	11.15	10.64	-0.09
42 Acenaphthene-d10	13.53	13.03	14.03	13.53	-0.03
59 Phenanthrene-d10	15.94	15.44	16.44	15.93	-0.06
69 Chrysene-d12	20.29	19.79	20.79	20.28	-0.05
77 Perylene-d12	22.48	21.98	22.98	22.47	-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.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Floyd-Snider
Sample Matrix: SOLID
Lab Smp Id: QF10MBS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnamblcs.sub
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

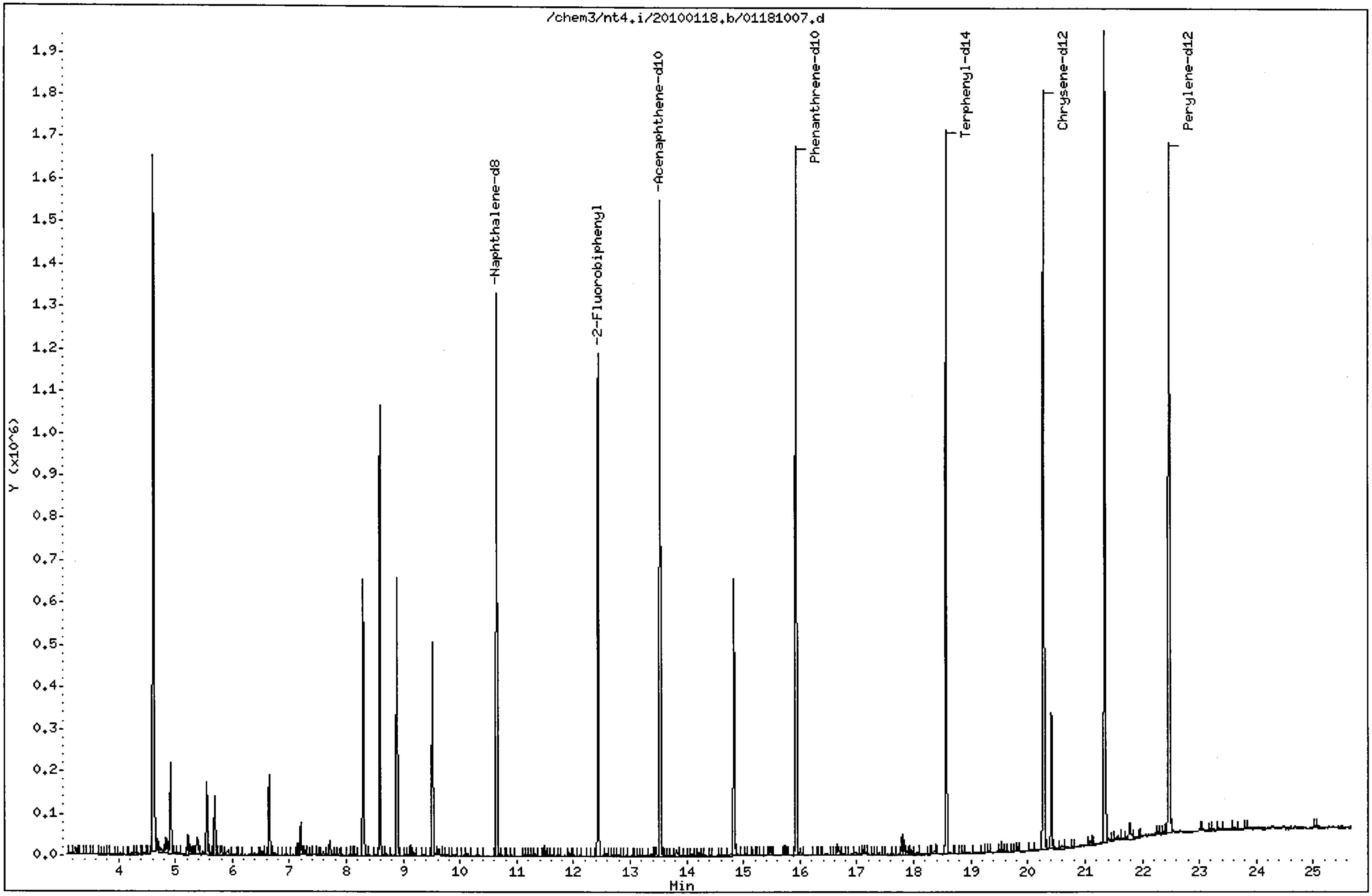
Client SDG: QF10
Fraction: SV
Client Smp ID: QF10MBS1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	500.0	357.7	71.55	40-100
$ 66 Terphenyl-d14	500.0	442.5	88.51	47-112

Data File: /chem3/nt4.i/20100118.b/01181007.d
Date : 18-JAN-2010 17:38
Client ID: QF10MBS1
Sample Info: QF10MBS1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS
Page 1 of 1

Sample ID: CB31A011110SED
MATRIX SPIKE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 12:54
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	---
91-57-6	2-Methylnaphthalene	20	---
90-12-0	1-Methylnaphthalene	20	---
208-96-8	Acenaphthylene	20	---
83-32-9	Acenaphthene	20	---
86-73-7	Fluorene	20	---
85-01-8	Phenanthrene	20	---
120-12-7	Anthracene	20	---
206-44-0	Fluoranthene	20	---
129-00-0	Pyrene	20	---
56-55-3	Benzo(a)anthracene	20	---
218-01-9	Chrysene	20	---
205-99-2	Benzo(b)fluoranthene	20	---
207-08-9	Benzo(k)fluoranthene	20	---
50-32-8	Benzo(a)pyrene	20	---
193-39-5	Indeno(1,2,3-cd)pyrene	20	---
53-70-3	Dibenz(a,h)anthracene	20	---
191-24-2	Benzo(g,h,i)perylene	20	---
132-64-9	Dibenzofuran	20	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	78.0%
2-Fluorobiphenyl	77.2%

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100119.b/01191002.d
Lab Smp Id: QF10AMS Client Smp ID: CB31A011110SED MS
Inj Date : 19-JAN-2010 12:54
Operator : JZ Inst ID: nt4.i
Smp Info : QF10AMS
Misc Info : 10-690
Comment : 1ul Injection
Method : /chem3/nt4.i/20100119.b/SW846100107.m
Meth Date : 19-Jan-2010 16:29 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 2 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

JZ 01/19/10

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	32.70000	Weight of sample extracted (g)
M	21.60000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.624	10.631	(1.000)	1044534	20.0000	
28 Naphthalene	128	10.659	10.660	(1.003)	800247	16.1592	315.2
32 2-Methylnaphthalene	141	11.781	11.788	(1.109)	498046	17.7642	346.5
105 1-methylnaphthalene	141	11.958	11.958	(1.125)	508330	18.3484	357.9
$ 36 2-Fluorobiphenyl	172	12.416	12.422	(0.919)	707581	19.2948	376.3
40 Acenaphthylene	152	13.256	13.262	(0.981)	947994	18.6631	364.0
* 42 Acenaphthene-d10	164	13.509	13.515	(1.000)	635241	20.0000	
44 Acenaphthene	153	13.561	13.568	(1.004)	604096	18.0144	351.3
46 Dibenzofuran	168	13.820	13.826	(1.023)	880739	19.2860	376.1
49 Fluorene	166	14.384	14.390	(1.065)	727566	19.4671	379.7
* 59 Phenanthrene-d10	188	15.911	15.912	(1.000)	1071795	20.0000	
60 Phenanthrene	178	15.952	15.953	(1.003)	1406136	25.2296	492.1(R)
61 Anthracene	178	16.023	16.023	(1.007)	1098010	20.0039	390.1
64 Fluoranthene	202	17.914	17.909	(1.126)	1747953	31.9145	622.4(R)
65 Pyrene	202	18.279	18.273	(0.901)	1740495	23.8219	464.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	66 Terphenyl-d14	244	18.561	18.555	(0.915)	830251	19.5135	380.6
	68 Benzo(a)anthracene	228	20.258	20.241	(0.999)	1466791	21.6705	422.6
*	69 Chrysene-d12	240	20.288	20.271	(1.000)	1147301	20.0000	
	71 Chrysene	228	20.329	20.312	(1.002)	1495721	23.2676	453.8
	74 Benzo(b)fluoranthene	252	21.950	21.915	(0.975)	1586140	20.7733	405.1
	75 Benzo(k)fluoranthene	252	21.979	21.951	(0.977)	1621495	21.3780	416.9(M)
	76 Benzo(a)pyrene	252	22.414	22.379	(0.996)	1375569	19.9357	388.8
*	77 Perylene-d12	264	22.502	22.456	(1.000)	1240238	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.341	24.265	(1.082)	1637306	20.6529	402.8
	79 Dibenzo(a,h)anthracene	278	24.353	24.277	(1.082)	1262585	19.0401	371.3
	80 Benzo(g,h,i)perylene	276	24.870	24.776	(1.105)	1370041	19.3521	377.4

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: nt4.i
Lab File ID: 01191002.d
Lab Smp Id: QF10AMS
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-690

Calibration Date: 19-JAN-2010
Calibration Time: 12:17
Client Smp ID: CB31A011110SED M
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	1044534	0.87
42 Acenaphthene-d10	594267	297134	1188534	635241	6.89
59 Phenanthrene-d10	951721	475860	1903442	1071795	12.62
69 Chrysene-d12	794862	397431	1589724	1147301	44.34
77 Perylene-d12	826094	413047	1652188	1240238	50.13

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.63	10.13	11.13	10.62	-0.06
42 Acenaphthene-d10	13.52	13.02	14.02	13.51	-0.05
59 Phenanthrene-d10	15.91	15.41	16.41	15.91	0.00
69 Chrysene-d12	20.27	19.77	20.77	20.29	0.08
77 Perylene-d12	22.46	21.96	22.96	22.50	0.21

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: SOLID
Lab Smp Id: QF10AMS
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-690

Client SDG: QF10
Fraction: SV
Client Smp ID: CB31A011110SED MS
Operator: JZ
SampleType: MS
Quant Type: ISTD

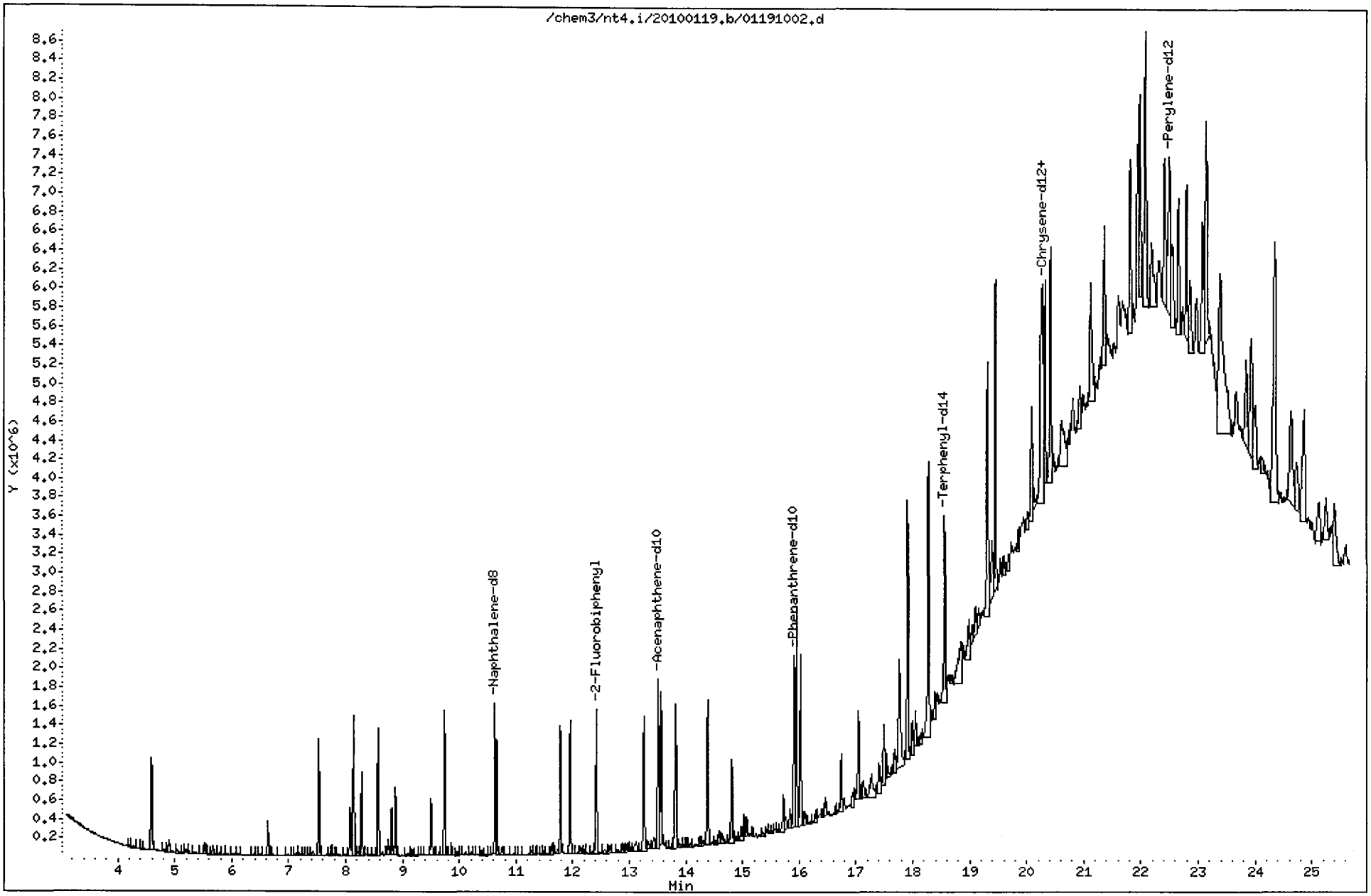
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	487.6	315.2	64.64	37-100
32 2-Methylnaphthalen	487.6	346.5	71.06	43-101
105 1-methylnaphthalen	487.6	357.9	73.39	39-100
40 Acenaphthylene	487.6	364.0	74.65	44-100
44 Acenaphthene	487.6	351.3	72.06	41-100
46 Dibenzofuran	487.6	376.1	77.14	44-100
49 Fluorene	487.6	379.7	77.87	49-100
60 Phenanthrene	487.6	492.1	100.92*	48-100
61 Anthracene	487.6	390.1	80.02	50-100
64 Fluoranthene	487.6	622.4	127.66*	54-100
65 Pyrene	487.6	464.6	95.29	41-105
68 Benzo(a)anthracene	487.6	422.6	86.68	49-100
71 Chrysene	487.6	453.8	93.07	50-100
74 Benzo(b)fluoranthe	487.6	405.1	83.09	53-100
75 Benzo(k)fluoranthe	487.6	416.9	85.51	54-100
76 Benzo(a)pyrene	487.6	388.8	79.74	50-100
78 Indeno(1,2,3-cd)py	487.6	402.8	82.61	33-101
79 Dibenzo(a,h)anthra	487.6	371.3	76.16	37-104
80 Benzo(g,h,i)peryle	487.6	377.4	77.41	33-107

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	487.6	376.3	77.18	34-100
$ 66 Terphenyl-d14	487.6	380.6	78.05	35-112

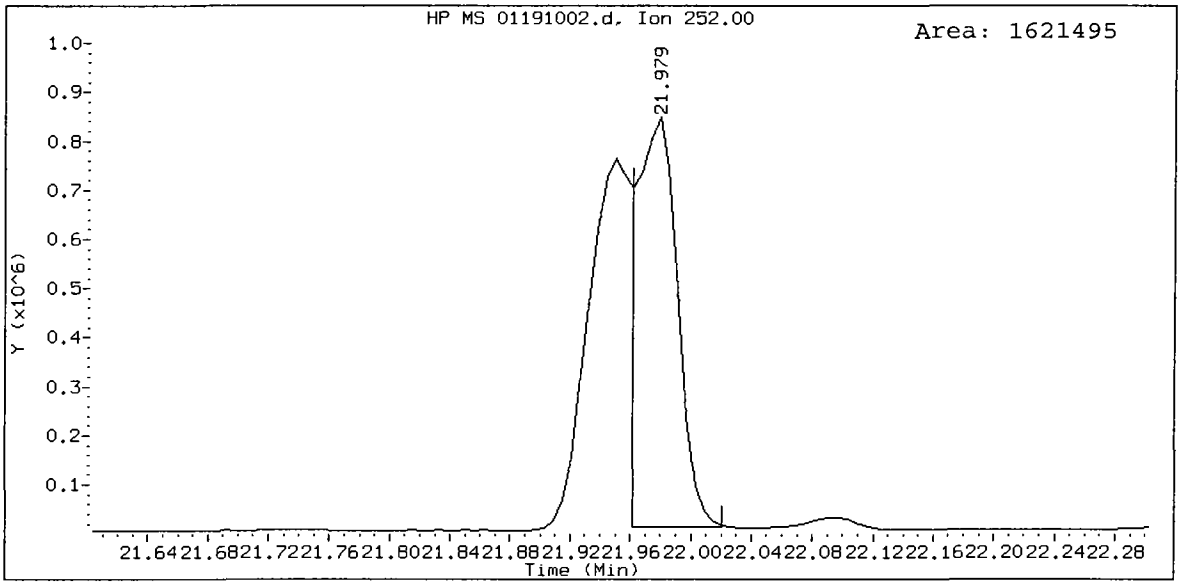
Data File: /chem3/nt4.i/20100119.b/01191002.d
Date : 19-JAN-2010 12:54
Client ID: CB31A011110SED MS
Sample Info: QF10AMS
Volume Injected (uL): 1.0
Column phase: ZB-5msi

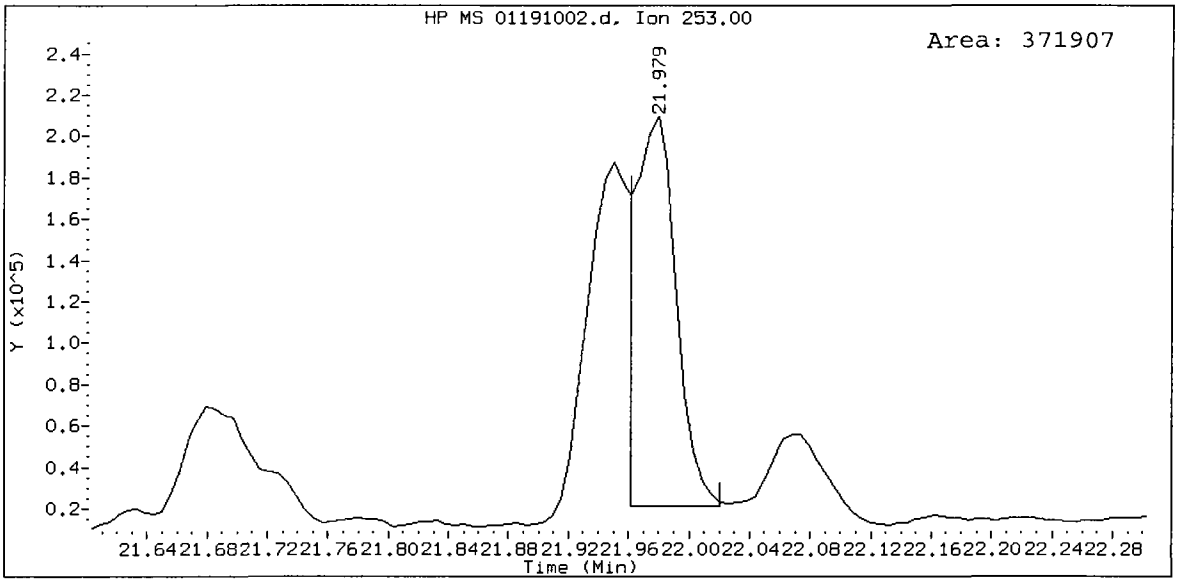
Instrument: nt4.i

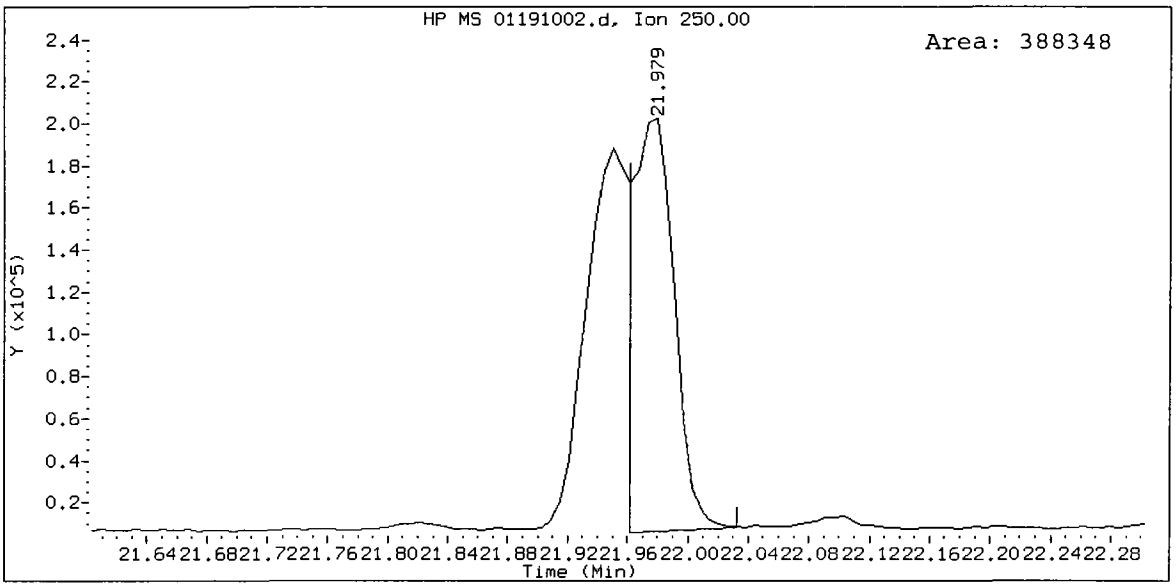
Operator: JZ
Column diameter: 0.32



QF10AMS, /chem3/nt4.i/20100119.b/01191002.d
Benzo(k)fluoranthene Amount: 21.38







ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: CB31A011110SED
MATRIX SPIKE DUPLICATE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/20/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/19/10 13:27
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	---
91-57-6	2-Methylnaphthalene	20	---
90-12-0	1-Methylnaphthalene	20	---
208-96-8	Acenaphthylene	20	---
83-32-9	Acenaphthene	20	---
86-73-7	Fluorene	20	---
85-01-8	Phenanthrene	20	---
120-12-7	Anthracene	20	---
206-44-0	Fluoranthene	20	---
129-00-0	Pyrene	20	---
56-55-3	Benzo(a)anthracene	20	---
218-01-9	Chrysene	20	---
205-99-2	Benzo(b)fluoranthene	20	---
207-08-9	Benzo(k)fluoranthene	20	---
50-32-8	Benzo(a)pyrene	20	---
193-39-5	Indeno(1,2,3-cd)pyrene	20	---
53-70-3	Dibenz(a,h)anthracene	20	---
191-24-2	Benzo(g,h,i)perylene	20	---
132-64-9	Dibenzofuran	20	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	83.6%
2-Fluorobiphenyl	78.4%

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100119.b/01191003.d
Lab Smp Id: QF10AMSD Client Smp ID: CB31A011110SED MSD
Inj Date : 19-JAN-2010 13:27
Operator : JZ Inst ID: nt4.i
Smp Info : QF10AMSD
Misc Info : 10-690
Comment : 1ul Injection
Method : /chem3/nt4.i/20100119.b/SW846100107.m
Meth Date : 19-Jan-2010 16:29 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 3 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

01/19/10

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	32.10000	Weight of sample extracted (g)
M	21.60000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.630	10.631	(1.000)	1305784	20.0000	
28 Naphthalene	128	10.665	10.660	(1.003)	1023222	16.5278	328.4
32 2-Methylnaphthalene	141	11.787	11.788	(1.109)	631377	18.0142	357.9
105 1-methylnaphthalene	141	11.963	11.958	(1.125)	648312	18.7192	371.9
$ 36 2-Fluorobiphenyl	172	12.422	12.422	(0.919)	905494	19.5792	389.0
40 Acenaphthylene	152	13.268	13.262	(0.981)	1203996	18.7953	373.4
* 42 Acenaphthene-d10	164	13.520	13.515	(1.000)	801110	20.0000	
44 Acenaphthene	153	13.567	13.568	(1.003)	754411	17.8389	354.4
46 Dibenzofuran	168	13.832	13.826	(1.023)	1103693	19.1641	380.7
49 Fluorene	166	14.396	14.390	(1.065)	911567	19.3403	384.2
* 59 Phenanthrene-d10	188	15.923	15.912	(1.000)	1345950	20.0000	
60 Phenanthrene	178	15.958	15.953	(1.002)	1541356	22.0226	437.5
61 Anthracene	178	16.034	16.023	(1.007)	1349520	19.5781	389.0
64 Fluoranthene	202	17.926	17.909	(1.126)	2130374	30.9739	615.4(R)
65 Pyrene	202	18.290	18.273	(0.901)	2143655	23.7534	471.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$	66 Terphenyl-d14	244	18.572	18.555	(0.915)	1097513	20.8835	414.9
	68 Benzo(a)anthracene	228	20.276	20.241	(0.999)	1817183	21.7354	431.8
*	69 Chrysene-d12	240	20.299	20.271	(1.000)	1417131	20.0000	
	71 Chrysene	228	20.340	20.312	(1.002)	1856198	23.3772	464.5
	74 Benzo(b)fluoranthene	252	21.979	21.915	(0.976)	2050454	22.9178	455.3
	75 Benzo(k)fluoranthene	252	21.997	21.951	(0.977)	1760386	19.8069	393.5(M)
	76 Benzo(a)pyrene	252	22.438	22.379	(0.996)	1631747	20.1818	401.0
*	77 Perylene-d12	264	22.520	22.456	(1.000)	1453270	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.376	24.265	(1.082)	2067791	22.2595	442.2
	79 Dibenzo(a,h)anthracene	278	24.388	24.277	(1.083)	1598999	20.5786	408.9
	80 Benzo(g,h,i)perylene	276	24.899	24.776	(1.106)	1813037	21.8554	434.2

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: nt4.i
Lab File ID: 01191003.d
Lab Smp Id: QF10AMSD
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-690

Calibration Date: 19-JAN-2010
Calibration Time: 12:17
Client Smp ID: CB31A011110SED M
Level: LOW
Sample Type: Soil

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	1305784	26.09
42 Acenaphthene-d10	594267	297134	1188534	801110	34.81
59 Phenanthrene-d10	951721	475860	1903442	1345950	41.42
69 Chrysene-d12	794862	397431	1589724	1417131	78.29
77 Perylene-d12	826094	413047	1652188	1453270	75.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.63	10.13	11.13	10.63	-0.01
42 Acenaphthene-d10	13.52	13.02	14.02	13.52	0.04
59 Phenanthrene-d10	15.91	15.41	16.41	15.92	0.07
69 Chrysene-d12	20.27	19.77	20.77	20.30	0.14
77 Perylene-d12	22.46	21.96	22.96	22.52	0.28

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: SOLID
Lab Smp Id: QF10AMSD
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem3/nt4.i/20100119.b/SW846100107.m
Misc Info: 10-690

Client SDG: QF10
Fraction: SV
Client Smp ID: CB31A011110SED MSD
Operator: JZ
SampleType: MSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	496.7	328.4	66.11	37-100
32 2-Methylnaphthalen	496.7	357.9	72.06	43-101
105 1-methylnaphthalen	496.7	371.9	74.88	39-100
40 Acenaphthylene	496.7	373.4	75.18	44-100
44 Acenaphthene	496.7	354.4	71.36	41-100
46 Dibenzofuran	496.7	380.7	76.66	44-100
49 Fluorene	496.7	384.2	77.36	49-100
60 Phenanthrene	496.7	437.5	88.09	48-100
61 Anthracene	496.7	389.0	78.31	50-100
64 Fluoranthene	496.7	615.4	123.90*	54-100
65 Pyrene	496.7	471.9	95.01	41-105
68 Benzo(a)anthracene	496.7	431.8	86.94	49-100
71 Chrysene	496.7	464.5	93.51	50-100
74 Benzo(b)fluoranthe	496.7	455.3	91.67	53-100
75 Benzo(k)fluoranthe	496.7	393.5	79.23	54-100
76 Benzo(a)pyrene	496.7	401.0	80.73	50-100
78 Indeno(1,2,3-cd)py	496.7	442.2	89.04	33-101
79 Dibenzo(a,h)anthra	496.7	408.9	82.31	37-104
80 Benzo(g,h,i)peryle	496.7	434.2	87.42	33-107

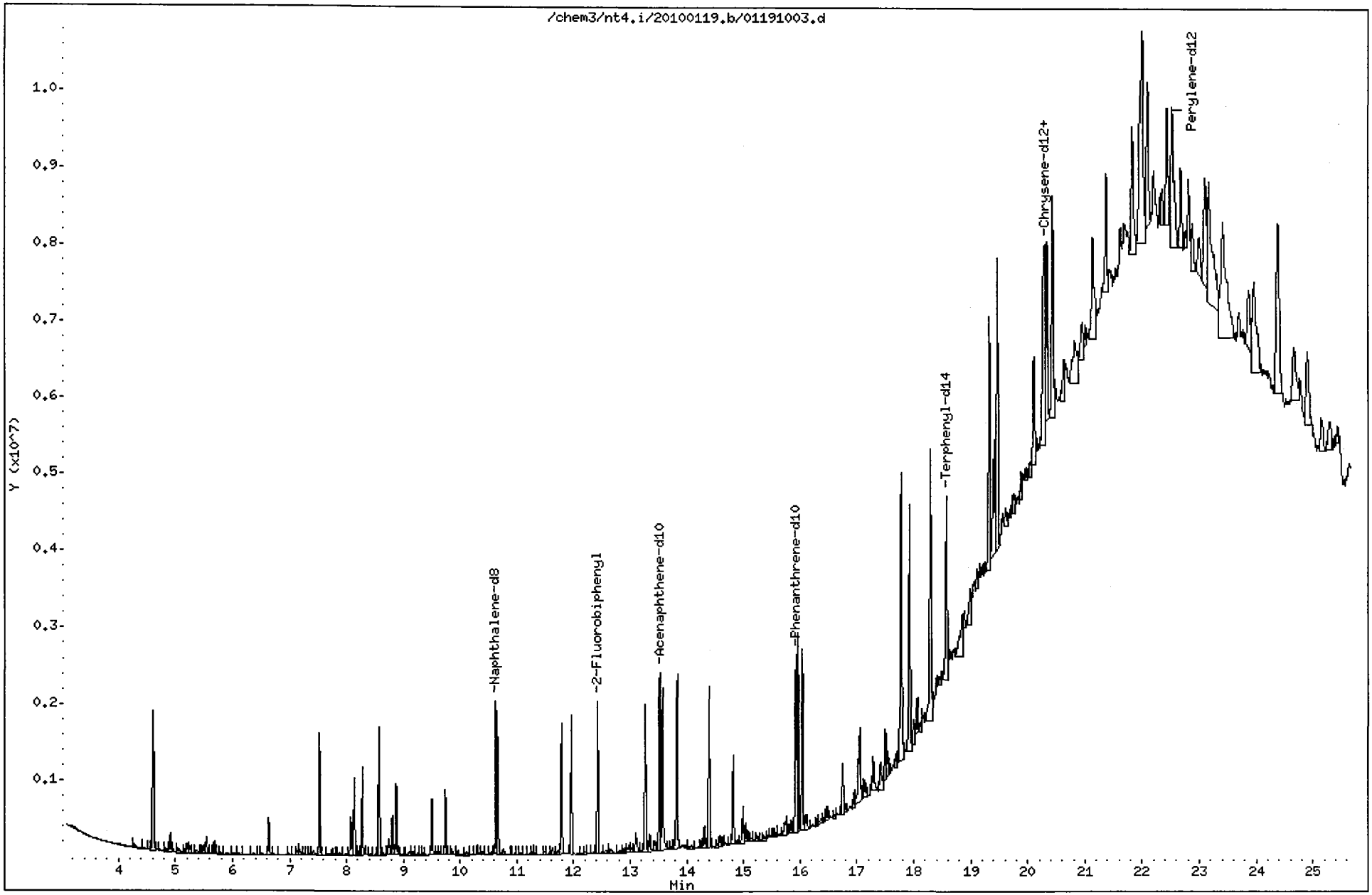
SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	496.7	389.0	78.32	34-100
$ 66 Terphenyl-d14	496.7	414.9	83.53	35-112

Data File: /chem3/nt4.i/20100119.b/01191003.d
Date : 19-JAN-2010 13:27
Client ID: CB31A011110SED MSD
Sample Info: QF10AMSD
Volume Injected (uL): 1.0
Column phase: ZB-5msi

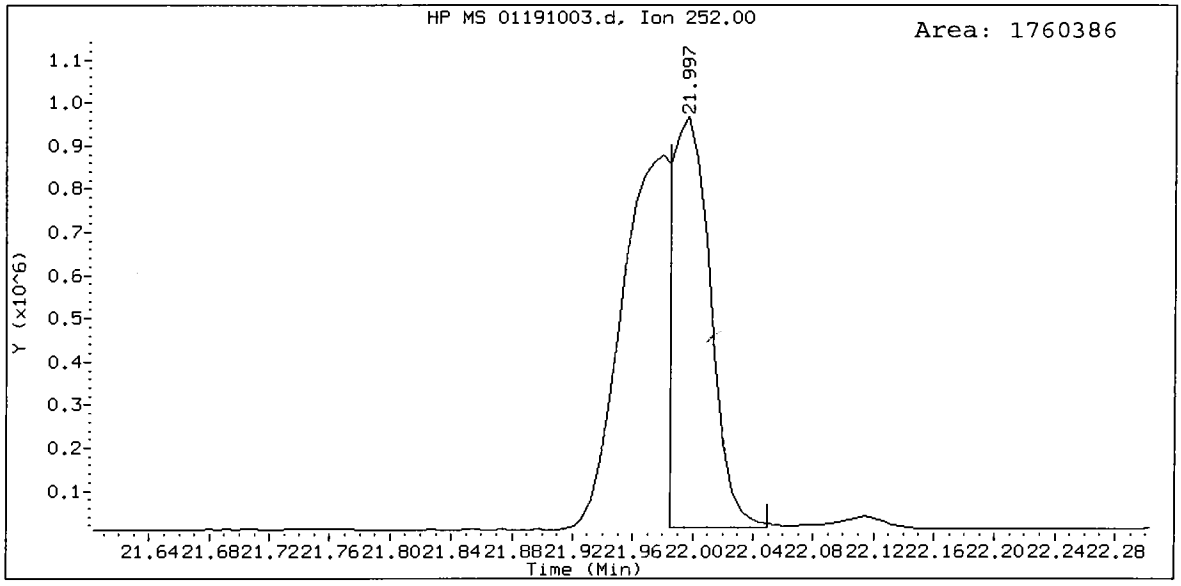
Instrument: nt4.i

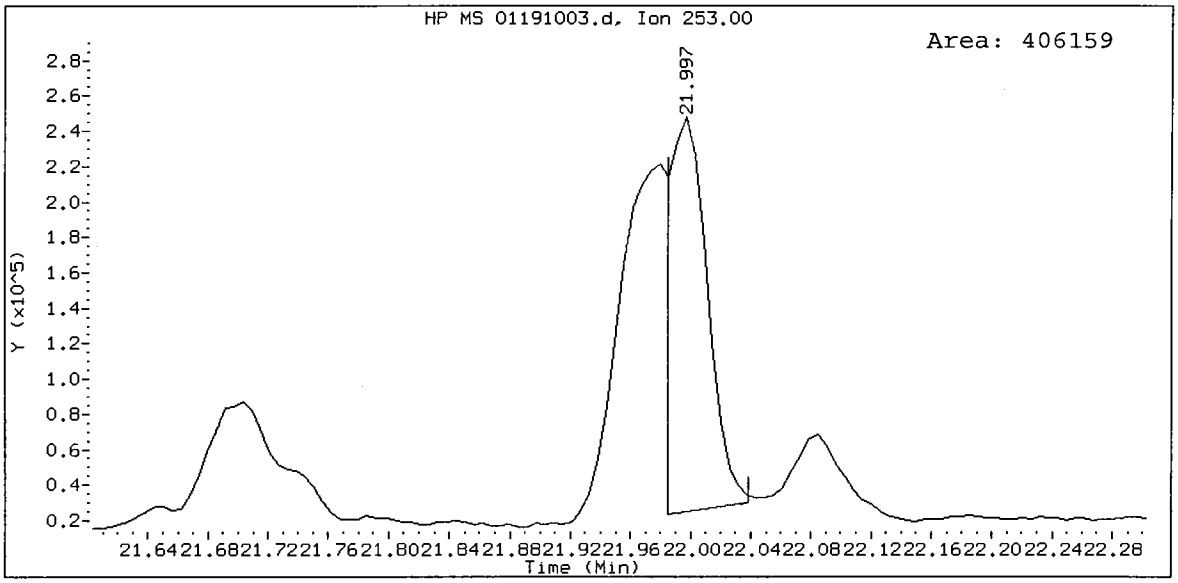
Operator: JZ
Column diameter: 0.32

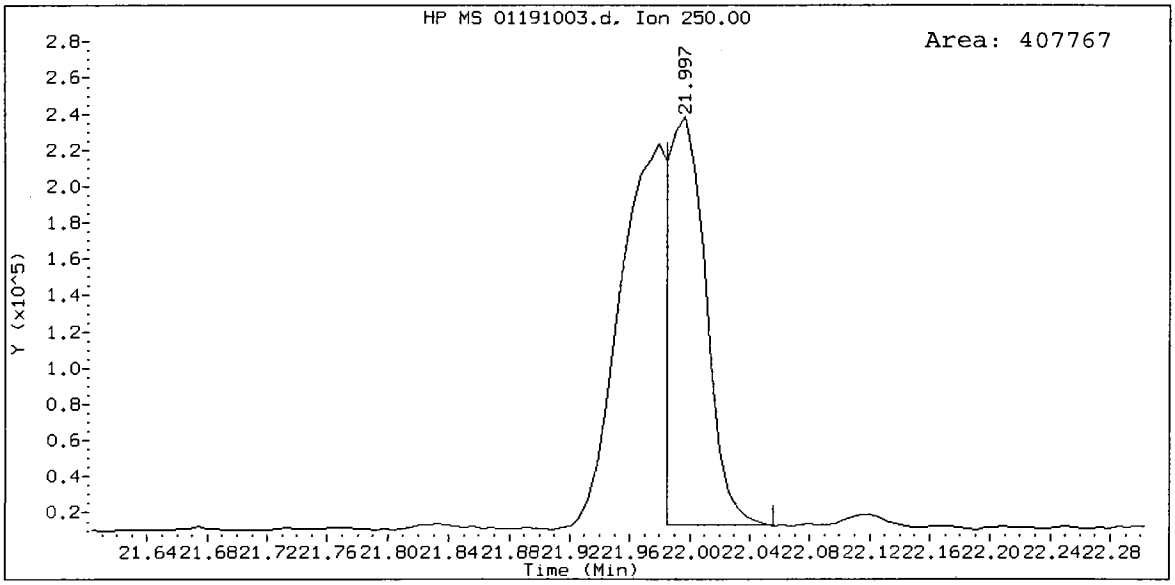
QF10:605513



QF10AMSD, /chem3/nt4.i/20100119.b/01191003.d
Benzo(k)fluoranthene Amount: 19.81







Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt4.i/20100118.b/01181008.d
Lab Smp Id: QF10LCSS1 Client Smp ID: QF10LCSS1
Inj Date : 18-JAN-2010 18:12
Operator : JZ Inst ID: nt4.i
Smp Info : QF10LCSS1,
Misc Info : 10-690
Comment : 1ul Injection
Method : /chem3/nt4.i/20100118.b/SW846100107.m
Meth Date : 18-Jan-2010 19:03 jianqing Quant Type: ISTD
Cal Date : 07-JAN-2010 13:14 Cal File: 01071002.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnamblcs.sub
Target Version: 3.50

JZ 01/18/10

Concentration Formula: Amt * DF * Vt/(Ws * (100 - M)/100) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	10.643	10.654	(1.000)	868069	20.0000	
28 Naphthalene	128	10.673	10.684	(1.003)	524356	12.7406	254.8
32 2-Methylnaphthalene	141	11.800	11.806	(1.109)	299604	12.8586	257.2
105 1-methylnaphthalene	141	11.977	11.982	(1.125)	312643	13.5790	271.6
$ 36 2-Fluorobiphenyl	172	12.435	12.446	(0.919)	438535	14.1890	283.8
40 Acenaphthylene	152	13.275	13.286	(0.981)	576046	13.4561	269.1
* 42 Acenaphthene-d10	164	13.528	13.533	(1.000)	535370	20.0000	
44 Acenaphthene	153	13.575	13.586	(1.003)	371611	13.1488	263.0
46 Dibenzofuran	168	13.839	13.850	(1.023)	556161	14.4504	289.0
49 Fluorene	166	14.403	14.414	(1.065)	469633	14.9098	298.2
* 59 Phenanthrene-d10	188	15.924	15.935	(1.000)	946659	20.0000	
60 Phenanthrene	178	15.965	15.977	(1.003)	731865	14.8673	297.3
61 Anthracene	178	16.036	16.047	(1.007)	737504	15.2121	304.2
64 Fluoranthene	202	17.922	17.933	(1.125)	903112	18.6688	373.4
65 Pyrene	202	18.286	18.291	(0.902)	936813	13.3787	267.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/kg)
$	66 Terphenyl-d14	244	18.568	18.579	(0.915)	689316	16.9045	338.1
	68 Benzo(a)anthracene	228	20.254	20.265	(0.999)	999999	15.4155	308.3
*	69 Chrysene-d12	240	20.283	20.288	(1.000)	1099560	20.0000	
	71 Chrysene	228	20.324	20.329	(1.002)	968299	15.7170	314.3
	74 Benzo(b)fluoranthene	252	21.928	21.939	(0.976)	1034990	15.2142	304.3
	75 Benzo(k)fluoranthene	252	21.957	21.968	(0.977)	1152351	17.0524	341.0
	76 Benzo(a)pyrene	252	22.386	22.397	(0.996)	862751	14.0341	280.7
*	77 Perylene-d12	264	22.474	22.479	(1.000)	1104984	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	24.272	24.295	(1.080)	1070344	15.1539	303.1
	79 Dibenzo(a,h)anthracene	278	24.289	24.306	(1.081)	877181	14.8473	296.9
	80 Benzo(g,h,i)perylene	276	24.789	24.806	(1.103)	870739	13.8048	276.1

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt4.i
Lab File ID: 01181008.d
Lab Smp Id: QF10LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

Calibration Date: 18-JAN-2010
Calibration Time: 13:38
Client Smp ID: QF10LCSS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1035557	517778	2071114	868069	-16.17
42 Acenaphthene-d10	594267	297134	1188534	535370	-9.91
59 Phenanthrene-d10	951721	475860	1903442	946659	-0.53
69 Chrysene-d12	794862	397431	1589724	1099560	38.33
77 Perylene-d12	826094	413047	1652188	1104984	33.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	10.65	10.15	11.15	10.64	-0.10
42 Acenaphthene-d10	13.53	13.03	14.03	13.53	-0.04
59 Phenanthrene-d10	15.94	15.44	16.44	15.92	-0.07
69 Chrysene-d12	20.29	19.79	20.79	20.28	-0.03
77 Perylene-d12	22.48	21.98	22.98	22.47	-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: SOLID
Lab Smp Id: QF10LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pnamblcs.sub
Method File: /chem3/nt4.i/20100118.b/SW846100107.m
Misc Info: 10-690

Client SDG: QF10
Fraction: SV
Client Smp ID: QF10LCSS1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

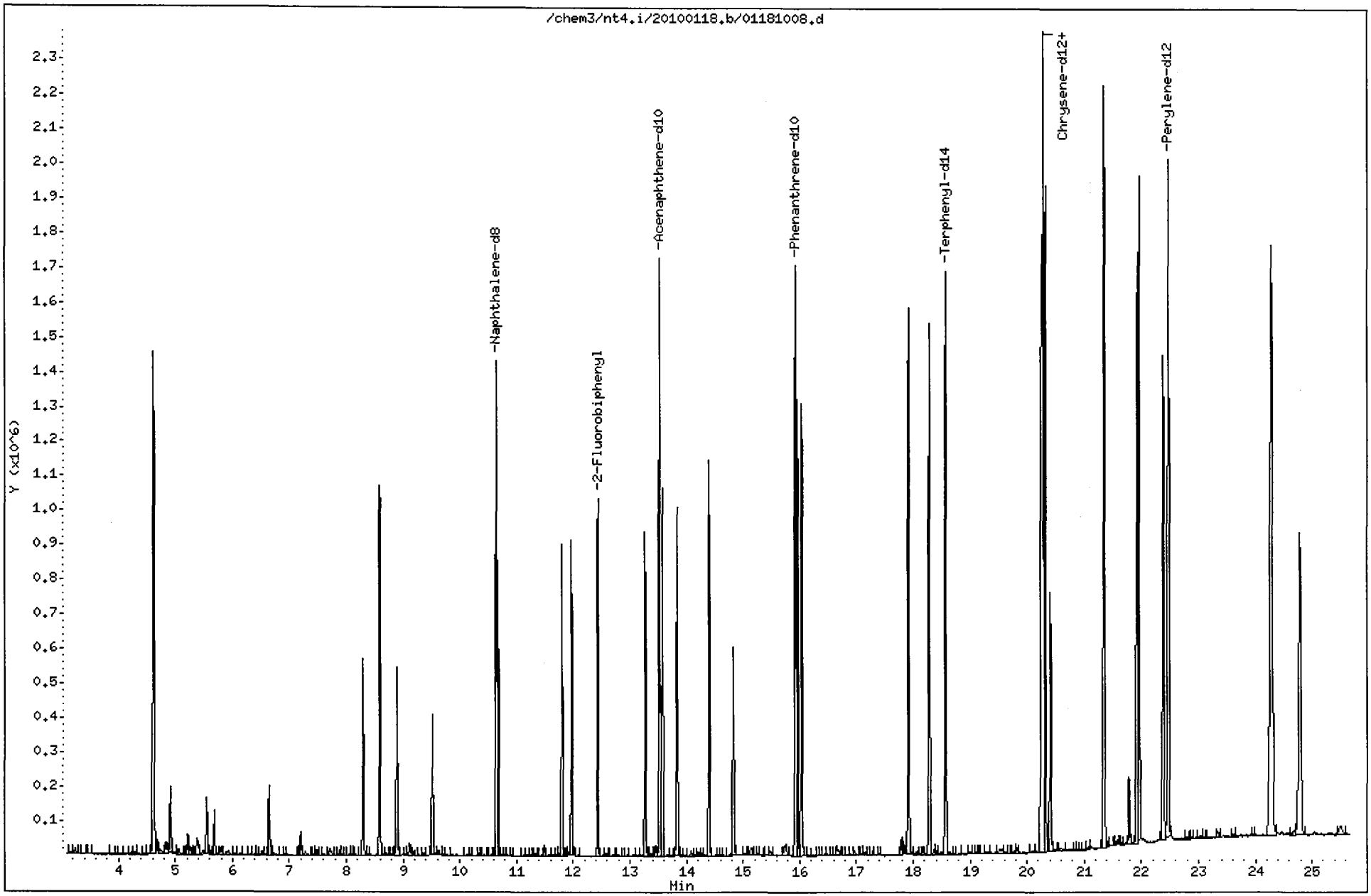
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	500.0	254.8	50.96	37-100
32 2-Methylnaphthalen	500.0	257.2	51.43	43-101
105 1-methylnaphthalen	500.0	271.6	54.32	39-100
40 Acenaphthylene	500.0	269.1	53.82	44-100
44 Acenaphthene	500.0	263.0	52.60	41-100
46 Dibenzofuran	500.0	289.0	57.80	44-100
49 Fluorene	500.0	298.2	59.64	49-100
60 Phenanthrene	500.0	297.3	59.47	48-100
61 Anthracene	500.0	304.2	60.85	50-100
64 Fluoranthene	500.0	373.4	74.68	54-100
65 Pyrene	500.0	267.6	53.51	41-105
68 Benzo(a)anthracene	500.0	308.3	61.66	49-100
71 Chrysene	500.0	314.3	62.87	50-100
74 Benzo(b)fluoranthe	500.0	304.3	60.86	53-100
75 Benzo(k)fluoranthe	500.0	341.0	68.21	54-100
76 Benzo(a)pyrene	500.0	280.7	56.14	50-100
78 Indeno(1,2,3-cd)py	500.0	303.1	60.62	33-101
79 Dibenzo(a,h)anthra	500.0	296.9	59.39	37-104
80 Benzo(g,h,i)peryle	500.0	276.1	55.22	33-107

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	500.0	283.8	56.76	40-100
$ 66 Terphenyl-d14	500.0	338.1	67.62	47-112

Data File: /chem3/nt4.i/20100118.b/01181008.d
Date : 18-JAN-2010 18:12
Client ID: QF10LCSS1
Sample Info: QF10LCSS1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt4.i

Operator: JZ
Column diameter: 0.32



QF10-SSS10

Semivolatile PAH Analysis
Extraction Bench Sheets/Run Logs

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

Miscellaneous
Water/Soil/Sed/Tissue/Other
~~Separatory Funnel (3510C)~~
Sonication (3550B)

Parameter 827ϕ PNA PSDDA
Preparation Test Misc # 1
ARI Job No(s) QF1ϕ

Batch set up by: JH

Bottle #	ARI Sample I.D. QF1ϕ	Verify Client ID	Volume Extracted	KD	Turbo Vap (1) 2 3	(REQ) Clean-Up Silica Gel (Y) / N 1:1	Clean-Up ____ Y / N	Clean-Up ____ Y / N	KD	Turbo Vap (1) 2 3	Final Effective Volume	Volume to Lab	Comments
	MB	Date 1/14/1ϕ	25.ϕϕg	↓	↓	↓				↓	ϕ.5 mL	ϕ.5 mL	1ϕg Actual; Filtered w/ 0.45
	SB	↓	25.ϕϕg										↓
	~~SB~~												
	~~Dup.~~												
13	QF1ϕA	Checked	32.41										Filtered w/ G.PX Filters
	Ams		32.6ϕ										
	Amsd		32.18										
7	B	↓	31.ϕ2	↓	↓	↓				↓	↓	↓	↓
Analyst/Date:	WC 1/14/1ϕ			TS/RR 1/15/10	WW 1/15/10 →					WW 1/15/10 →			

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
BAN Surrogate	A2	125 µL	1ϕ/ϕ8/1ϕ	WC	WW
Spike		µL			
827ϕ PNA Spike	2ϕ	125 µL	12/ϕ4/1ϕ	WC	WW
Spike		µL			

Extraction Time: 20:45 **Liq/Liq Start:** **Liq/Liq Stop:**

SPECIAL INSTRUCTIONS:

3057F

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: QF10 Client ID: Floyd-Snider

Parameter: 8270 PNA PSDDA Client Project: POS-Lora Lake Apts Interim Actio

SOP Number(s): 3745 No Anomalies:

List problems, concerns, corrective actions and any other pertinent information

A= organics

B= √ AC 1-12-10

A, Ams, Amsd, B - extracts are viscous/black at final vialing - ww 1/15/10

Analyst Initials: Date:

3F

Revision 006
1/12/07

QF10:00522

Extractions Total Solids-extts
Data By: Alex Choeng
Created: 1/12/10

Worklist: 8844
Analyst: AC
Comments:

Oven ID: ~~04~~ 06 (AC 1-12-10)

Balance ID: MXX-612

Samples In: 1-12-10 Date: 1-12-10 Time: 17:20 Temp: 100°C Analyst: AC

Samples Out: Date: 1-13-10 Time: 6:00AM Temp: 105 Analyst: RR

	ARI ID / CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	QF10A 10-690 CB31A011110SED	~~1.14~~ 1.13	7.00	5.73		NR
2.	QF10B 10-691 CB99011110SED	1.12	8.12	6.85		NR

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 01/07/10 Analysis: 8270 Analyst: [illegible]

GC Program: _____ Column No: _____ Column Type: 2B-5MS

Instrument Tune (.U or .CT.): 100104 EM Voltage: 1165

Calibration File: 0107100f Curve Date: 01/07/10

IS/SS	Ical/Ccal	LCS/ICV
1627-1	1669-2, 1670-1	1678-1, 1679-1
	1671-1 1636-2	1680-1, 1672-1
	1679-2, 1669-1	1674-4, 1647-5
	1685-4	1634-3

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20100107.b

	Time	Filename	LabID	ClientId	DF											
1	1218	01071001.d	CC0107	CC0107	1	NO ISTDS FOUND										
						end of QC										
2	1314	01071002.d	IC010107	IC010107	1	8.66	250552	10.71	894883	13.60	515321	16.00	817465	20.36	652198	22.56	687115	21.42	1104794
3	1415	01071003.d	IC050107	IC050107	1	8.66	230656	10.71	816977	13.60	463708	16.00	727498	20.36	587293	22.56	632794	21.42	1010753
4	1449	01071004.d	IC100107	IC100107	1	8.66	281417	10.71	999242	13.59	574053	16.00	907483	20.36	770789	22.56	816539	21.42	1301379
5	1522	01071005.d	IC250107	IC250107	1	8.66	286117	10.71	1035557	13.60	594267	16.01	951721	20.36	794862	22.56	826094	21.42	1280700
				CC0107															
6	1555	01071006.d	IC400107	IC400107	1	8.66	275908	10.71	1007609	13.60	574151	16.01	913448	20.37	750618	22.56	785897	21.43	1191095
7	1629	01071007.d	IC600107	IC600107	1	8.67	270135	10.72	1001488	13.61	565443	16.01	907075	20.37	786643	22.57	810286	21.43	1204515
8	1702	01071008.d	IC800107	IC800107	1	8.67	266285	10.72	994426	13.61	557203	16.01	856068	20.38	768384	22.57	796348	21.43	1169150
9	1736	01071009.d	ICV0107	ICV0107	1	8.66	246959	10.71	891863	13.60	500490	16.00	776886	20.36	648969	22.56	705785	21.42	1070944

[illegible] 01/07/10

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/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: Arnie Client ID: ✓

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-1 NT-2 NT-4 NT-6 NT-8

Curve Date: 01/07/10 Analysis Start Date: 01/07/10

DFTPP Tune Meets Criteria? YES / NO Internal Standard Meets Criteria? YES / NO

DDT Breakdown <20%? YES / NO / NA Method Blank In Control? YES / NO / NA

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: _____ **Date:** 01/07/10.

Reviewer's Signature: _____ **Date:** 1/8/2010

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 1/18/10 Analysis: 8270 Analyst: JB

GC Program: ABN Column No: 167634 Column Type: ZB-5MS

Instrument Tune (.U or .CT.): 100104 EM Voltage: 1165

Calibration File: 0118100 Curve Date: 1/07/10

IS/SS	Ical/Ccal	LCS/ICV
1627-1	1669-2, 1670-1 1671-1, 1676-2 1679-2, 1669-1 1681-4	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20100118.b

	Time	Filename	LabID	ClientId	DF										
1	1338	01181001.d	CC0118	CC0118	1	8.60	224637	10.65	827743	13.53	516264	15.94	932152	20.29	1007190	22.48	1014030	21.36	1663134
2	1449	01181002.d	QF11MBW1	QF11MBW1	1	8.60	261071	10.65	933796	13.53	564557	15.93	976217	20.28	1085011	21.35	1853109	22.47	1084664
3	1523	01181003.d	QF11LCSW1	QF11LCSW1	1	8.60	262881	10.65	963683	13.53	603759	15.93	1079868	20.29	1232499	21.36	1990280	22.48	1205027
4	1557	01181004.d	I5326	I5326	1	8.59	260030	10.64	944440	13.53	559770	15.93	931800	20.28	916753	21.35	1571752	22.47	901937
5	1630	01181005.d	QF11LCSDW1	QF11LCSDW1	1	8.59	260284	10.64	947627	13.53	595019	15.93	1070627	20.28	1233443	21.35	2009194	22.48	1212747
6	1704	01181006.d	QF11A	6057011110CO	1	8.59	253981	10.64	937589	13.53	579264	15.93	1017649	20.28	1028215	21.35	1749256	22.47	985429
7	1738	01181007.d	QF10MBS1	QF10MBS1	1	10.64	818034	13.53	493700	15.93	844560	20.28	889769	22.47	899718				
8	1812	01181008.d	QF10LCSS1	QF10LCSS1	1	10.64	868069	13.53	535370	15.92	946659	20.28	1099560	22.47	1104984				
9	1845	01181009.d	QF10A	CB31A011110S	1	10.64	961142	13.53	634456	15.93	1166372	20.30	1089592	22.50	465781				

01/19/10

Mal function of Auto-sampler, Batch run aborted after 01181009.

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 Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 01/19/10 Analysis: 8270 Analyst: [illegible]

GC Program: ABN Column No: 16762F Column Type: ZB-5MSi

Instrument Tune (.U or .CT.): 100104 EM Voltage: 1453

Calibration File: 0119001 Curve Date: 01/07/10

IS/SS	Ical/Ccal	LCS/ICV
1627-1	1669-2, 1670-1	
	1671-1, 1666-2	
	1679-2, 1669-1	
	1685-4	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt4.i/20100119.b

	Time	Filename	LabID	ClientId	DF											
1	1217	01191001.d	CC0119	CC0119	1	8.58	342716	10.63	1226801	13.52	724591	15.91	1182161	20.27	1097102	22.46	1040303	21.34	1808730
2	1254	01191002.d	QF10AMS	CB31A011110S	1	10.62	1044534	13.51	635241	15.91	1071795	20.29	1147301	22.50	1240238				
3	1327	01191003.d	QF10AMSD	CB31A011110S	1	10.63	1305784	13.52	801110	15.92	1345950	20.30	1417131	22.52	1453270				
4	1401	01191004.d	QF10B	CB99011110SE	1	10.64	1192791	13.52	719314	15.93	1220847	20.31	1331661	22.55	1307072				
5	1435	01191005.d	QF22MBS1	QF22MBS1	1	8.59	294337	10.64	1059848	13.53	630148	15.93	1049731	20.29	1079749	21.36	1775269	22.49	1185867
6	1509	01191006.d	QF22LCSS1	QF22LCSS1	1	8.59	273570	10.64	1011709	13.53	611267	15.94	989563	20.29	996801	21.36	1659021	22.49	1091917
7	1543	01191007.d	QF22SRM1	SQ-1	1	8.59	306915	10.64	1110995	13.53	665568	15.94	1148106	20.29	1012168	21.36	1772511	22.49	1097430
8	1617	01191008.d	QF22A	T30-09-04	1	8.59	274810	10.64	1006096	13.52	602237	15.93	1004970	20.29	971829	21.35	1693461	22.49	1051396
9	1651	01191009.d	QF22B	T30-09-06	1	8.59	251903	10.64	927185	13.53	567568	15.94	973593	20.31	1024739	21.37	1615768	22.51	1102386
10	1725	01191010.d	QF22C	T30-09-13	1	8.59	255979	10.64	944456	13.53	575966	15.94	993299	20.30	1035844	21.37	1656382	22.51	1123106
11	1758	01191011.d	QF22CMS	T30-09-13 MS	1	8.59	261630	10.64	954846	13.53	590411	15.94	1028029	20.31	1080317	21.37	1620948	22.51	1133690
12	1832	01191012.d	QF22CMSD	T30-09-13 MS	1	8.59	284499	10.64	1038430	13.53	641955	15.94	1114668	20.31	1163152	21.37	1741825	22.52	1217164
13	1906	01191013.d	QF22D	T30-09-24	1	8.59	266761	10.64	958525	13.53	579505	15.94	987588	20.30	994969	21.36	1688103	22.50	1087408
14	1940	01191014.d	QF22E	T30-09-27	1	8.59	229969	10.64	843797	13.53	507991	15.93	873043	20.30	895569	21.36	1514009	22.51	983169
15	2014	01191015.d	QF22F	T30-09-28	1	8.59	276704	10.64	992468	13.53	602428	15.94	1087176	20.31	1156919	21.38	1713393	22.53	1220579
16	2048	01191016.d	QF22G	T30-09-31	1	8.59	230060	10.64	825942	13.53	498220	15.93	829935	20.29	823141	21.35	1447242	22.49	909425

01/20/10

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/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: QF10 Client ID: Floyd - Snider

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-1 NT-2 NT-4 NT-6 NT-8

Curve Date: 01/07/10 Analysis Start Date: 01/18, 19/10

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):

1/18: Sample A + MB/LCS

1/19: Sample B + MS/MSD

Forms included

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 01/20/10

Reviewer's Signature: _____ **Date:** 1/20/10

PCP/Chlorophenols ANALYSIS
QC Summary Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8041 CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	TBP	TOT OUT
MB-011410	64.0%	0
LCS-011410	57.6%	0
CB31A011110SED	55.2%	0
CB31A011110SED DL	72.8%	0
CB31A011110SED MS	79.8%	0
CB31A011110SED MSD	117%	0
CB99011110SED	73.6%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(50-115)	(10-146)

Prep Method: SW3550B
Log Number Range: 10-690 to 10-691

FORM-II SW8041

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A011110SED
MS/MSD

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/14/10

Sample Amount MS: 7.91 g-dry-wt
MSD: 7.90 g-dry-wt

Date Analyzed MS: 01/20/10 05:25
MSD: 01/20/10 05:45

Final Extract Volume MS: 25 mL
MSD: 25 mL

Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR

Dilution Factor MS: 10.0
MSD: 10.0

Percent Moisture: 21.6%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Pentachlorophenol	25.0	169	79.0	182%	133	79.1	137%	23.8%

Results reported in µg/kg
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: LCS-011410
LAB CONTROL

Lab Sample ID: LCS-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 04:46
Instrument/Analyst: ECD1/AAR

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Pentachlorophenol	42.7	62.5	68.3%

Chlorophenols Surrogate Recovery

2,4,6-Tribromophenol	57.6%

Results reported in µg/kg

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC — Client: FLOYD-SNIDER

ARI Job No.: QF10 — Project: POS-LORA LAKE APTS

Lab Sample ID: QF10MBS1 — Lab File ID: 0119A028

Matrix (soil/water) SOLID — Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y — Date Extracted: 01/14/10

Date Analyzed (1): 01/20/10 — Date Analyzed (2): 01/20/10

Time Analyzed (1): 0426 — Time Analyzed (2): 0426

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	QF10LCSS1	QF10LCSS1	01/20/10	01/20/10
02	CB31A011110S	QF10A	01/20/10	01/20/10
03	CB31A011110S	QF10AMS	01/20/10	01/20/10
04	CB31A011110S	QF10AMSD	01/20/10	01/20/10
05	CB99011110SE	QF10B	01/20/10	01/20/10
06	CB31A011110S	QF10A	01/20/10	01/20/10

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 01/19/10 01/19/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.00

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	01/19/10	1659	10.00
02		PCPA	01/19/10	1719	10.00
03		PCPB	01/19/10	1739	10.00
04		PCPC	01/19/10	1759	10.00
05		PCPE	01/19/10	1819	10.00
06		PCPF	01/19/10	1839	10.00
07	ZZZZZ	ZZZZZ	01/19/10	1859	10.00
08	ZZZZZ	ZZZZZ	01/20/10	0346	10.00
09		PCP CCAL	01/20/10	0406	10.00
10	QF10MBS1	QF10MBS1	01/20/10	0426	10.01
11	QF10LCSS1	QF10LCSS1	01/20/10	0446	10.01
12	CB31A011110S	QF10A	01/20/10	0505	10.01
13	CB31A011110S	QF10AMS	01/20/10	0525	10.01
14	CB31A011110S	QF10AMSD	01/20/10	0545	10.01
15	CB99011110SE	QF10B	01/20/10	0605	10.01
16	ZZZZZ	ZZZZZ	01/20/10	0625	10.01
17		PCP CCAL	01/20/10	0645	10.01
18	ZZZZZ	ZZZZZ	01/20/10	1653	10.01
19	ZZZZZ	ZZZZZ	01/20/10	1713	10.01
20	ZZZZZ	ZZZZZ	01/20/10	1733	10.01
21		PCP CCAL	01/20/10	1753	10.00
22	CB31A011110S	QF10A	01/20/10	1813	10.00
23	ZZZZZ	ZZZZZ	01/20/10	1833	10.00
24		PCP CCAL	01/20/10	1853	10.00

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 01/19/10 01/19/10

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 10.64

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCPD	01/19/10	1659	10.63
02		PCPA	01/19/10	1719	10.64
03		PCPB	01/19/10	1739	10.64
04		PCPC	01/19/10	1759	10.64
05		PCPE	01/19/10	1819	10.64
06		PCPF	01/19/10	1839	10.64
07	ZZZZZ	ZZZZZ	01/19/10	1859	10.64
08	ZZZZZ	ZZZZZ	01/20/10	0346	10.64
09		PCP CCAL	01/20/10	0406	10.64
10	QF10MBS1	QF10MBS1	01/20/10	0426	10.65
11	QF10LCSS1	QF10LCSS1	01/20/10	0446	10.65
12	CB31A011110S	QF10A	01/20/10	0505	10.65
13	CB31A011110S	QF10AMS	01/20/10	0525	10.65
14	CB31A011110S	QF10AMSD	01/20/10	0545	10.65
15	CB99011110SE	QF10B	01/20/10	0605	10.65
16	ZZZZZ	ZZZZZ	01/20/10	0625	10.65
17		PCP CCAL	01/20/10	0645	10.65
18	ZZZZZ	ZZZZZ	01/20/10	1653	10.65
19	ZZZZZ	ZZZZZ	01/20/10	1713	10.65
20	ZZZZZ	ZZZZZ	01/20/10	1733	10.64
21		PCP CCAL	01/20/10	1753	10.64
22	CB31A011110S	QF10A	01/20/10	1813	10.64
23	ZZZZZ	ZZZZZ	01/20/10	1833	10.64
24		PCP CCAL	01/20/10	1853	10.64

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

PCP/Chlorophenols ANALYSIS
Sample Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
SAMPLE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 18:13
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.86 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	8.0	25

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	55.2%

FORM I

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

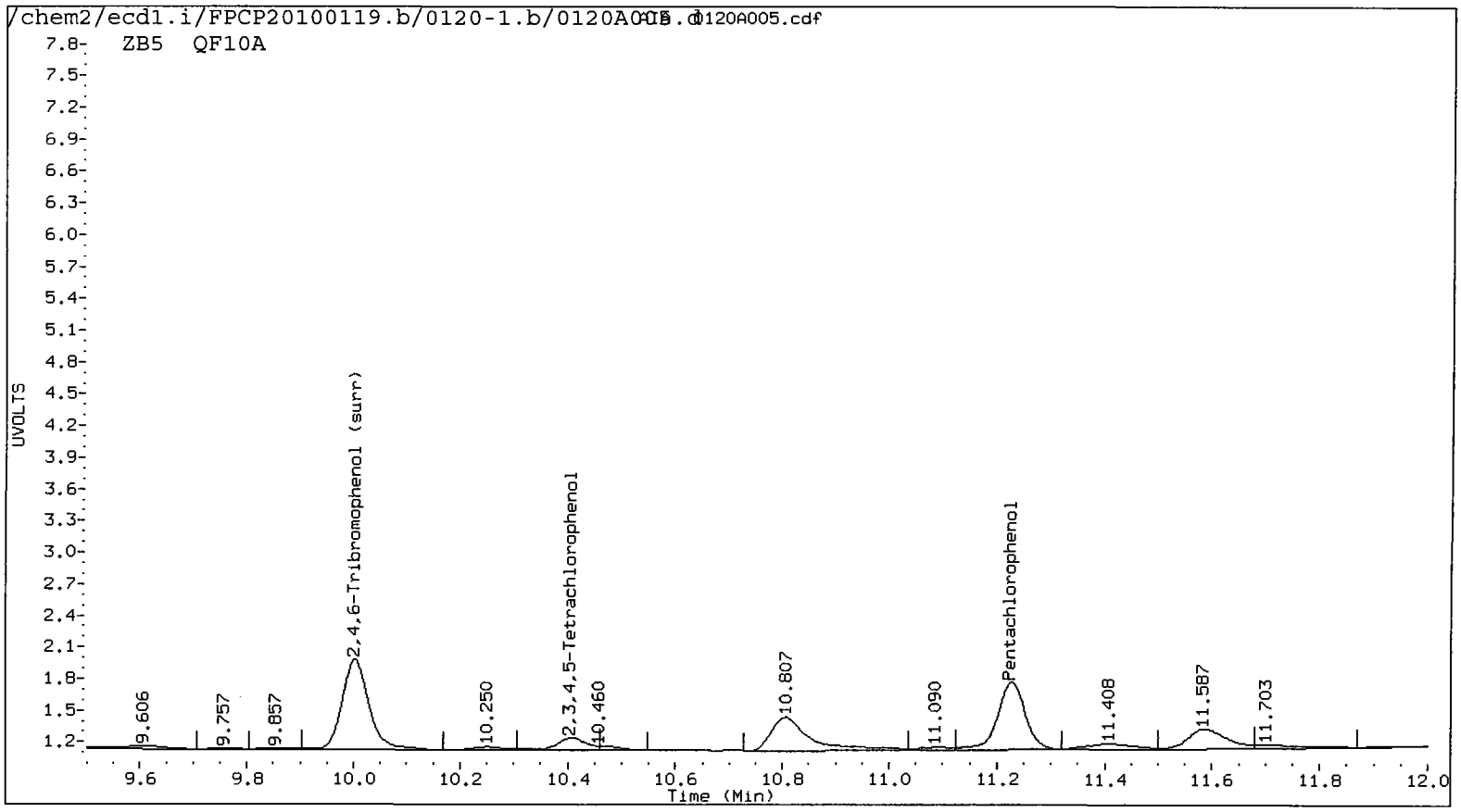
AR 1/21/2010

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0120-1.b/0120A005.d ARI ID: QF10A
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0120-2.b/0120A005.d Client ID: CB31A011110SED
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 18:13
Compound Sublist: all Report Date: 01/21/2010 12:13
Instrument: ecd1.i Matrix: SOIL
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
11.227	0.002	114809	11.661	0.004	126596	7.8751	7.7497	1.6	Pentachlorophenol
7.288	0.025	26953	7.366	0.041	35724	2.9339	3.3625	13.6	2,4,6-Trichlorophenol
----			7.824	-0.030	2799	0.0000	0.2569	---	2,3,6-Trichlorophenol
----			8.523	-0.062	4917	0.0000	0.9315	---	2,4,5-Trichlorophenol
8.753	-0.012	5403	----			1.0244	0.0000	---	2,3,4-Trichlorophenol
9.043	0.043	61898	9.263	0.002	11240	4.6555	0.7395	145.2*	2,3,5,6-Tetrachlorophenol
10.407	0.005	22343	11.118	0.007	40280	2.5500	3.7958	39.3	2,3,4,5-Tetrachlorophenol
----			7.133	-0.016	1866	0.0000	4.2039	---	2,4-Dichlorophenol
10.003	0.007	151487	10.641	0.006	190085	13.8	13.6	1.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	55.0	54.2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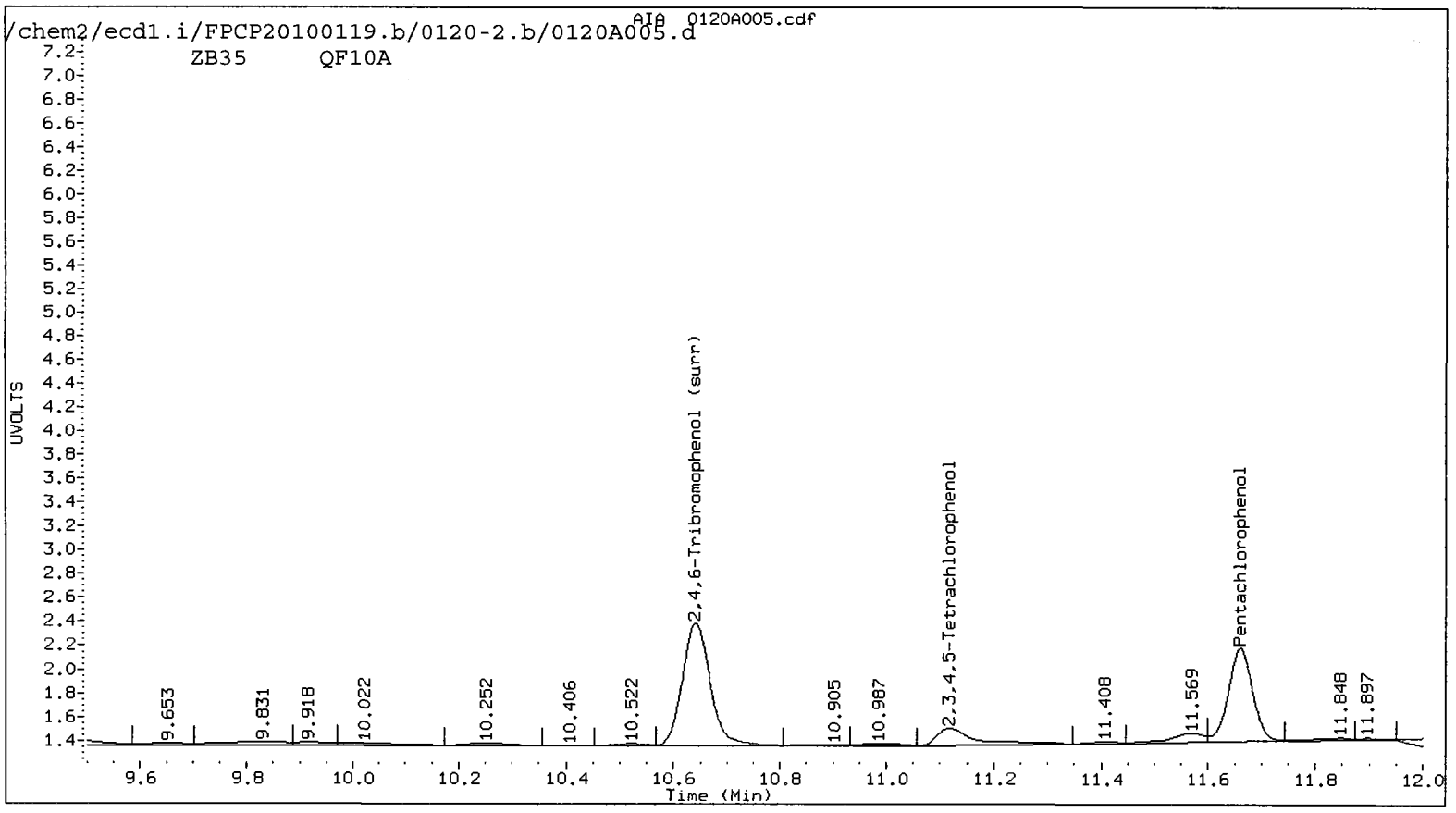
ZB5 QF10A
UVOLTS
9.606
9.757
9.857
2,4,6-Tribromophenol (surr)
10.250
2,3,4,5-Tetrachlorophenol
10.460
10.807
11.090
Pentachlorophenol
11.408
11.587
11.703
Time (Min)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ZB35 QF10A
UVOLTS
9.653
9.831
9.918
10.022
10.252
10.406
10.522
2,4,6-Tribromophenol (surr)
10.905
10.987
2,3,4,5-Tetrachlorophenol
11.408
11.569
Pentachlorophenol
11.848
11.897
Time (Min)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
DILUTION

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.86 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	80	< 80 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	72.8%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 1/20/2010

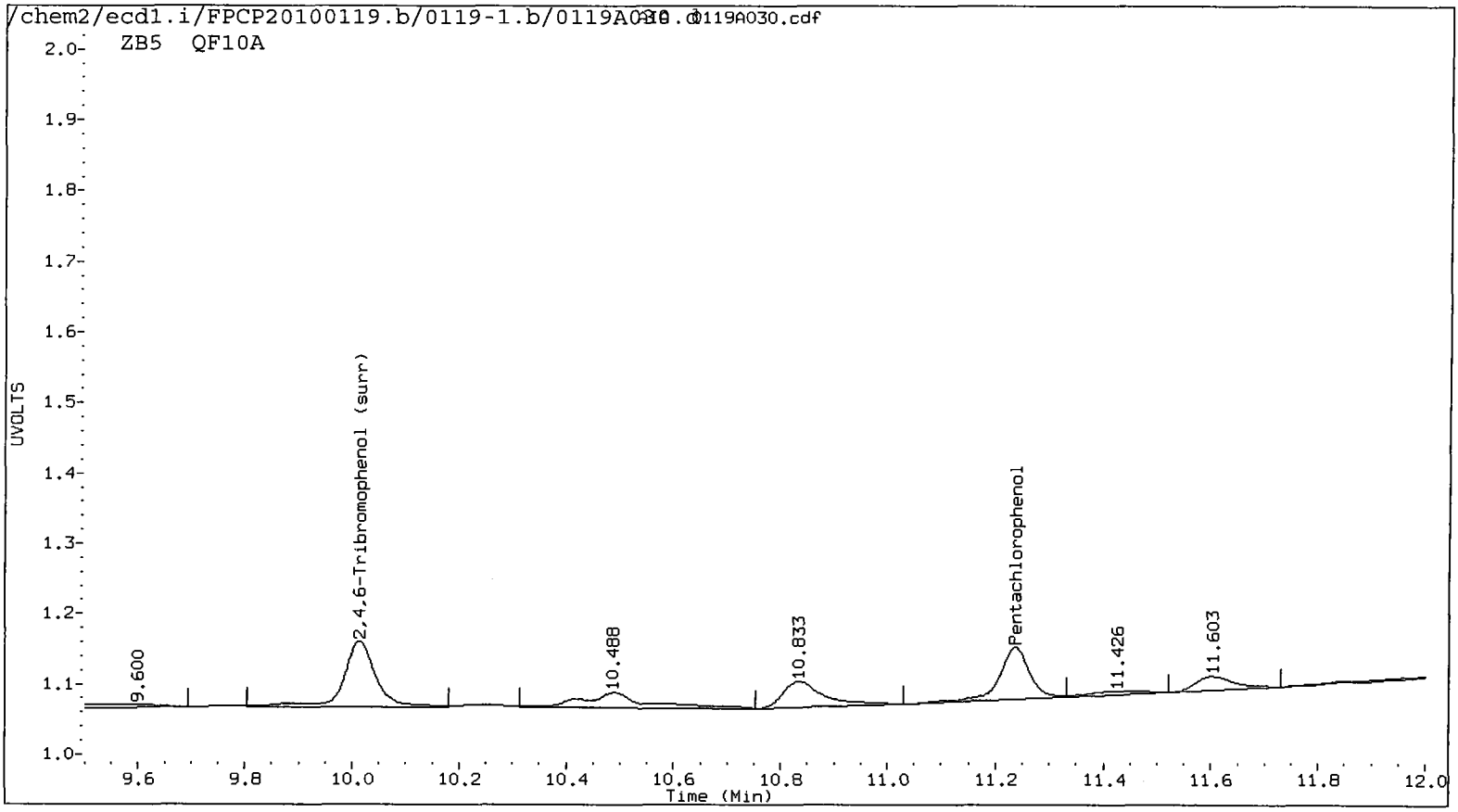
Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A030.d ARI ID: QF10A
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A030.d Client ID: CB31A011110SED
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 05:05
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 10.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.236	0.011	14077	11.669	0.012	18425	0.9656	1.1279	15.5	Pentachlorophenol
7.215	-0.049	44349	7.367	0.042	3276	4.8275	0.3083	176.0*	2,4,6-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,6-Trichlorophenol
----			8.545	-0.040	959	0.0000	0.1817	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
9.067	0.066	24844	9.275	0.014	678	1.8686	0.0446	190.7*	2,3,5,6-Tetrachlorophenol
----			11.130	0.019	2463	0.0000	0.2321	---	2,3,4,5-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,4-Dichlorophenol
10.013	0.017	20029	10.650	0.014	19805	1.8	1.4	25.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	72.8	56.5

QF10:0854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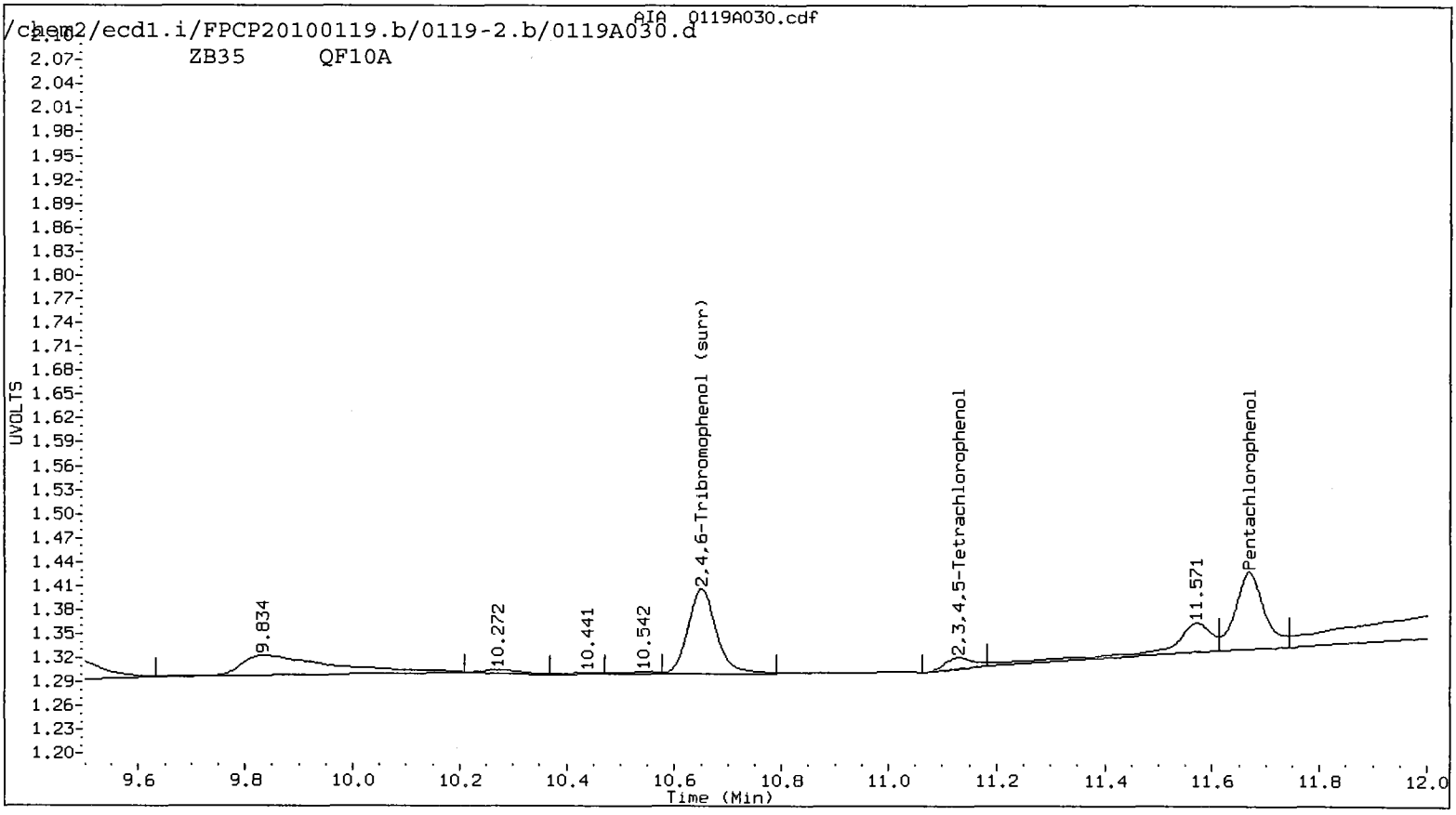
ZB5 QF10A
UVOLTS
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
9.600
2,4,6-Tribromophenol (surr)
10.488
10.833
Pentachlorophenol
11.426
11.603
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0
11.2
11.4
11.6
11.8
12.0
Time (Min)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ZB35 QF10A
UVOLTS
9.834
10.272
10.441
10.542
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
11.571
Pentachlorophenol
9.6
9.8
10.0
10.2
10.4
10.6
10.8
11.0
11.2
11.4
11.6
11.8
12.0
Time (Min)

QF10:00542

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB99011110SED
SAMPLE

Lab Sample ID: QF10B
LIMS ID: 10-691
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 06:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 8.26 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 18.1%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	76	84

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	73.6%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

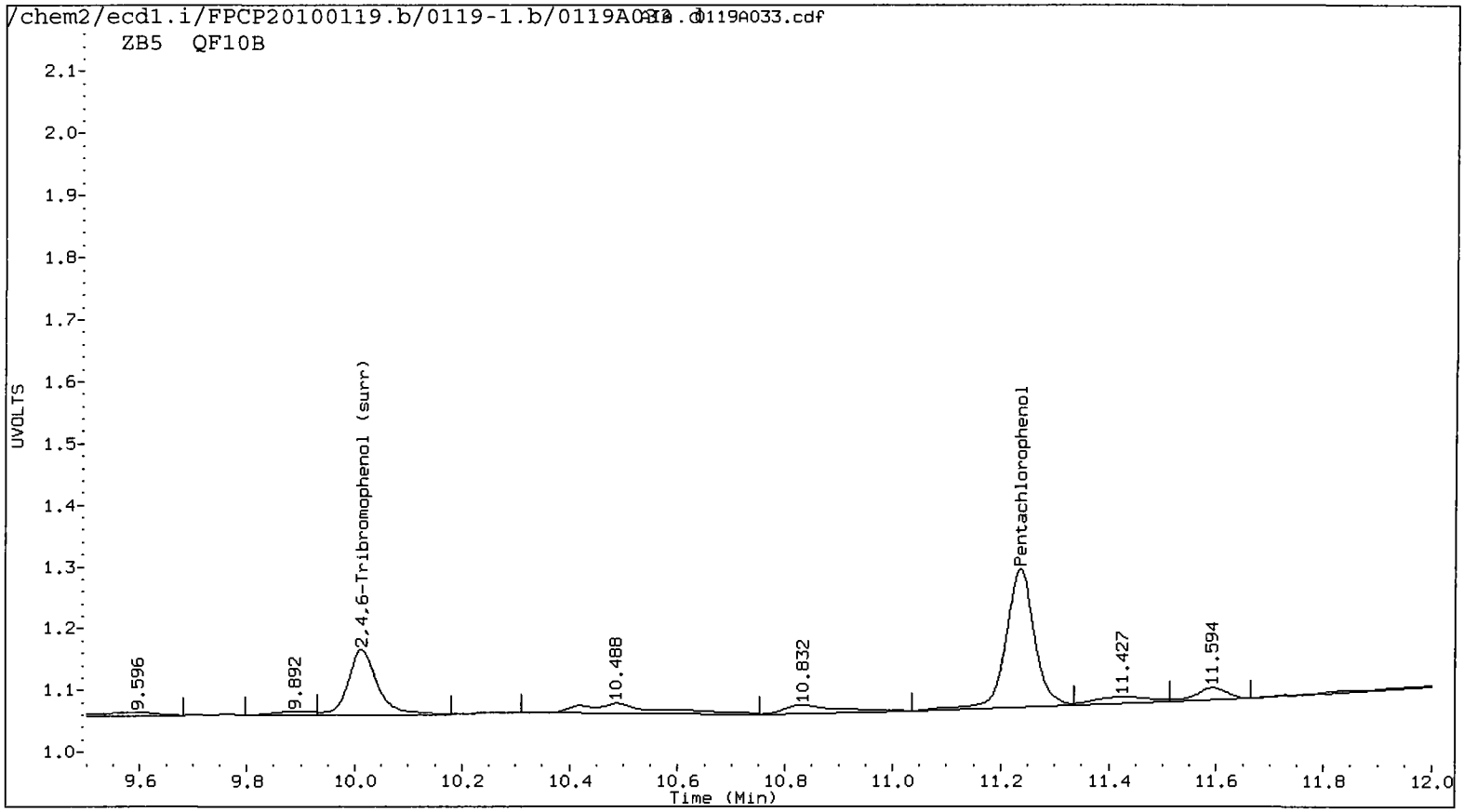
AR 1/20/2010

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A033.d ARI ID: QF10B
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A033.d Client ID: CB99011110SED
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 06:05
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 10.000

ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.236	0.011	40710	11.668	0.012	42886	2.7925	2.6253	6.2	Pentachlorophenol
7.270	0.007	8715	7.367	0.042	6805	0.9487	0.6405	38.8	2,4,6-Trichlorophenol
7.630	0.013	1767	----			0.1964	0.0000	---	2,3,6-Trichlorophenol
----			8.539	-0.046	836	0.0000	0.1584	---	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
9.053	0.053	18640	9.290	0.029	2022	1.4020	0.1330	165.3*	2,3,5,6-Tetrachlorophenol
----			11.129	0.018	2892	0.0000	0.2725	---	2,3,4,5-Tetrachlorophenol
6.863	-0.020	409	----			1.0563	0.0000	---	2,4-Dichlorophenol
10.013	0.017	20273	10.650	0.014	19774	1.8	1.4	26.5	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	73.7	56.4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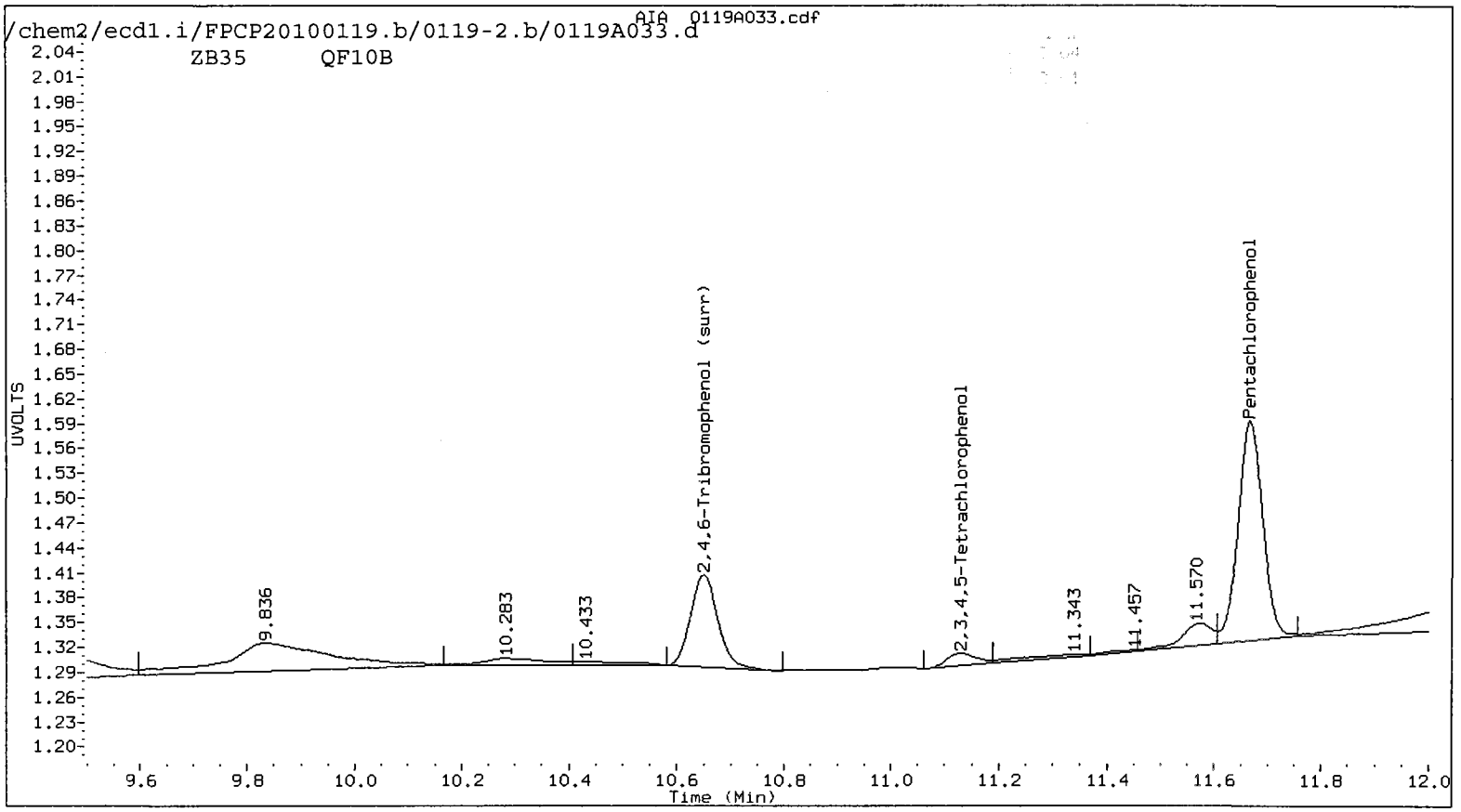
AIA 0119A033.cdf
ZB5 QF10B
UVOLTS
Time (Min)
9.596
9.892
2,4,6-Tribromophenol (surr)
10.488
10.832
Pentachlorophenol
11.427
11.594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AIA 0119A033.cdf
ZB35 QF10B
UVOLTS
Time (Min)
9.836
10.283
10.433
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
11.343
11.457
11.570
Pentachlorophenol

QF10:085445

PCP/Chlorophenols ANALYSIS
Standard Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 01/19/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol	11.23	11.23	11.23	11.22	11.23	11.23	11.16	11.30
2,4,6-Trichloropheno	7.26	7.26	7.26	7.26	7.26	7.26	7.19	7.33
2,3,6-Trichloropheno	7.62	7.62	7.62	7.62	7.62	7.62	7.55	7.69
2,4,5-Trichloropheno	8.22	8.22	8.22	8.22	8.22	8.22	8.15	8.29
2,3,4-Trichloropheno	8.78	8.78	8.77	8.77	8.77	8.77	8.70	8.84
2,3,5,6-Tetrachlorop	9.01	9.01	9.00	9.00	9.00	9.00	8.93	9.07
2,3,4,5-Tetrachlorop	10.41	10.41	10.41	10.40	10.40	10.41	10.33	10.47
2,4-Dichlorophenol	6.89	6.89	6.89	6.89	6.89	6.89	6.81	6.95
2,4,6-Tribromophenol	10.00	10.00	10.00	10.00	10.00	10.00	9.93	10.07

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 01/19/10

	RT OF STANDARDS					MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT	FROM	TO
Pentachlorophenol	11.66	11.66	11.66	11.66	11.66	11.66	11.59	11.73
2,4,6-Trichloropheno	7.32	7.33	7.33	7.32	7.33	7.32	7.25	7.39
2,3,6-Trichloropheno	7.86	7.86	7.86	7.85	7.86	7.86	7.78	7.92
2,4,5-Trichloropheno	8.59	8.59	8.59	8.59	8.59	8.59	8.51	8.65
2,3,4-Trichloropheno	9.36	9.36	9.36	9.35	9.35	9.36	9.28	9.42
2,3,5,6-Tetrachlorop	9.26	9.26	9.26	9.26	9.26	9.26	9.19	9.33
2,3,4,5-Tetrachlorop	11.11	11.11	11.12	11.11	11.11	11.11	11.04	11.18
2,4-Dichlorophenol	7.15	7.15	7.15	7.15	7.15	7.15	7.08	7.22
2,4,6-Tribromophenol	10.64	10.64	10.64	10.63	10.64	10.64	10.57	10.71

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 01/19/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	15929	15648	15147	14388	13309	13051	8.3	A
2,4,6-Trichlorophenol	11986	10053	8913	8388	7879	7902	17.3	A
2,3,6-Trichlorophenol	12040	9945	9042	8017	7475	7451	19.8	A
2,4,5-Trichlorophenol	3994	4280	4676	4358	3897	3755	8.2	A
2,3,4-Trichlorophenol	5849	5602	5578	4933	4866	4818	8.6	A
2,3,5,6-Tetrachloroph	14562	15076	14113	12623	11815	11585	11.2	A
2,3,4,5-Tetrachloroph	9162	9558	9313	8164	8282	8094	7.4	A
2,4-Dichlorophenol	706	547	473	412	398	380	0.9961	L
2,4,6-Tribromophenol	10889	11287	11481	10474	10937	10992	3.2	A
						AVE RSD	12.2	

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/FPCP20100119.b/ical-1.b/0119A006.d
LVL 2: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A007.d
LVL 3: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A008.d
LVL 4: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A005.d
LVL 5: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A009.d
LVL 6: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A010.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 01/19/10

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	16893	17131	16871	15371	15781	15967	4.4	A
2,4,6-Trichlorophenol	12893	11118	10549	10216	9542	9428	12.0	A
2,3,6-Trichlorophenol	13375	11572	10710	10590	9600	9515	13.2	A
2,4,5-Trichlorophenol	6705	5548	5501	4795	4610	4515	15.7	A
2,3,4-Trichlorophenol	7126	7101	6919	6224	6150	6048	7.7	A
2,3,5,6-Tetrachloroph	16192	15848	15702	14547	14472	14445	5.2	A
2,3,4,5-Tetrachloroph	11367	11114	11133	9877	10071	10108	6.2	A
2,4-Dichlorophenol	411	465	457	489	432	409	7.2	A
2,4,6-Tribromophenol	14028	13970	14139	13610	13981	14414	1.9	A
						AVE RSD	8.2	

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/FPCP20100119.b/ical-2.b/0119A006.d
LVL 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A007.d
LVL 3: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A008.d
LVL 4: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A005.d
LVL 5: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A009.d
LVL 6: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A010.d

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2010 16:59
End Cal Date : 19-JAN-2010 18:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100119.b/FPCPB.m
Cal Date : 20-Jan-2010 11:09 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A006.d
Level 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A007.d
Level 3: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A008.d
Level 4: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A005.d
Level 5: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A009.d
Level 6: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A010.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	411	465	457	489	432	409	444	7.222
2	2,4,6-Trichlorophenol	12893	11118	10549	10216	9543	9428	10624	12.027
3	2,3,6-Trichlorophenol	13375	11572	10710	10590	9600	9515	10894	13.187
4	2,4,5-Trichlorophenol	6705	5548	5501	4795	4610	4515	5279	15.669
5	2,3,5,6-Tetrachlorophenol	16192	15848	15702	14547	14472	14445	15201	5.248
6	2,3,4-Trichlorophenol	7126	7101	6919	6224	6150	6048	6595	7.667
8	2,3,4,5-Tetrachlorophenol	11367	11115	11133	9877	10071	10108	10612	6.223
9	Pentachlorophenol	16893	17131	16871	15371	15781	15967	16336	4.419
$ 7	2,4,6-Tribromophenol (surr)	14028	13971	14139	13610	13981	14414	14024	1.863

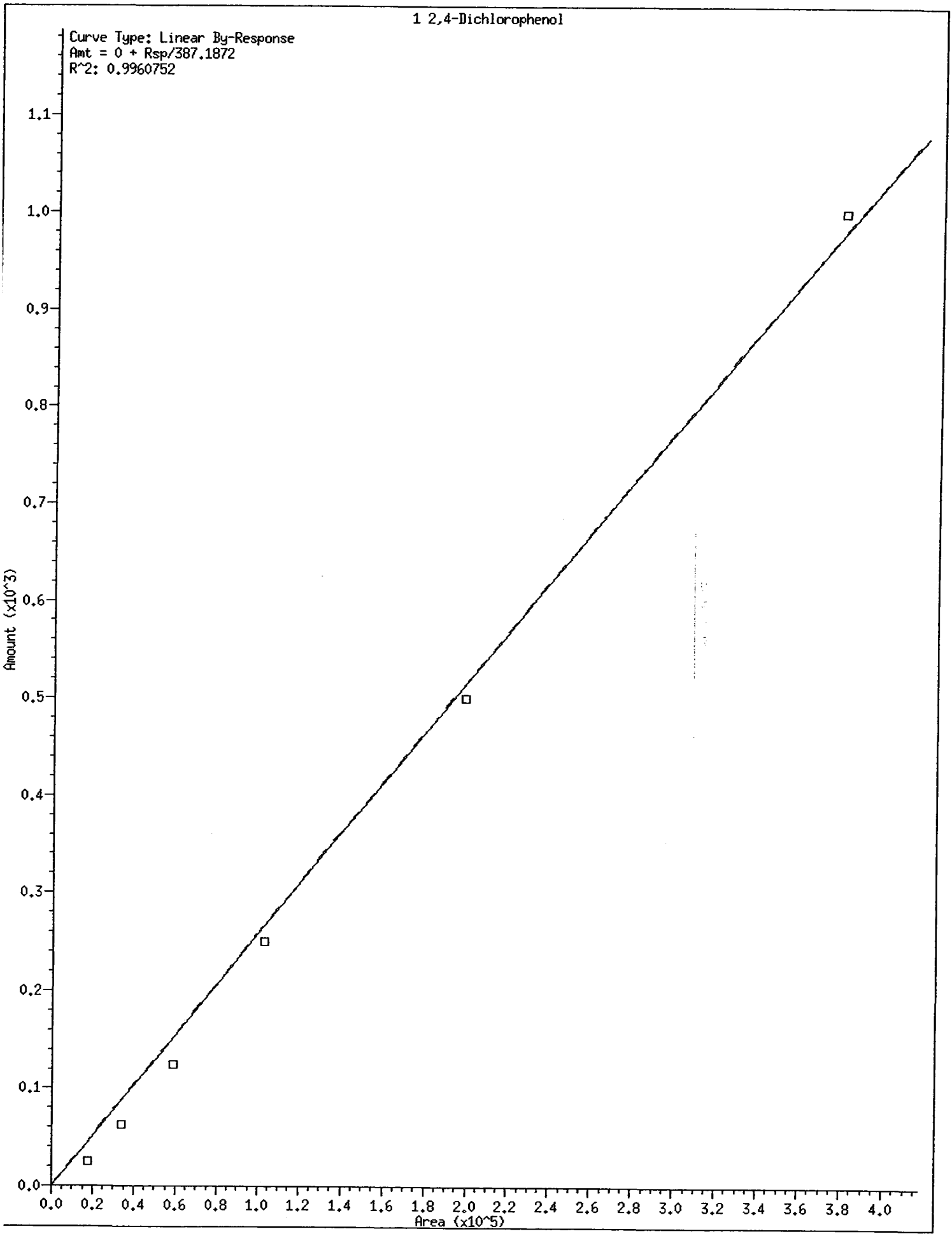
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2010 16:59
End Cal Date : 19-JAN-2010 18:39
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100119.b/FPCP.m
Cal Date : 20-Jan-2010 12:00 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A006.d
Level 2: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A007.d
Level 3: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A008.d
Level 4: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A005.d
Level 5: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A009.d
Level 6: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A010.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	706	547	473	412	398	380	486	25.494	<-
2	2,4,6-Trichlorophenol	11986	10053	8913	8388	7879	7902	9187	17.322	
3	2,3,6-Trichlorophenol	12040	9945	9042	8017	7475	7451	8995	19.780	
4	2,4,5-Trichlorophenol	3994	4280	4676	4359	3897	3755	4160	8.191	
5	2,3,4-Trichlorophenol	5849	5602	5579	4933	4866	4818	5274	8.569	
6	2,3,5,6-Tetrachlorophenol	14562	15076	14113	12623	11815	11585	13296	11.163	
8	2,3,4,5-Tetrachlorophenol	9162	9558	9313	8164	8282	8095	8762	7.450	
9	Pentachlorophenol	15929	15648	15147	14388	13309	13051	14579	8.273	
$ 7	2,4,6-Tribromophenol (surr)	10889	11287	11481	10474	10937	10992	11010	3.164	


1 2,4-Dichlorophenol
Curve Type: Linear By-Response
Amt = 0 + Rsp/387.1872
R^2: 0.9960752
Amount (x10^3)
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
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

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-JAN-2010 16:59
End Cal Date : 19-JAN-2010 18:39
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/FPCP20100119.b/FPCP.m
Cal Date : 20-Jan-2010 12:00 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A006.d
Level 2: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A007.d
Level 3: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A008.d
Level 4: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A005.d
Level 5: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A009.d
Level 6: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A010.d

	Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
1	2,4-Dichlorophenol	17654	34185	59133	103087	199161	379616	LINR	0.000e+00	387		0.99608
2	2,4,6-Trichlorophenol	11986	10053	8913	8388	7879	7902	AVRG		9187		17.32208
3	2,3,6-Trichlorophenol	12040	9945	9042	8017	7475	7451	AVRG		8995		19.77968
4	2,4,5-Trichlorophenol	3994	4280	4676	4359	3897	3755	AVRG		4160		8.19071
5	2,3,4-Trichlorophenol	5849	5602	5579	4933	4866	4818	AVRG		5274		8.56909
6	2,3,5,6-Tetrachlorophenol	14562	15076	14113	12623	11815	11585	AVRG		13296		11.16279
8	2,3,4,5-Tetrachlorophenol	9162	9558	9313	8164	8282	8095	AVRG		8762		7.45021
9	Pentachlorophenol	15929	15648	15147	14388	13309	13051	AVRG		14579		8.27339
$ 7	2,4,6-Tribromophenol (surr)	10889	11287	11481	10474	10937	10992	AVRG		11010		3.16388

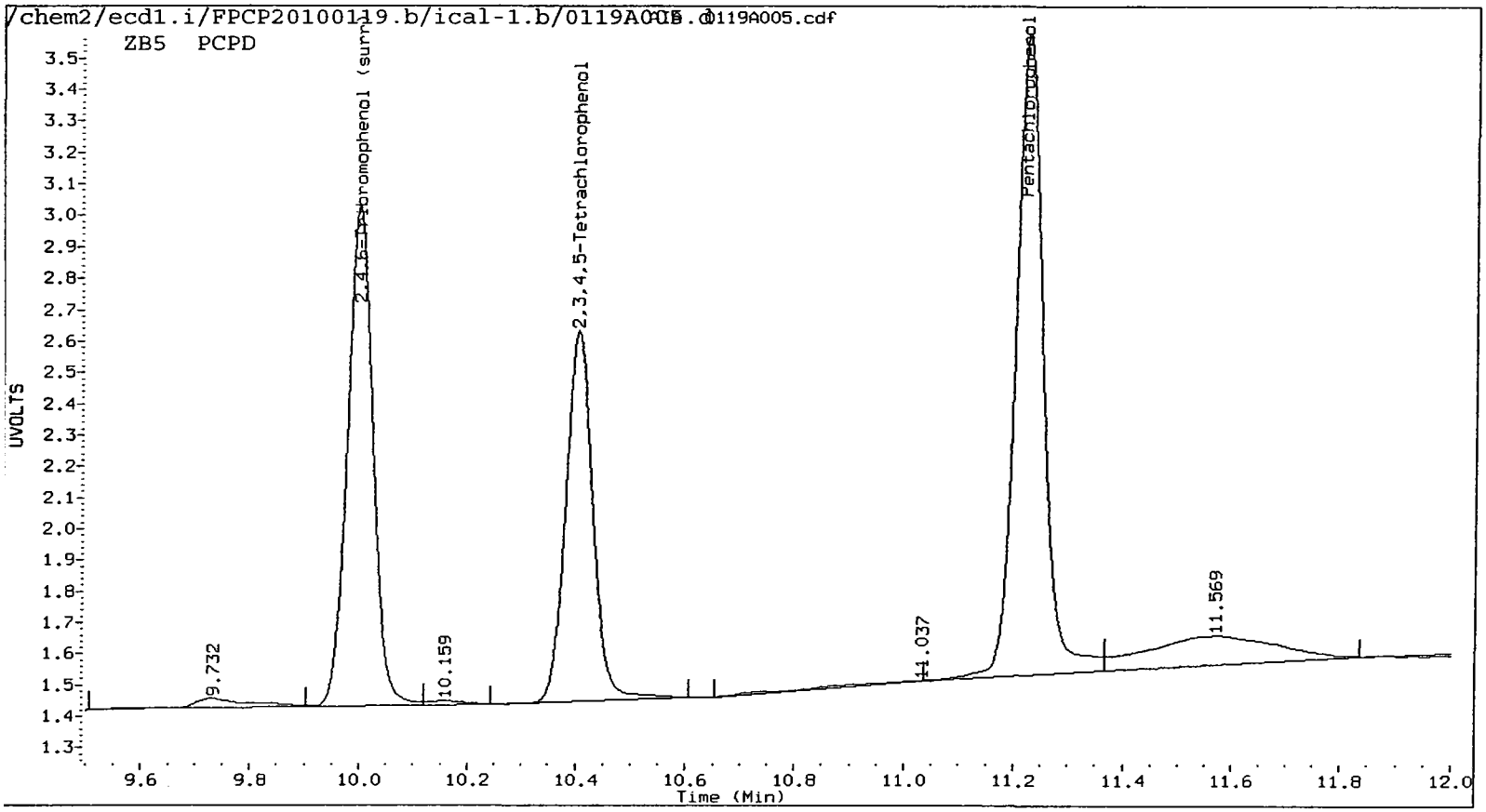
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A005.d ARI ID: PCPD
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A005.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 16:59
Compound Sublist: all Report Date: 01/20/2010 12:02
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
11.223	-0.002	359690	11.656	-0.001	384265	24.6722	23.5230	4.8	Pentachlorophenol
7.263	0.000	209689	7.324	-0.001	255392	22.8250	24.0383	5.2	2,4,6-Trichlorophenol
7.617	0.000	200422	7.853	-0.001	264740	22.2814	24.3024	8.7	2,3,6-Trichlorophenol
8.219	0.003	108964	8.585	0.001	119866	26.1938	22.7065	14.3	2,4,5-Trichlorophenol
8.769	0.004	123328	9.352	0.000	155594	23.3826	23.5935	0.9	2,3,4-Trichlorophenol
9.000	-0.001	315575	9.260	-0.001	363678	23.7352	23.9245	0.8	2,3,5,6-Tetrachlorophenol
10.404	0.002	204096	11.110	0.000	246933	23.2931	23.2697	0.1	2,3,4,5-Tetrachlorophenol
6.887	0.004	103087	7.149	0.000	122242	266.2459	275.3990	3.4	2,4-Dichlorophenol
9.999	0.002	261850	10.634	-0.002	340243	23.8	24.3	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	95.1	97.0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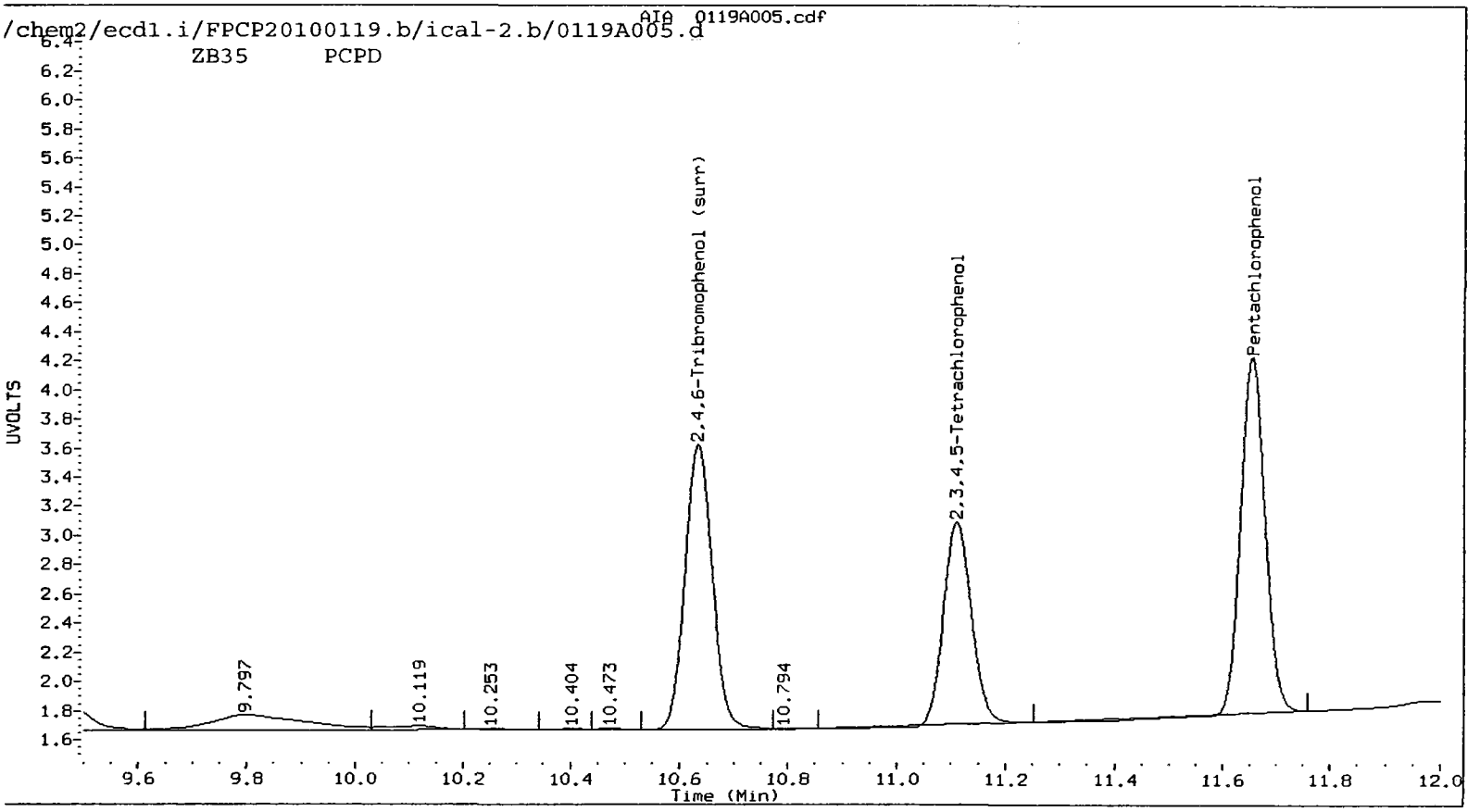
ZB5 PCPD
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.732
10.159
11.037
11.569
UVOLTS
Time (Min)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ZB35 PCPD
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.797
10.119
10.253
10.404
10.473
10.794
UVOLTS
Time (Min)

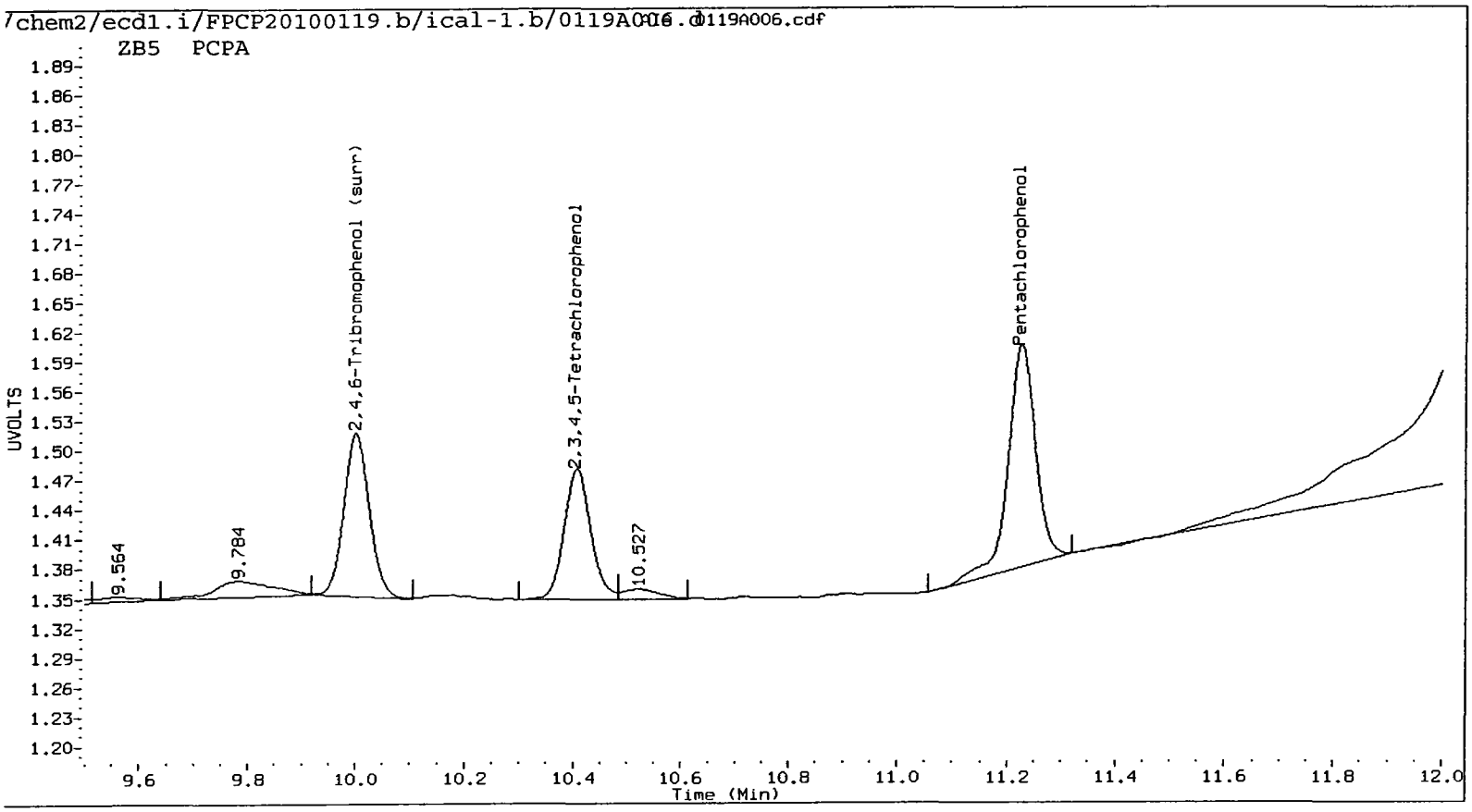
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A006.d ARI ID: PCPA
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A006.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 17:19
Compound Sublist: all Report Date: 01/20/2010 12:02
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
11.227	0.002	39823	11.657	0.001	42233	2.7316	2.5853	5.5	Pentachlorophenol
7.263	0.000	29966	7.324	-0.001	32232	3.2618	3.0338	7.2	2,4,6-Trichlorophenol
7.617	0.000	30100	7.857	0.003	33438	3.3463	3.0695	8.6	2,3,6-Trichlorophenol
8.223	0.008	9985	8.587	0.002	16762	2.4003	3.1753	27.8	2,4,5-Trichlorophenol
8.775	0.010	14622	9.358	0.006	17816	2.7723	2.7015	2.6	2,3,4-Trichlorophenol
9.005	0.004	36405	9.262	0.002	40480	2.7381	2.6630	2.8	2,3,5,6-Tetrachlorophenol
10.407	0.005	22904	11.113	0.002	28417	2.6140	2.6779	2.4	2,3,4,5-Tetrachlorophenol
6.890	0.007	17654	7.149	0.000	10267	45.5955	23.1305	65.4*	2,4-Dichlorophenol
10.002	0.005	27222	10.636	0.001	35071	2.5	2.5	1.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	9.9	10.0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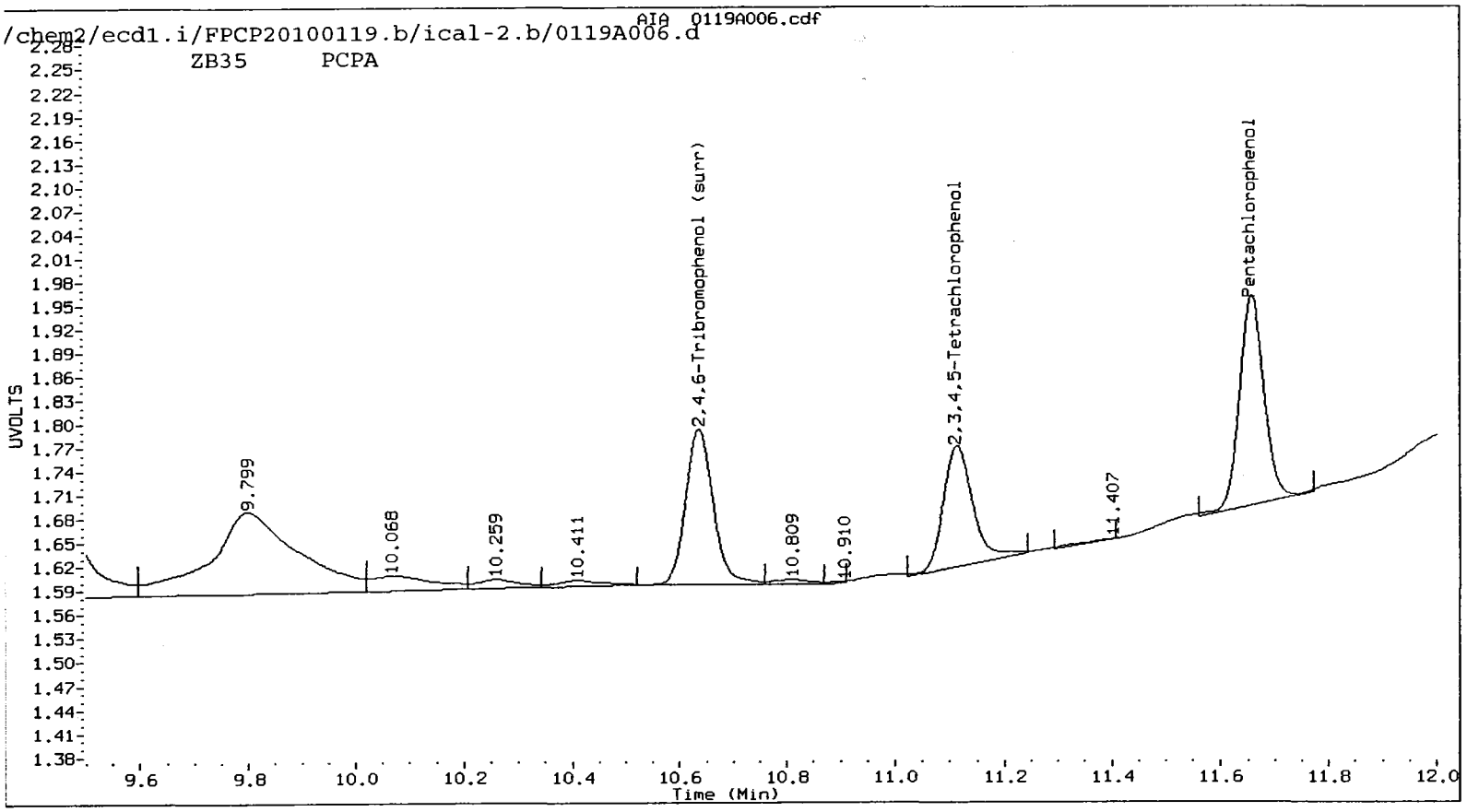
AIA 0119A006.cdf
ZB5 PCPA
UVOLTS
Time (Min)
9.564
9.784
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
10.527
Pentachlorophenol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AIA 0119A006.cdf
ZB35 PCPA
UVOLTS
Time (Min)
9.799
10.068
10.259
10.411
2,4,6-Tribromophenol (surr)
10.809
10.910
2,3,4,5-Tetrachlorophenol
11.407
Pentachlorophenol

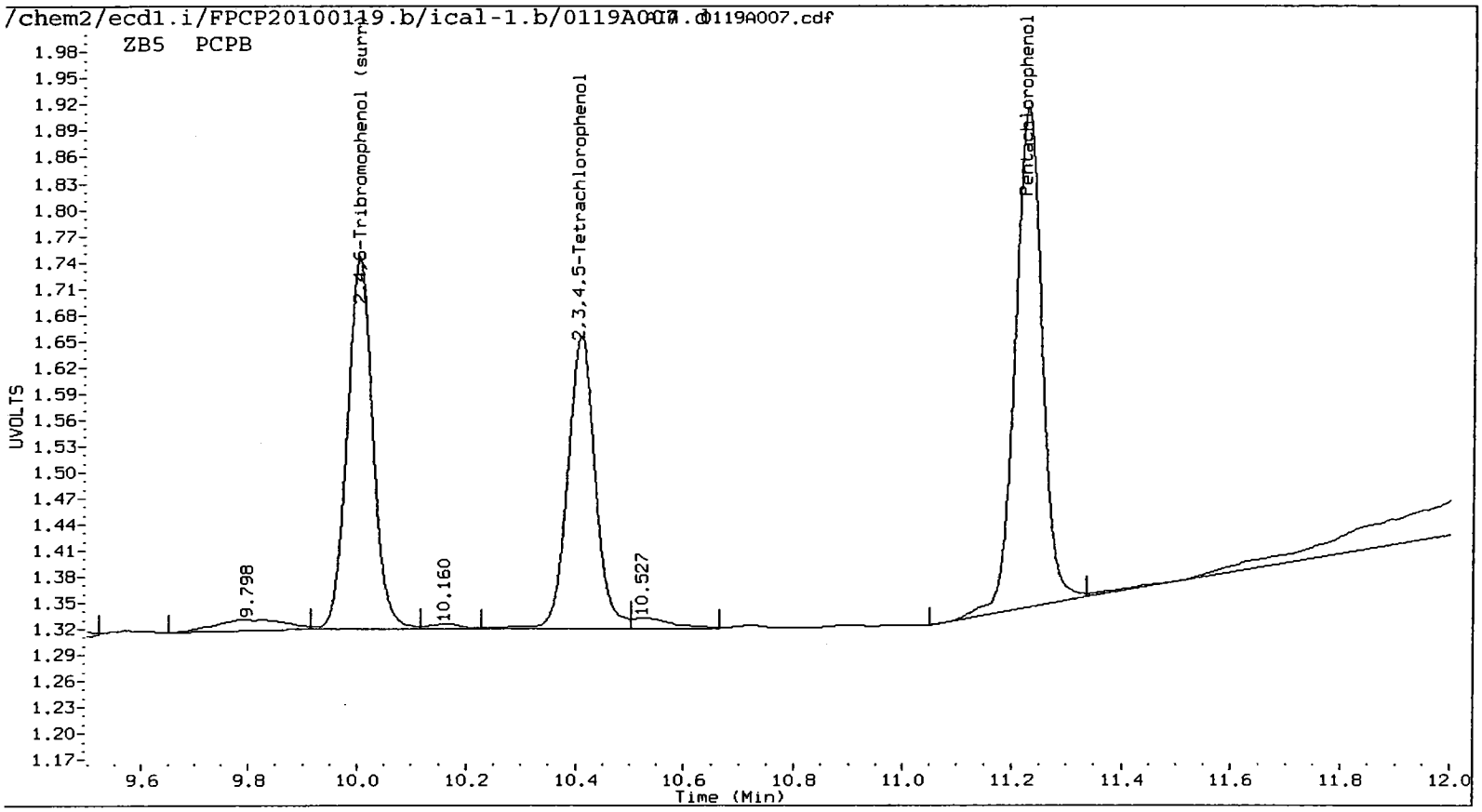
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

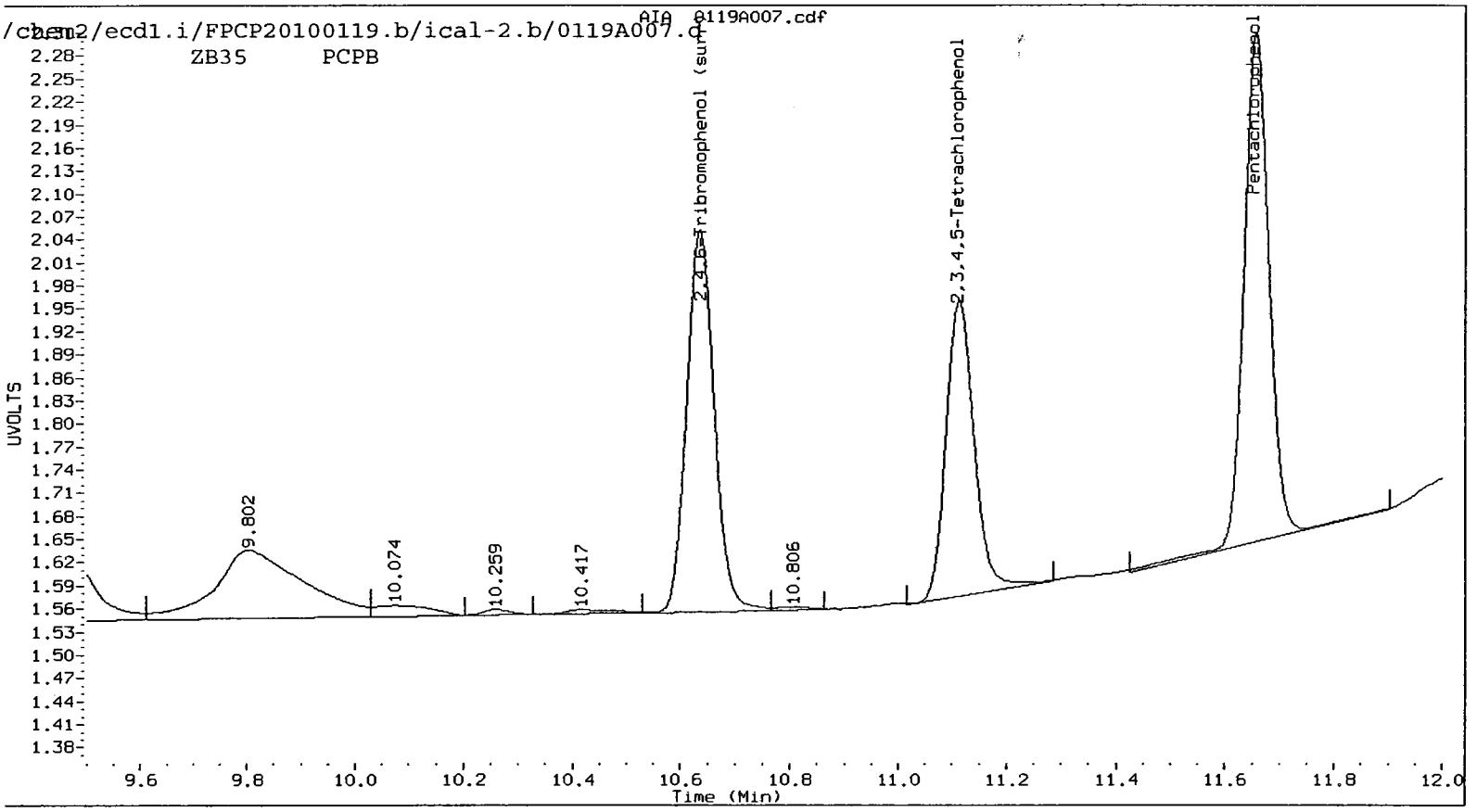
Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A007.d ARI ID: PCPB
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A007.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 17:39
Compound Sublist: all Report Date: 01/20/2010 12:02
Instrument: ecd1.i Matrix: 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
11.227	0.002	97803	11.657	0.001	107070	6.7086	6.5544	2.3	Pentachlorophenol
7.263	0.000	62829	7.325	0.000	69489	6.8390	6.5405	4.5	2,4,6-Trichlorophenol
7.618	0.001	62158	7.855	0.001	72323	6.9103	6.6390	4.0	2,3,6-Trichlorophenol
8.223	0.008	26747	8.590	0.005	34676	6.4297	6.5688	2.1	2,4,5-Trichlorophenol
8.776	0.010	35011	9.358	0.006	44383	6.6380	6.7300	1.4	2,3,4-Trichlorophenol
9.007	0.006	94226	9.263	0.002	99048	7.0870	6.5159	8.4	2,3,5,6-Tetrachlorophenol
10.407	0.005	59737	11.113	0.002	69466	6.8177	6.5461	4.1	2,3,4,5-Tetrachlorophenol
6.887	0.004	34185	7.151	0.002	29088	88.2906	65.5324	29.6	2,4-Dichlorophenol
10.003	0.006	70546	10.636	0.001	87316	6.4	6.2	2.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	25.6	24.9


/chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A007.d
AIA 0119A007.cdf
ZB5 PCPB
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.798
10.160
10.527
UVOLTS
Time (Min)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AIA 0119A007.cdf
ZB35 PCPB
2,4,6-Tribromophenol (surr
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.802
10.074
10.259
10.417
10.806
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

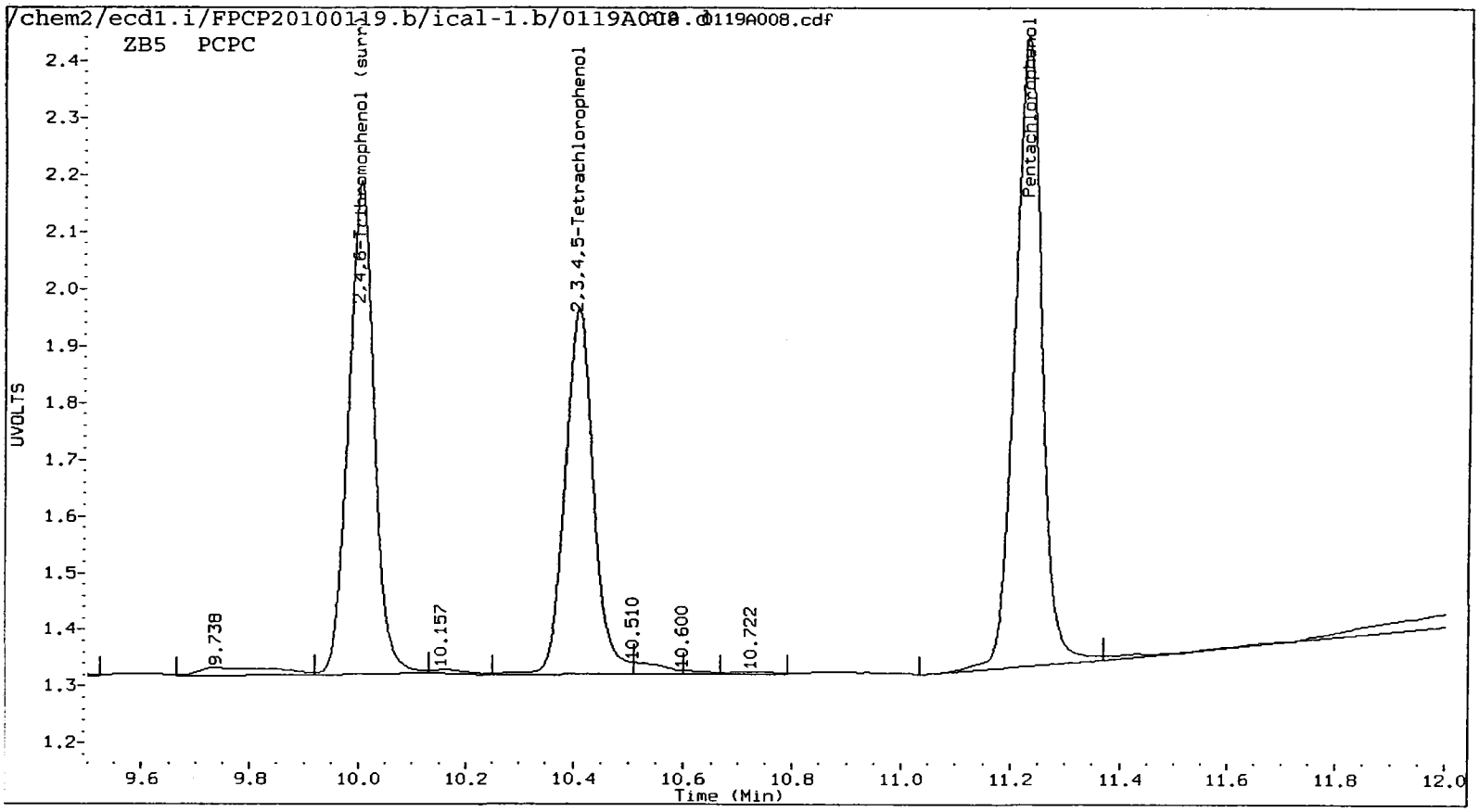
Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A008.d ARI ID: PCPC
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A008.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 17:59
Compound Sublist: all Report Date: 01/20/2010 12:02
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

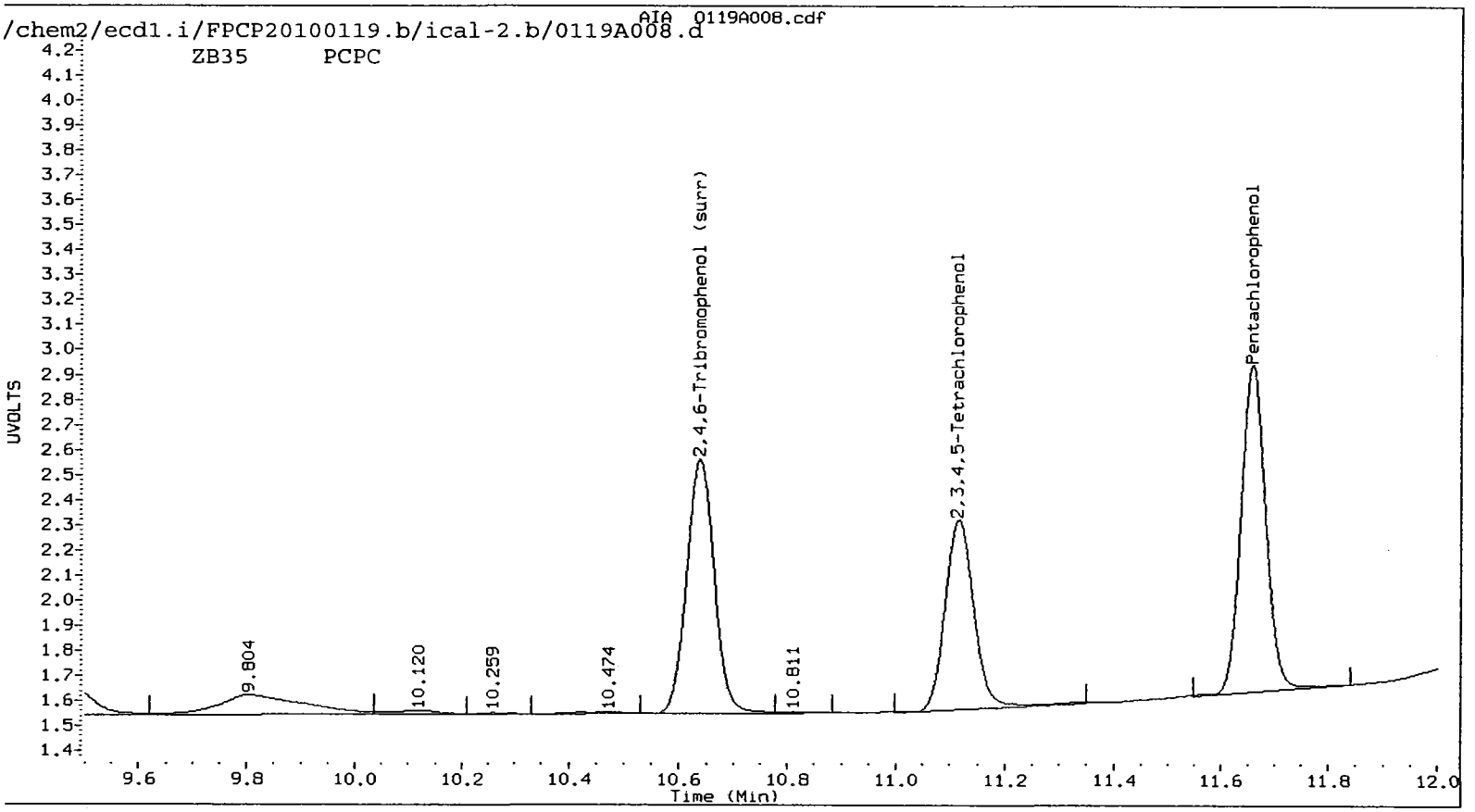
ZB-5 Col			ZB35 Col			ZB-5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
11.228	0.003	189339	11.660	0.004	210889	12.9873	12.9097	0.6	Pentachlorophenol
7.263	0.000	111417	7.326	0.001	131865	12.1279	12.4115	2.3	2,4,6-Trichlorophenol
7.619	0.002	113023	7.857	0.003	133874	12.5650	12.2893	2.2	2,3,6-Trichlorophenol
8.223	0.008	58445	8.589	0.005	68764	14.0496	13.0261	7.6	2,4,5-Trichlorophenol
8.774	0.009	69732	9.358	0.006	86486	13.2210	13.1143	0.8	2,3,4-Trichlorophenol
9.003	0.003	176411	9.264	0.003	196281	13.2683	12.9123	2.7	2,3,5,6-Tetrachlorophenol
10.407	0.005	116412	11.117	0.006	139166	13.2859	13.1143	1.3	2,3,4,5-Tetrachlorophenol
6.887	0.004	59133	7.151	0.002	57136	152.7246	128.7217	17.1	2,4-Dichlorophenol
10.000	0.003	143517	10.638	0.003	176742	13.0	12.6	3.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	52.1	50.4

QF10:00561


/chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A008.d
AIA 0119A008.cdf
ZB5 PCPC
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.738
10.157
10.510
10.600
10.722
UVOLTS
Time (Min)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AIA 0119A008.cdf
ZB35 PCPC
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.804
10.120
10.259
10.474
10.811
UVOLTS
Time (Min)

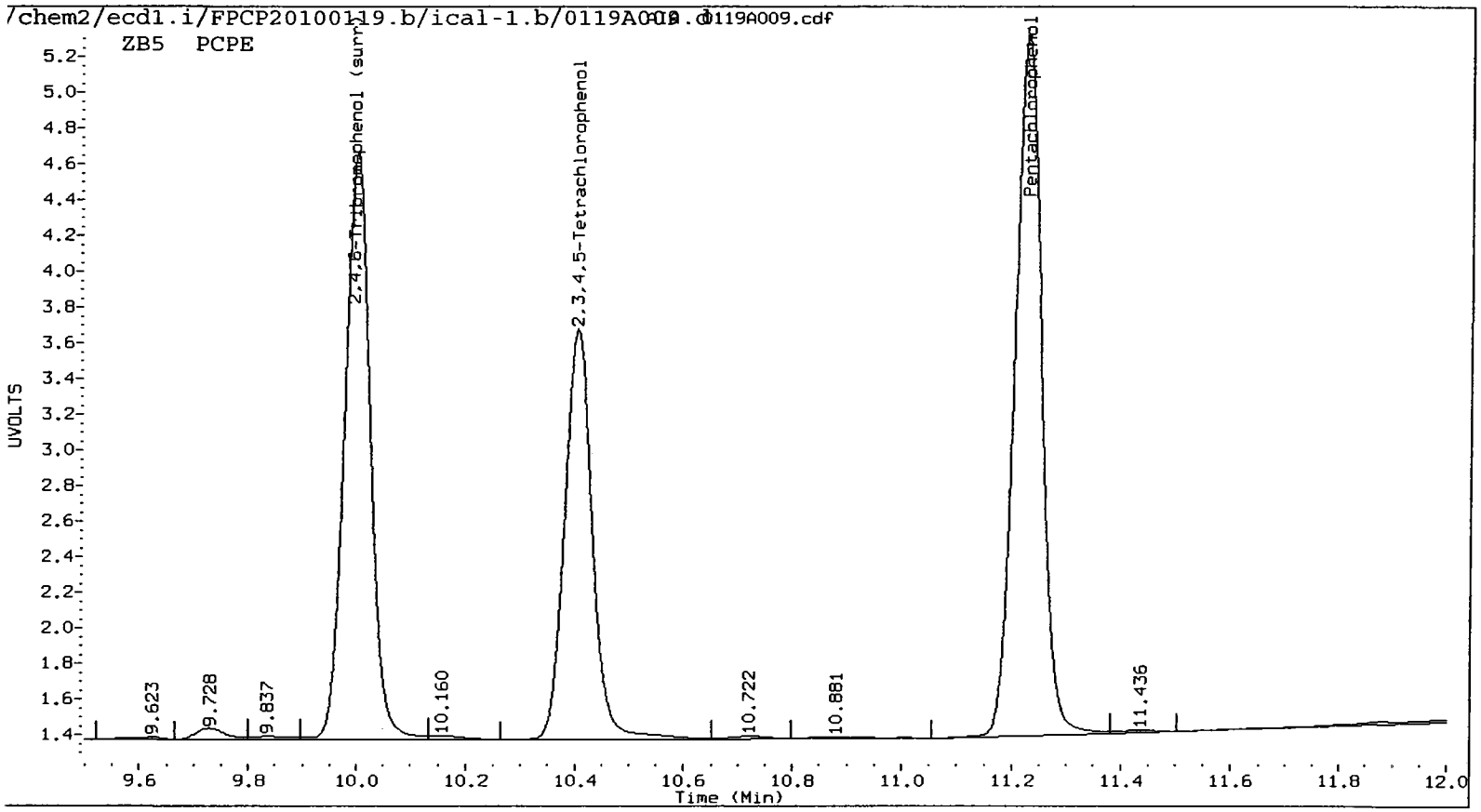
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

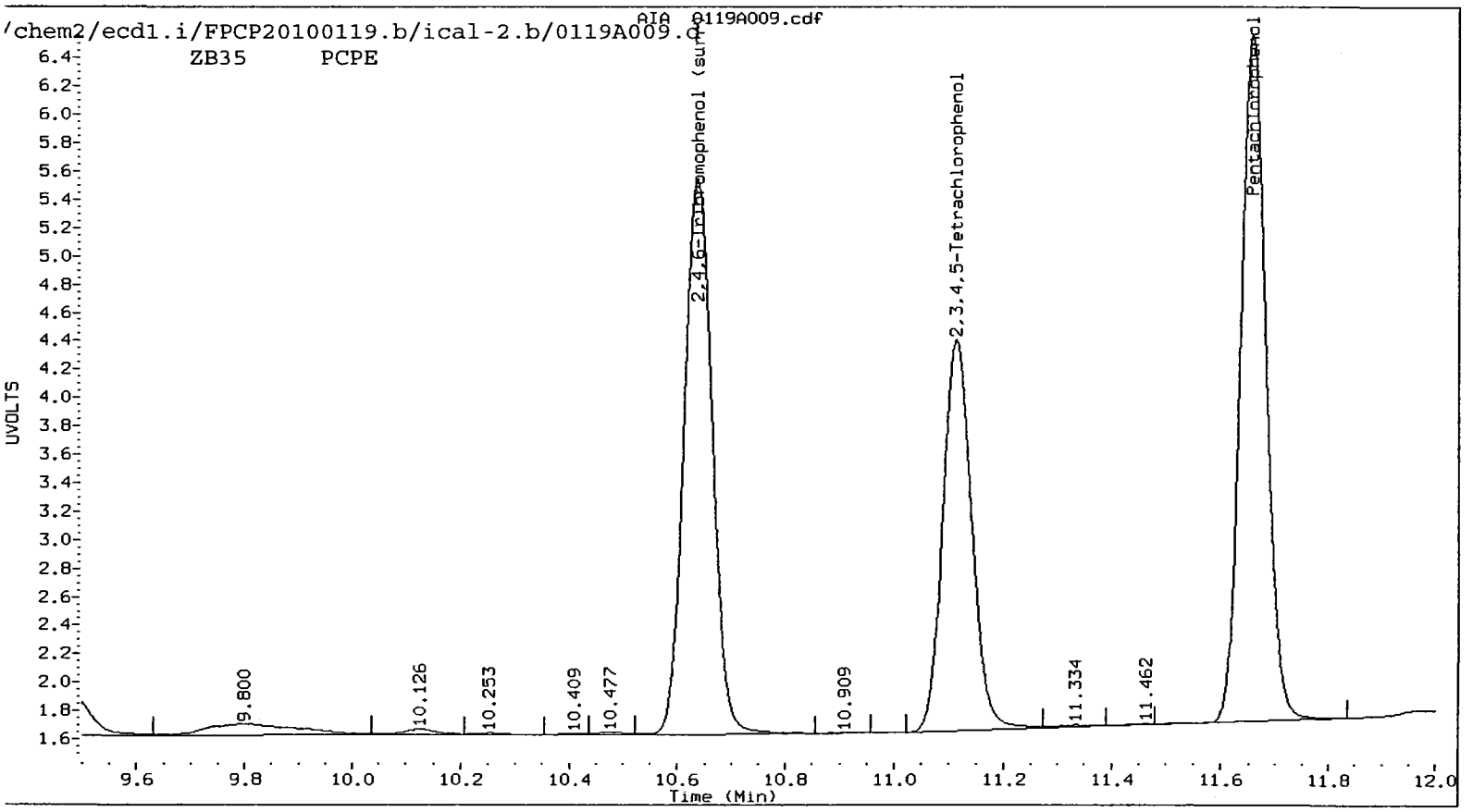
Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A009.d ARI ID: PCPE
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A009.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 18:19
Compound Sublist: all Report Date: 01/20/2010 12:02
Instrument: ecd1.i Matrix: 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
11.226	0.001	665471	11.657	0.001	789074	45.6467	48.3036	5.7	Pentachlorophenol
7.263	0.000	393937	7.326	0.001	477127	42.8806	44.9086	4.6	2,4,6-Trichlorophenol
7.617	0.000	373767	7.855	0.001	480023	41.5526	44.0648	5.9	2,3,6-Trichlorophenol
8.218	0.003	194854	8.587	0.002	230505	46.8408	43.6652	7.0	2,4,5-Trichlorophenol
8.768	0.003	243291	9.355	0.002	307523	46.1273	46.6312	1.1	2,3,4-Trichlorophenol
9.001	0.001	590752	9.262	0.001	723600	44.4320	47.6020	6.9	2,3,5,6-Tetrachlorophenol
10.404	0.002	414084	11.113	0.002	503550	47.2586	47.4519	0.4	2,3,4,5-Tetrachlorophenol
6.887	0.004	199161	7.150	0.001	216140	514.3791	486.9418	5.5	2,4-Dichlorophenol
9.997	0.000	546863	10.636	0.001	699030	49.7	49.8	0.4	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	198.7	199.4


/chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A009.d
AIA 0119A009.cdf
ZB5 PCPE
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.623
9.728
9.837
10.160
10.722
10.881
11.436
UVOLTS
Time (Min)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AIA 0119A009.cdf
ZB35 PCPE
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.800
10.126
10.253
10.409
10.477
10.909
11.334
11.462
UVOLTS
Time (Min)

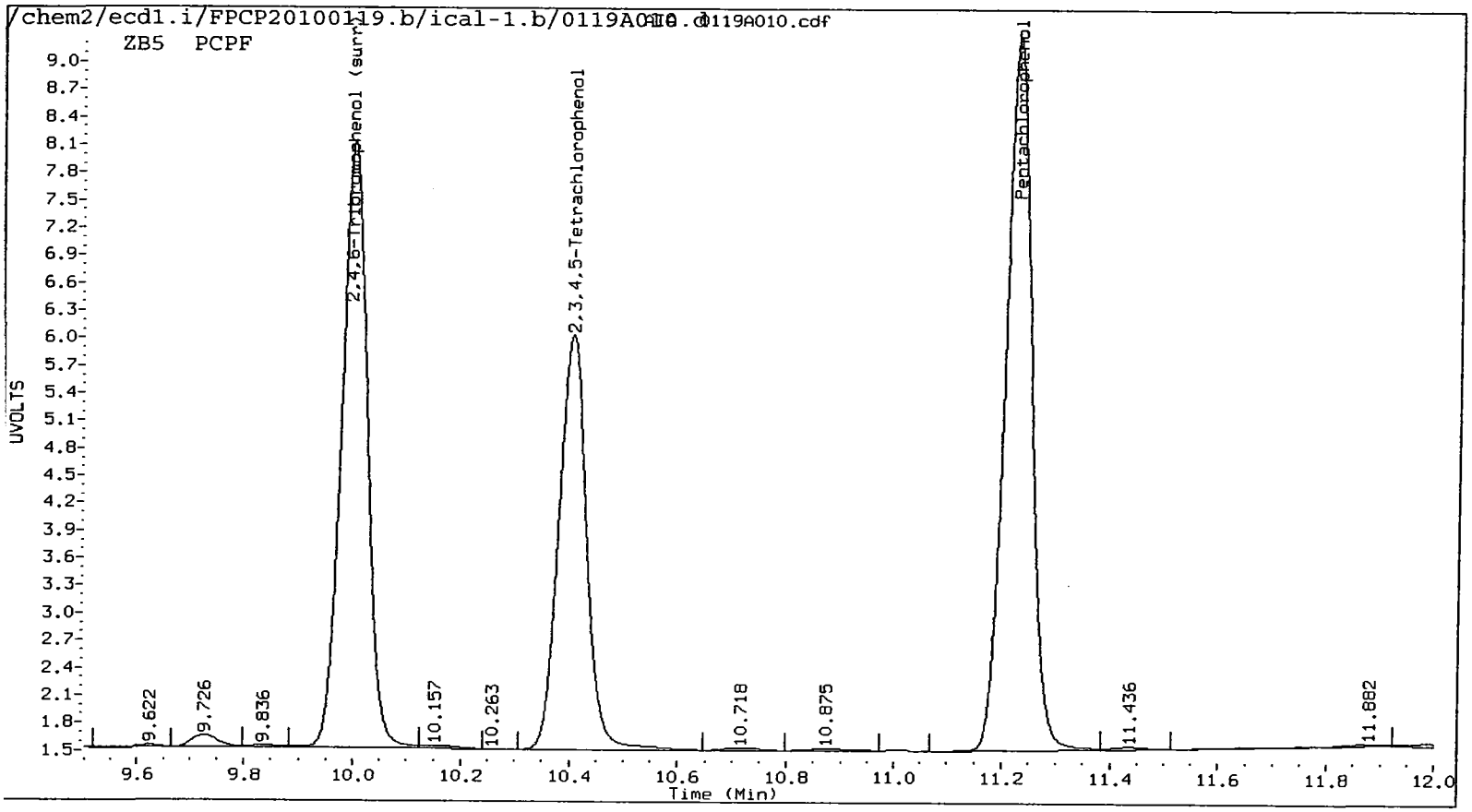
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

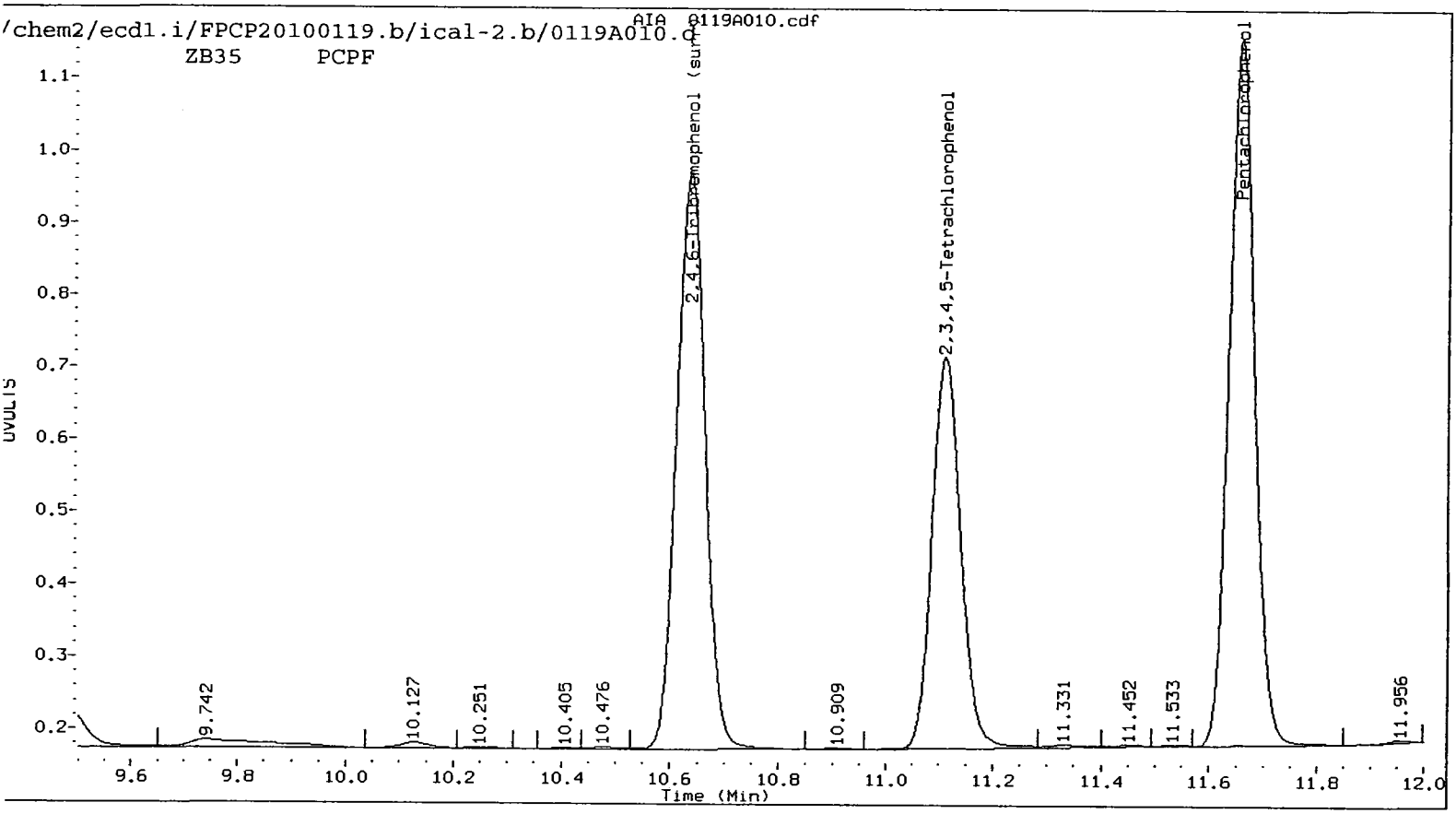
Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A010.d ARI ID: PCPF
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A010.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 18:39
Compound Sublist: all Report Date: 01/20/2010 12:02
Instrument: ecd1.i Matrix: 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
11.225	0.000	1305060	11.656	0.000	1596662	89.5180	97.7406	8.8	Pentachlorophenol
7.263	0.000	790229	7.325	0.000	942788	86.0176	88.7381	3.1	2,4,6-Trichlorophenol
7.617	0.000	745090	7.854	0.000	951463	82.8334	87.3416	5.3	2,3,6-Trichlorophenol
8.216	0.000	375474	8.585	0.000	451470	90.2600	85.5232	5.4	2,4,5-Trichlorophenol
8.766	0.000	481797	9.352	0.000	604798	91.3474	91.7084	0.4	2,3,4-Trichlorophenol
9.001	0.000	1158471	9.261	0.000	1444501	87.1317	95.0264	8.7	2,3,5,6-Tetrachloropheno
10.402	0.000	809456	11.111	0.000	1010782	92.3816	95.2508	3.1	2,3,4,5-Tetrachlorophenol
6.883	0.000	379616	7.149	0.000	408810	980.4456	921.0081	6.3	2,4-Dichlorophenol
9.997	0.000	1099163	10.635	0.000	1441352	99.8	102.8	2.9	2,4,6-Tribromophenol (su

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	399.3	411.1


/chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A010.d
AIA 0119A010.cdf
ZB5 PCPF
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.622
9.726
9.836
10.157
10.263
10.718
10.875
11.436
11.882
UVOLTS
Time (Min)


/chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A010.d
AIA 0119A010.cdf
ZB35 PCPF
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.742
10.127
10.251
10.405
10.476
10.909
11.331
11.452
11.533
11.956
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A005.d

Date : 19-JAN-2010 16:59

Client ID:

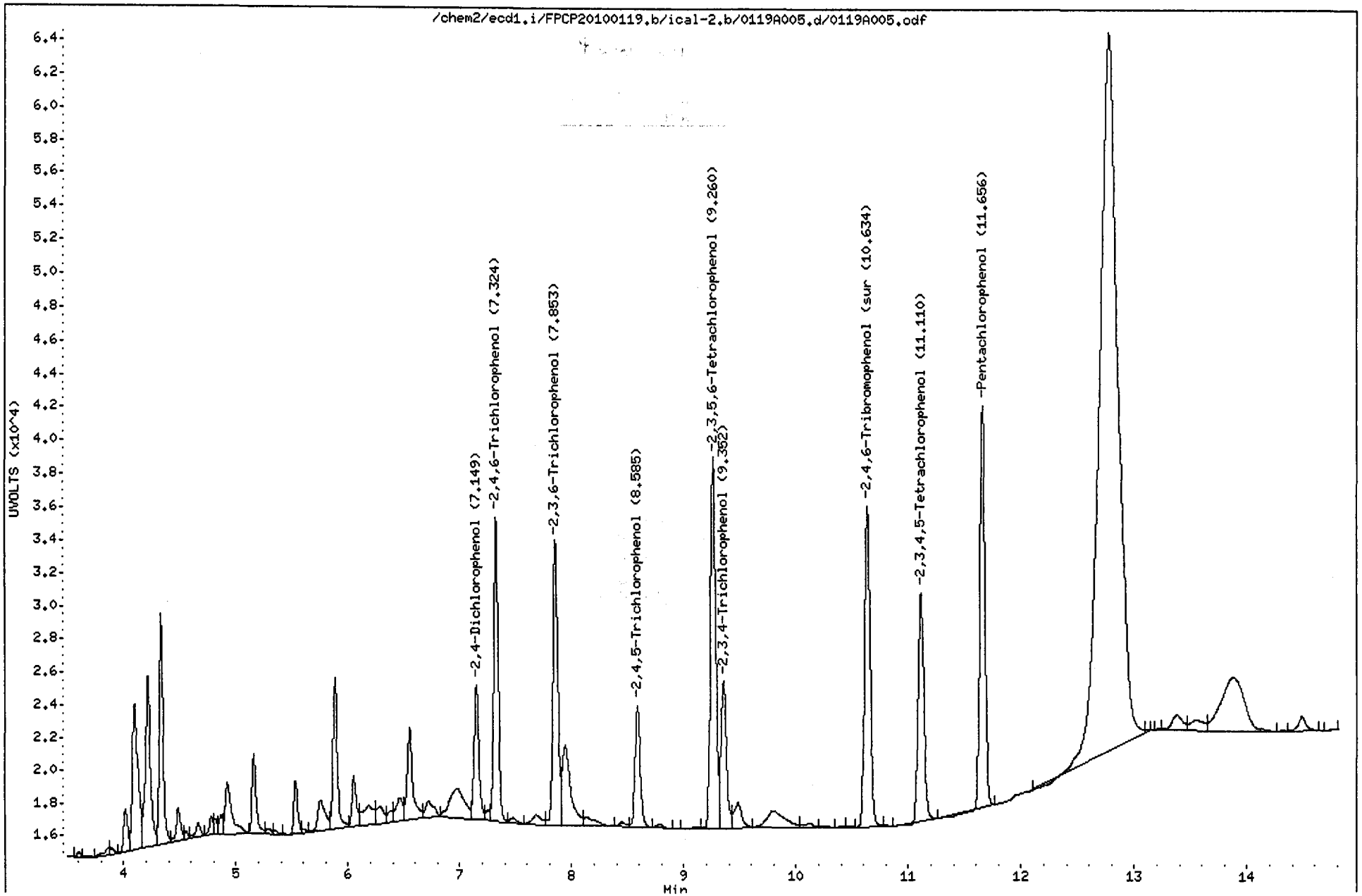
Sample Info: PCPD

Column phase: ZB35

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



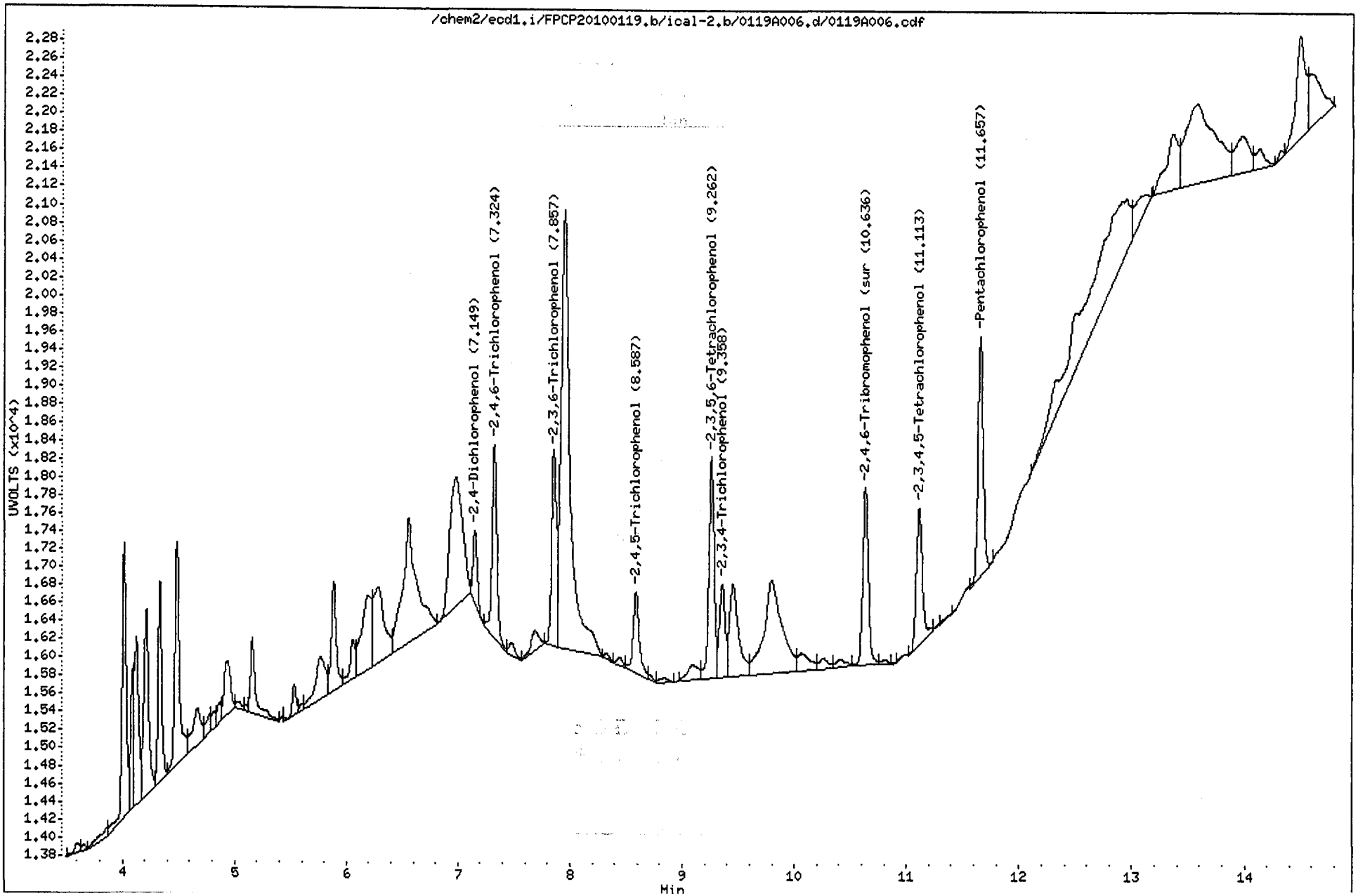
Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A006.d
Date : 19-JAN-2010 17:19
Client ID:
Sample Info: PCPA

Column phase: ZB35

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53

QF19:00568

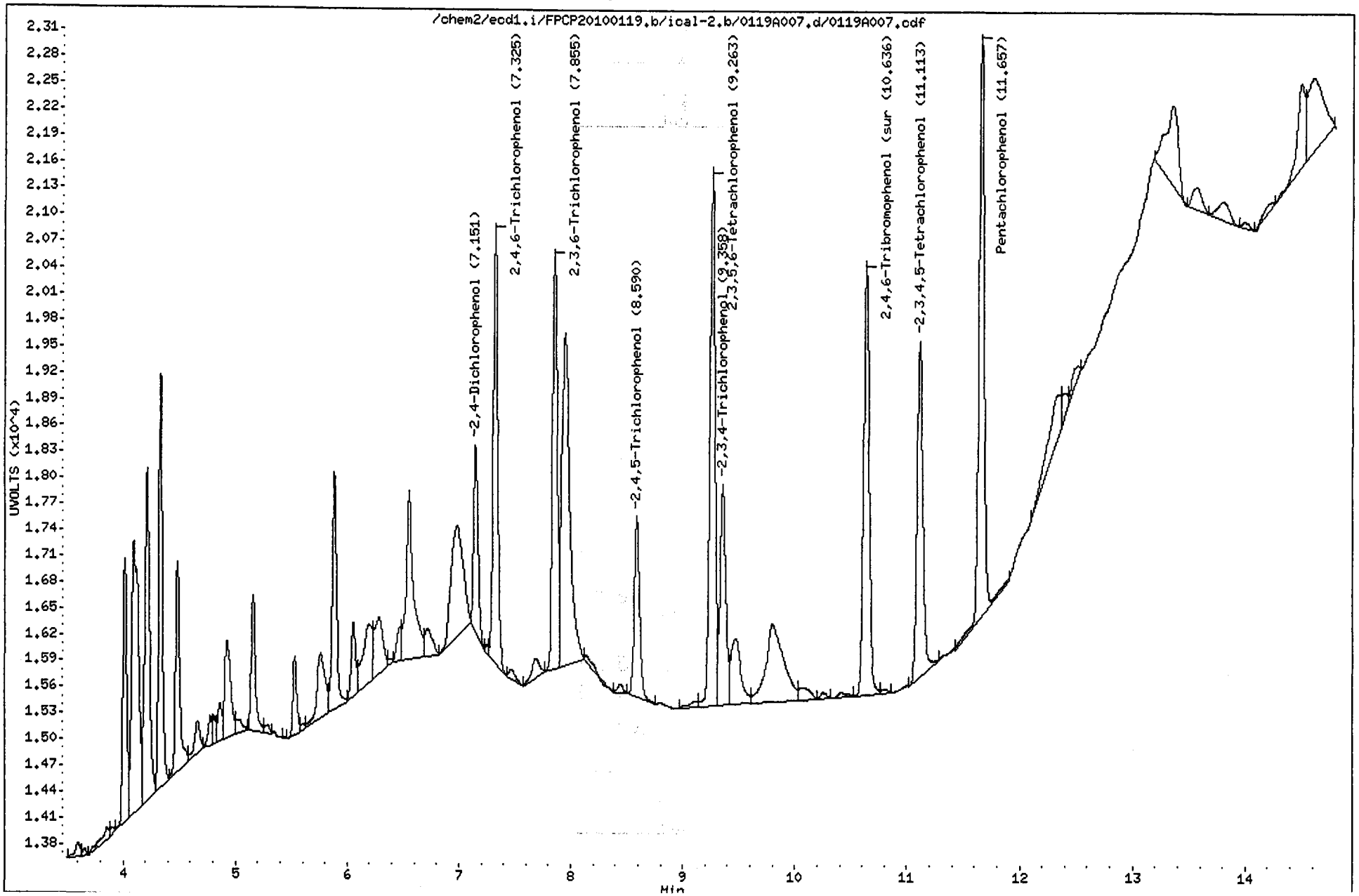


Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A007.d
Date : 19-JAN-2010 17:39
Client ID:
Sample Info: PCPB

Column phase: ZB35

Instrument: ecd1.i

Operator: ar
Column diameter: 0.53



Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A008.d

Date : 19-JAN-2010 17:59

Client ID:

Sample Info: PCPC

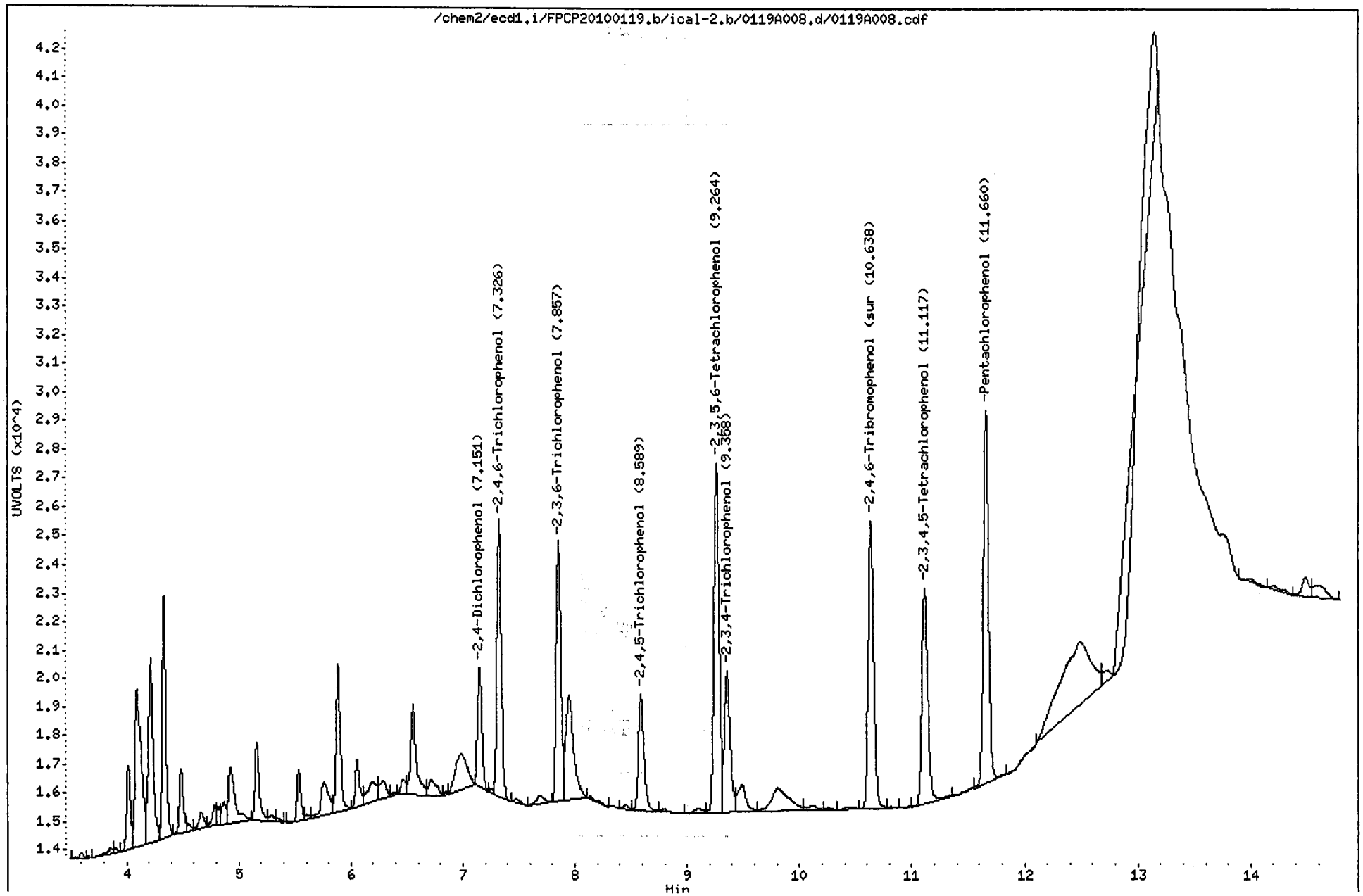
Column phase: ZB35

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53

QF10-00573



Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A009.d

Date : 19-JAN-2010 18:19

Client ID:

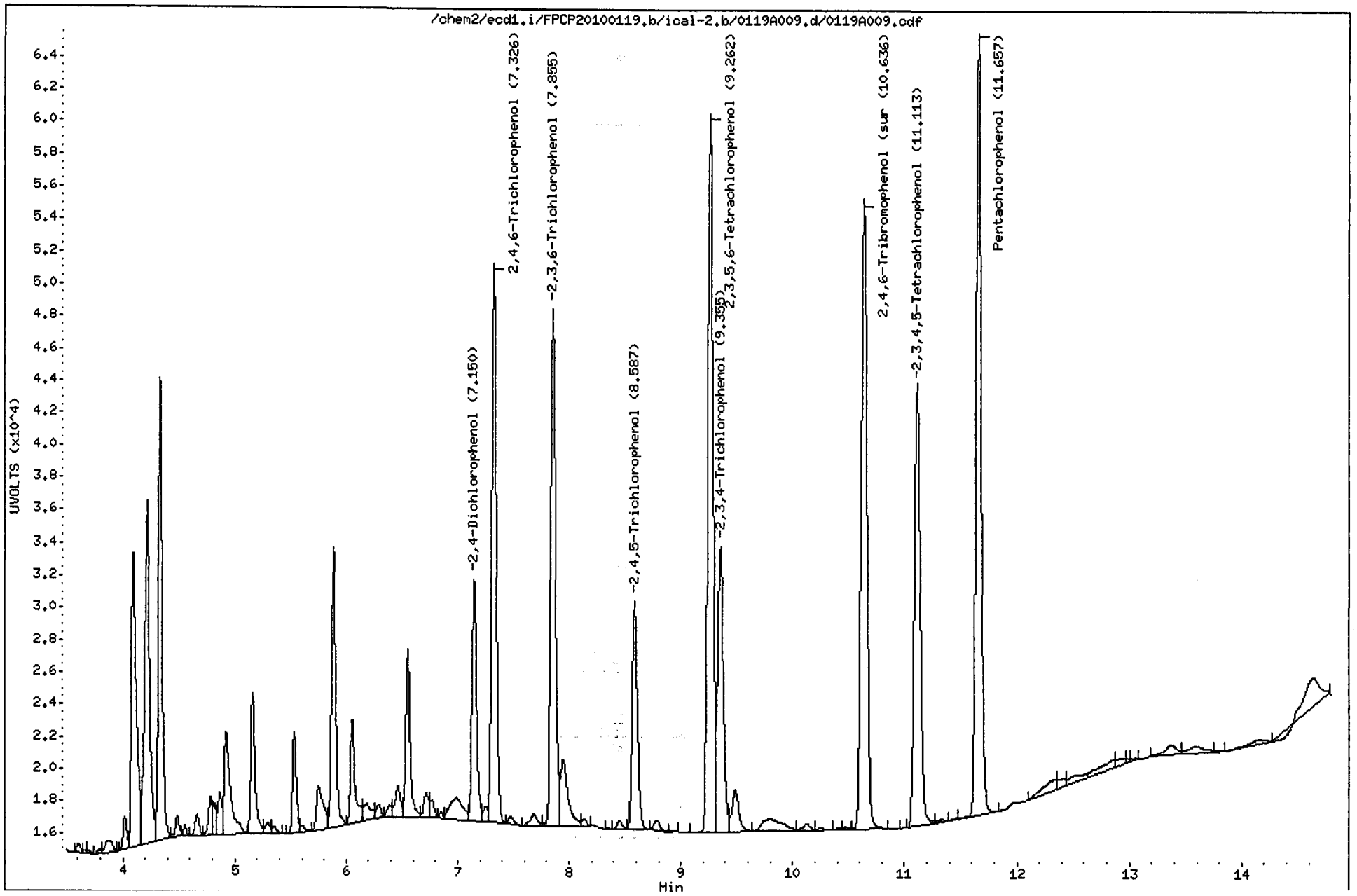
Sample Info: PCPE

Column phase: ZB35

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



Data File: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A010.d

Date : 19-JAN-2010 18:39

Client ID:

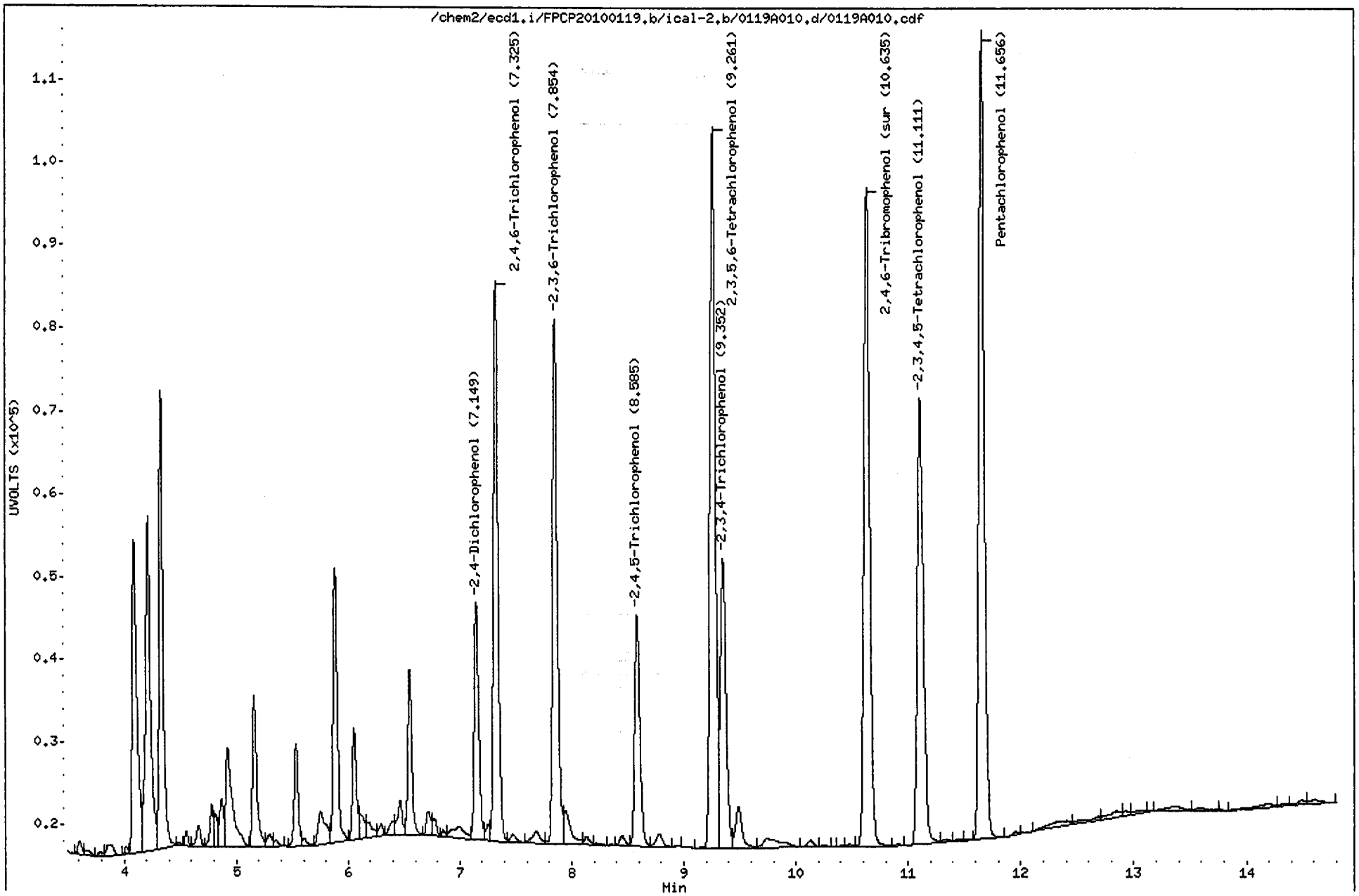
Sample Info: PCPF

Column phase: ZB35

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



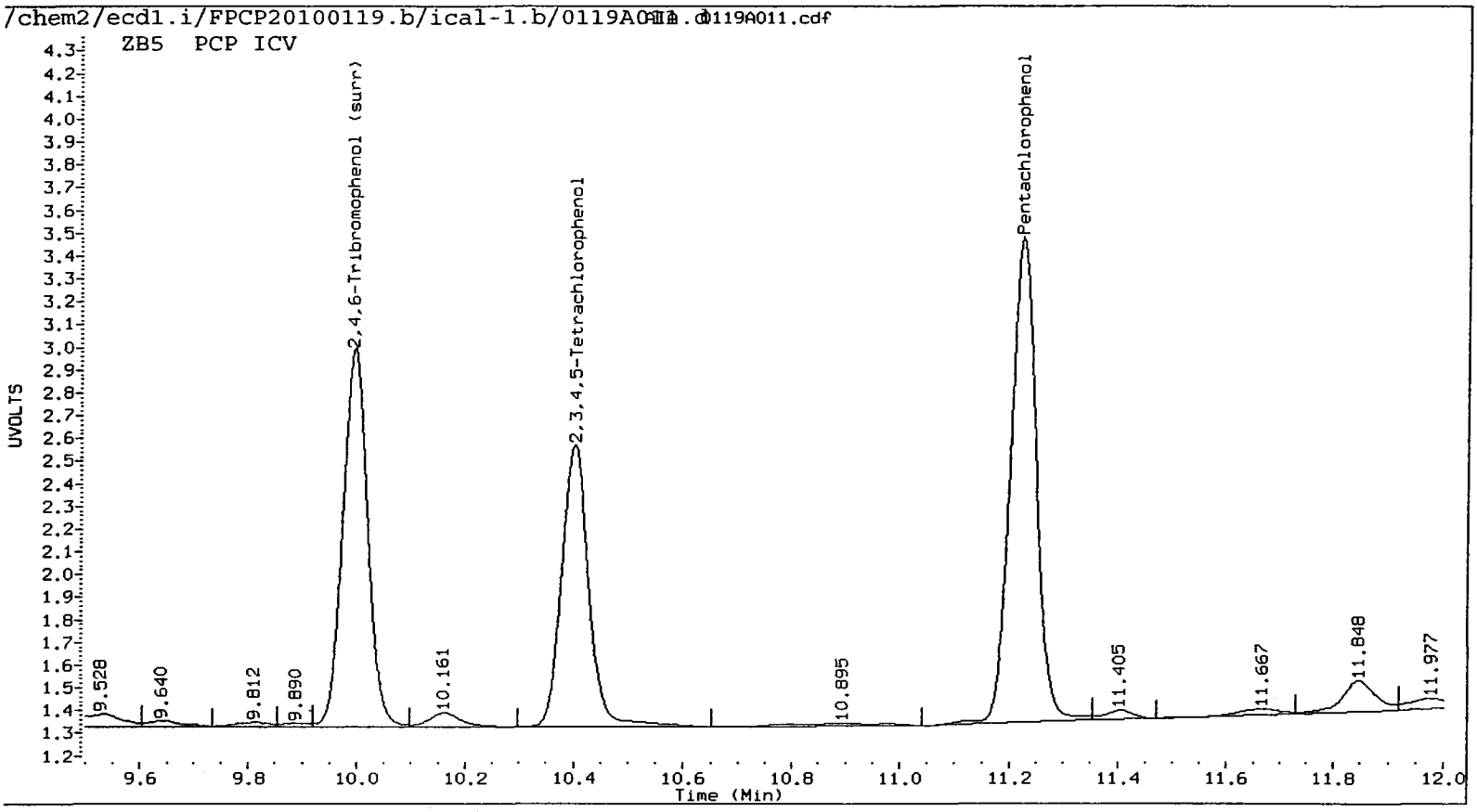
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

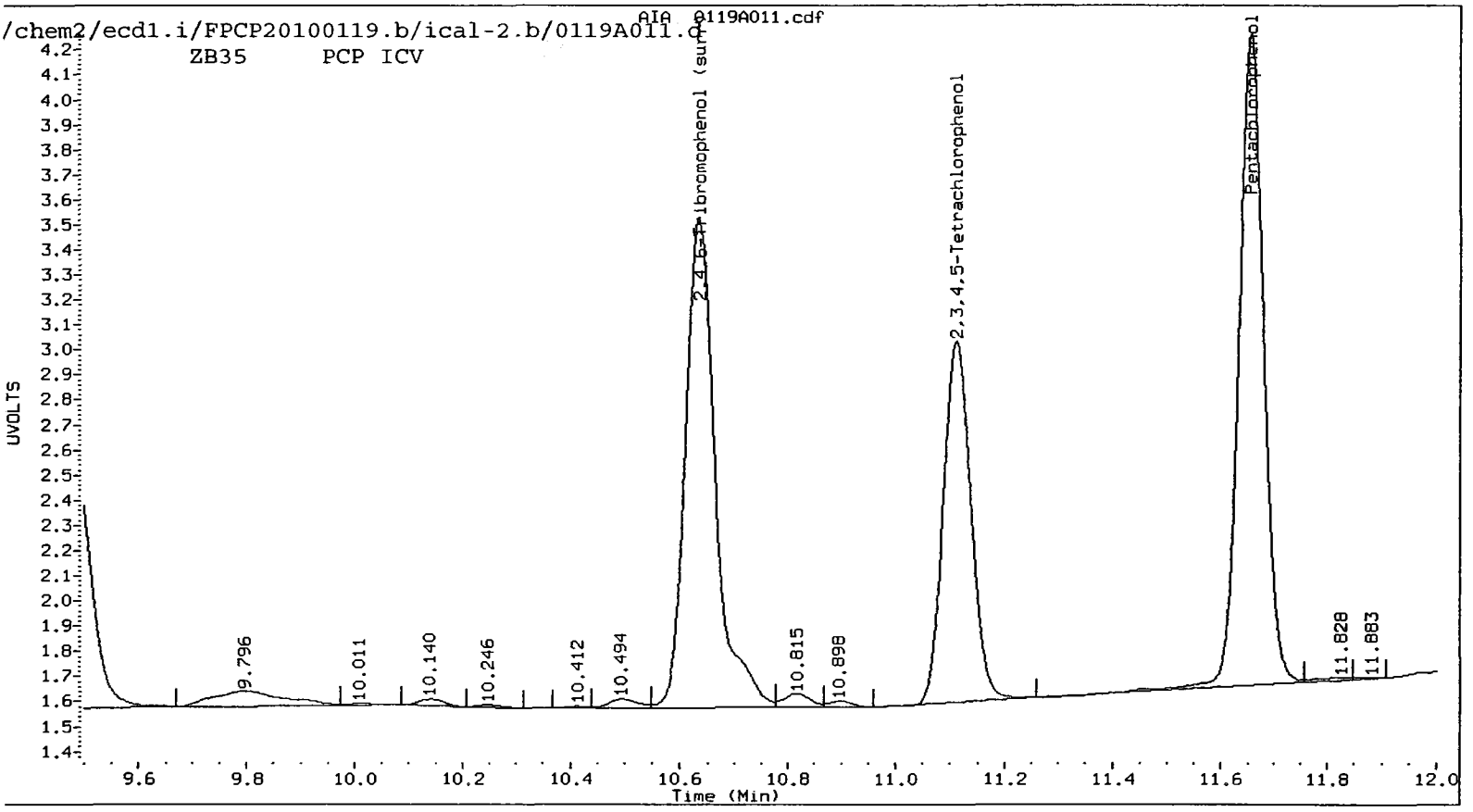
Data file 1: /chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A011.d ARI ID: PCP ICV
Data file 2: /chem2/ecd1.i/FPCP20100119.b/ical-2.b/0119A011.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 19-JAN-2010 18:59
Compound Sublist: all Report Date: 01/20/2010 12:22
Instrument: ecd1.i Matrix: 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
11.224	-0.001	355452	11.657	0.001	424994	24.3816	26.0163	6.5	Pentachlorophenol
7.262	-0.002	237905	7.326	0.001	266703	25.8964	25.1029	3.1	2,4,6-Trichlorophenol
7.615	-0.002	213821	7.856	0.002	252829	23.7710	23.2090	2.4	2,3,6-Trichlorophenol
8.213	-0.002	126597	8.586	0.002	136534	30.4326	25.8640	16.2	2,4,5-Trichlorophenol
8.764	-0.002	135876	9.353	0.001	159632	25.7617	24.2058	6.2	2,3,4-Trichlorophenol
8.999	-0.001	301916	9.263	0.003	386144	22.7079	25.4025	11.2	2,3,5,6-Tetrachlorophenol
10.402	0.000	219939	11.112	0.001	252064	25.1013	23.7532	5.5	2,3,4,5-Tetrachlorophenol
6.883	0.000	123288	7.151	0.002	107407	318.4196	241.9772	27.3	2,4-Dichlorophenol
9.997	0.000	267443	10.635	0.000	370307	24.3	26.4	8.3	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	97.5	104.1
2,4,6-Trichlorophenol	103.6	100.4
2,3,6-Trichlorophenol	95.1	92.8
2,4,5-Trichlorophenol	121.7	103.5
2,3,4-Trichlorophenol	103.0	96.8
2,3,5,6-Tetrachlorophenol	90.8	101.6
2,3,4,5-Tetrachlorophenol	100.4	95.0
2,4-Dichlorophenol	127.4	96.8
2,4,6-TBP (surr)	97.2 ~~48.6~~	~~52.8~~ 105.6


/chem2/ecd1.i/FPCP20100119.b/ical-1.b/0119A011.cdf
ZB5 PCP ICV
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.528
9.640
9.812
9.890
10.161
10.895
11.405
11.667
11.848
11.977
UVOLTS
Time (Min)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AIA 0119A011.cdf
ZB35 PCP ICV
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.796
10.011
10.140
10.246
10.412
10.494
10.815
10.898
11.828
11.883
UVOLTS
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0406

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.23	11.16	11.30	26.6	25.0	6.4
2,4,6-Trichlorophenol	7.27	7.19	7.33	24.5	25.0	-2.0
2,3,6-Trichlorophenol	7.62	7.55	7.69	24.0	25.0	-4.0
2,4,5-Trichlorophenol	8.23	8.15	8.29	29.1	25.0	16.4
2,3,4-Trichlorophenol	8.78	8.70	8.84	28.3	25.0	13.2
2,3,5,6-Tetrachlorophenol	9.01	8.93	9.07	25.9	25.0	3.6
2,3,4,5-Tetrachlorophenol	10.41	10.33	10.47	28.0	25.0	12.0
2,4-Dichlorophenol	6.89	6.81	6.95	287	250	14.8
2,4,6-Tribromophenol (surr	10.00	9.93	10.07	28.0	25.0	12.0

AVERAGE %D = 9.4

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0406

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.66	11.59	11.73	27.9	25.0	11.6
2,4,6-Trichlorophenol	7.33	7.25	7.39	25.1	25.0	0.4
2,3,6-Trichlorophenol	7.86	7.78	7.92	24.3	25.0	-2.8
2,4,5-Trichlorophenol	8.59	8.51	8.65	25.9	25.0	3.6
2,3,4-Trichlorophenol	9.36	9.28	9.42	27.0	25.0	8.0
2,3,5,6-Tetrachlorophenol	9.27	9.19	9.33	26.1	25.0	4.4
2,3,4,5-Tetrachlorophenol	11.12	11.04	11.18	27.5	25.0	10.0
2,4-Dichlorophenol	7.16	7.08	7.22	293	250	17.2
2,4,6-Tribromophenol (surr	10.64	10.57	10.71	27.4	25.0	9.6

AVERAGE %D = 7.5

FORM VII PCP

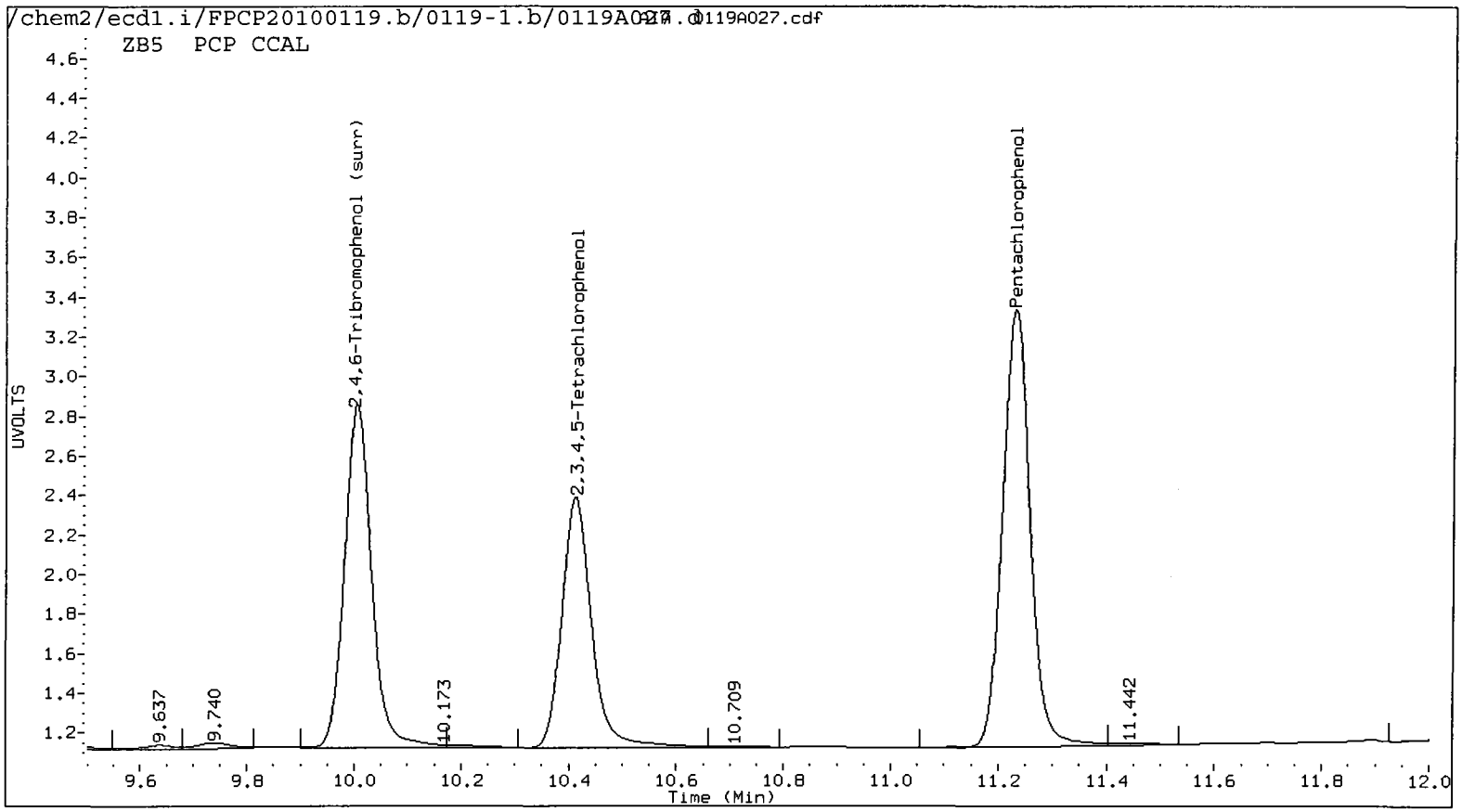
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A027.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A027.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 04:06
Compound Sublist: all Report Date: 01/20/2010 13:03
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
11.231	0.005	387408	11.663	0.007	455654	26.5736	27.8932	4.8	Pentachlorophenol
7.267	0.003	225446	7.330	0.005	267000	24.5401	25.1309	2.4	2,4,6-Trichlorophenol
7.621	0.004	215614	7.860	0.006	264717	23.9704	24.3003	1.4	2,3,6-Trichlorophenol
8.226	0.010	120979	8.594	0.009	136591	29.0822	25.8748	11.7	2,4,5-Trichlorophenol
8.776	0.011	149120	9.363	0.011	178059	28.2727	27.0000	4.6	2,3,4-Trichlorophenol
9.007	0.006	344117	9.269	0.008	396913	25.8820	26.1109	0.9	2,3,5,6-Tetrachlorophenol
10.412	0.010	245300	11.121	0.010	291752	27.9957	27.4933	1.8	2,3,4,5-Tetrachlorophenol
6.887	0.004	111069	7.155	0.006	130239	286.8612	293.4154	2.3	2,4-Dichlorophenol
10.003	0.007	308111	10.644	0.008	383955	28.0	27.4	2.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	106.3	111.6
2,4,6-Trichlorophenol	98.2	100.5
2,3,6-Trichlorophenol	95.9	97.2
2,4,5-Trichlorophenol	116.3	103.5
2,3,4-Trichlorophenol	113.1	108.0
2,3,5,6-Tetrachlorophenol	103.5	104.4
2,3,4,5-Tetrachlorophenol	112.0	110.0
2,4-Dichlorophenol	114.7	117.4
2,4,6-TBP (surr)	111.9	109.5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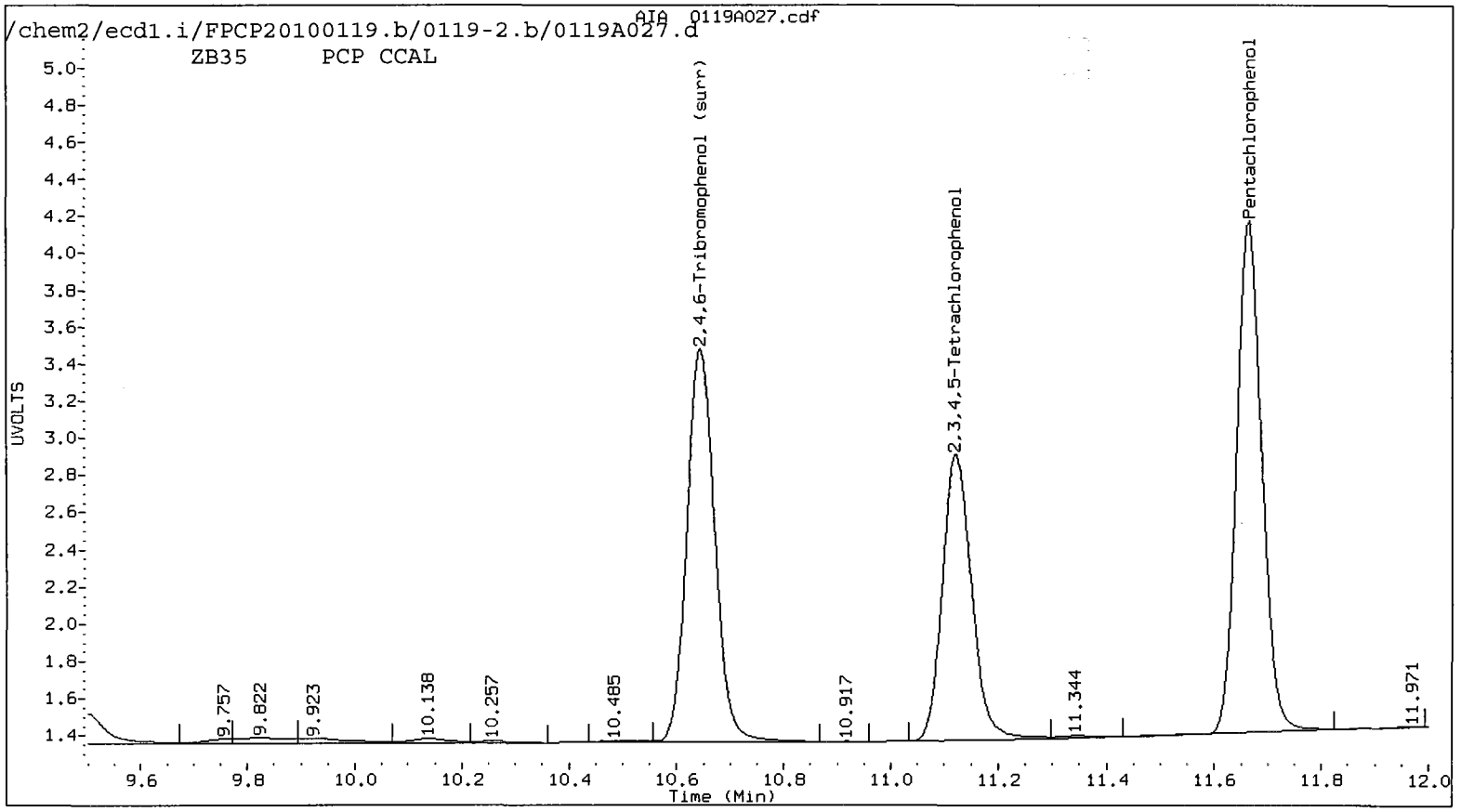
AIA 0119A027.cdf
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.637
9.740
10.173
10.709
11.442
Time (Min)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AIA 0119A027.cdf
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.757
9.822
9.923
10.138
10.257
10.485
10.917
11.344
11.971
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0645

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.23	11.16	11.30	26.8	25.0	7.2
2,4,6-Trichlorophenol	7.27	7.19	7.33	26.2	25.0	4.8
2,3,6-Trichlorophenol	7.62	7.55	7.69	24.2	25.0	-3.2
2,4,5-Trichlorophenol	8.23	8.15	8.29	28.1	25.0	12.4
2,3,4-Trichlorophenol	8.78	8.70	8.84	28.3	25.0	13.2
2,3,5,6-Tetrachlorophenol	9.01	8.93	9.07	26.3	25.0	5.2
2,3,4,5-Tetrachlorophenol	10.41	10.33	10.47	28.4	25.0	13.6
2,4-Dichlorophenol	6.89	6.81	6.95	284	250	13.6
2,4,6-Tribromophenol (surr	10.01	9.93	10.07	28.6	25.0	14.4

AVERAGE %D = 9.7

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :0645

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.67	11.59	11.73	28.6	25.0	14.4
2,4,6-Trichlorophenol	7.33	7.25	7.39	25.4	25.0	1.6
2,3,6-Trichlorophenol	7.86	7.78	7.92	24.7	25.0	-1.2
2,4,5-Trichlorophenol	8.60	8.51	8.65	25.9	25.0	3.6
2,3,4-Trichlorophenol	9.36	9.28	9.42	27.8	25.0	11.2
2,3,5,6-Tetrachlorophenol	9.27	9.19	9.33	26.8	25.0	7.2
2,3,4,5-Tetrachlorophenol	11.12	11.04	11.18	28.2	25.0	12.8
2,4-Dichlorophenol	7.16	7.08	7.22	285	250	14.0
2,4,6-Tribromophenol (surr	10.65	10.57	10.71	28.3	25.0	13.2

AVERAGE %D = 8.8

FORM VII PCP

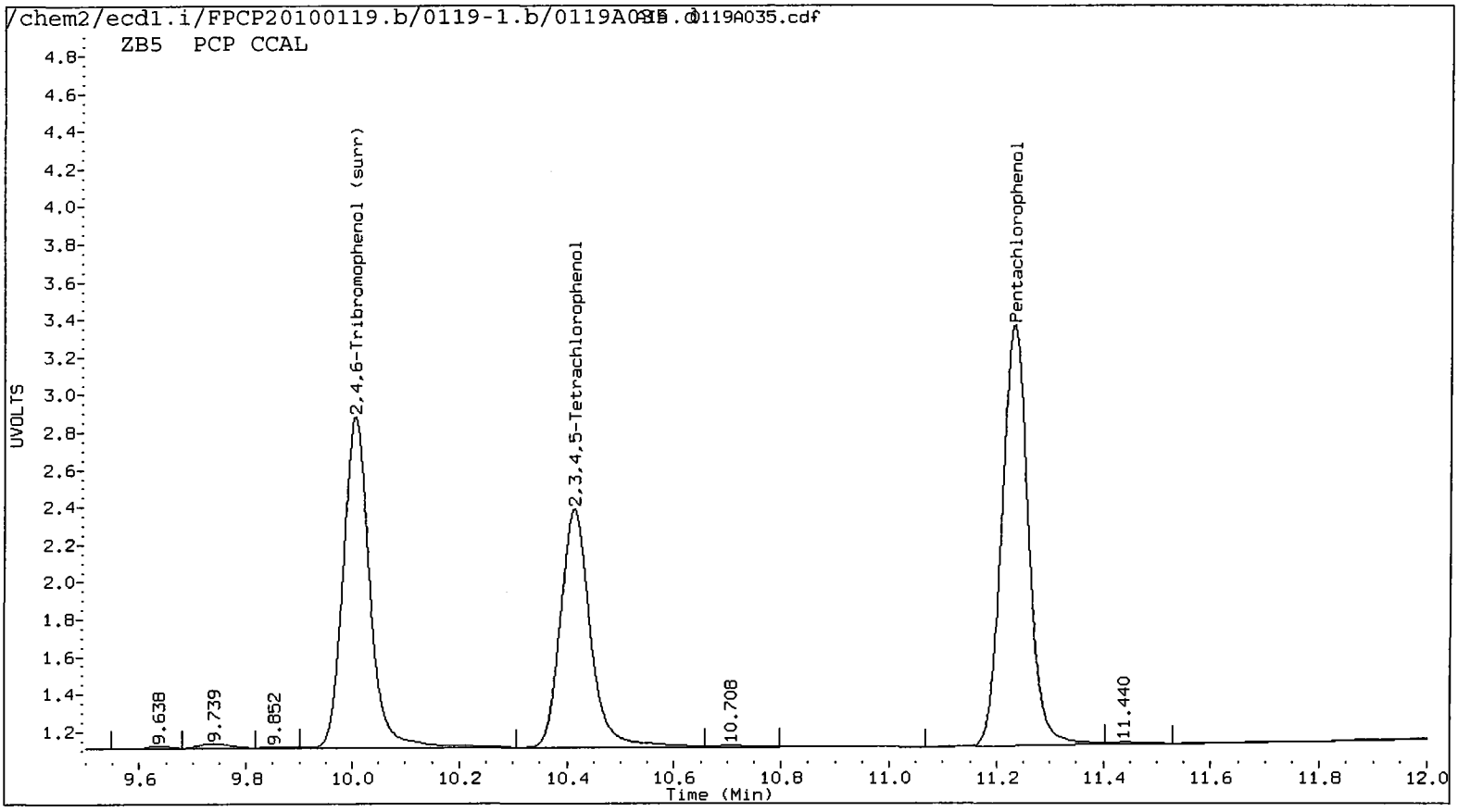
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A035.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A035.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 06:45
Compound Sublist: all Report Date: 01/20/2010 13:03
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
11.232	0.007	390545	11.665	0.009	467009	26.7887	28.5883	6.5	Pentachlorophenol
7.267	0.003	240544	7.331	0.006	270439	26.1836	25.4545	2.8	2,4,6-Trichlorophenol
7.622	0.005	217915	7.861	0.007	269472	24.2261	24.7368	2.1	2,3,6-Trichlorophenol
8.227	0.011	116900	8.596	0.011	136714	28.1015	25.8982	8.2	2,4,5-Trichlorophenol
8.777	0.012	149473	9.364	0.012	183398	28.3397	27.8095	1.9	2,3,4-Trichlorophenol
9.007	0.006	349214	9.270	0.010	407920	26.2653	26.8350	2.1	2,3,5,6-Tetrachlorophenol
10.413	0.012	249048	11.123	0.012	299739	28.4233	28.2458	0.6	2,3,4,5-Tetrachlorophenol
6.890	0.007	109958	7.156	0.007	126503	283.9918	284.9986	0.4	2,4-Dichlorophenol
10.006	0.010	314386	10.646	0.011	396441	28.6	28.3	1.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	107.2	114.4
2,4,6-Trichlorophenol	104.7	101.8
2,3,6-Trichlorophenol	96.9	98.9
2,4,5-Trichlorophenol	112.4	103.6
2,3,4-Trichlorophenol	113.4	111.2
2,3,5,6-Tetrachlorophenol	105.1	107.3
2,3,4,5-Tetrachlorophenol	113.7	113.0
2,4-Dichlorophenol	113.6	114.0
2,4,6-TBP (surr)	114.2	113.1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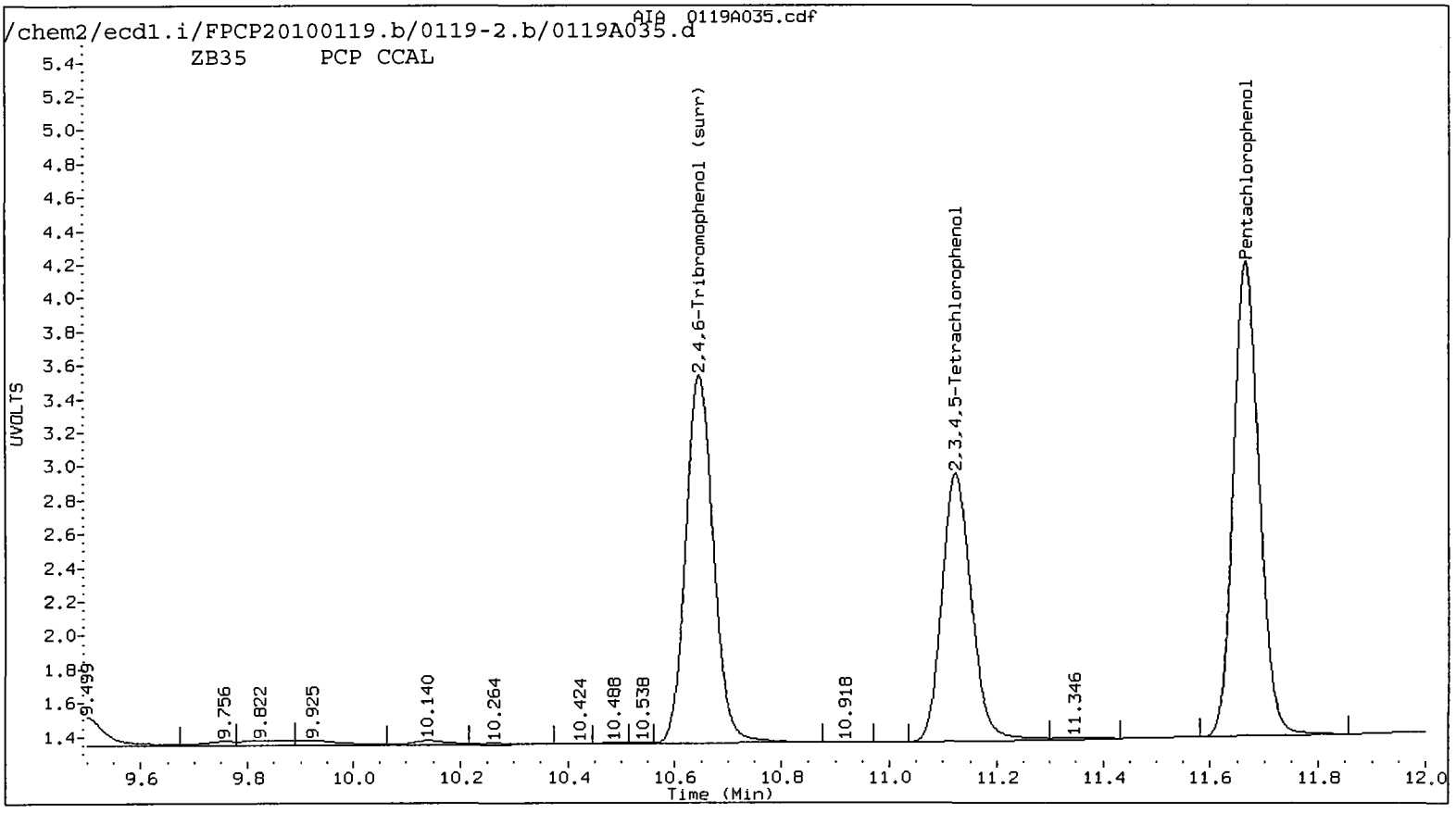
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.638
9.739
9.852
10.708
11.440
Time (Min)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ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.499
9.756
9.822
9.925
10.140
10.264
10.424
10.488
10.538
10.918
11.346
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1753

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.23	11.16	11.30	25.4	25.0	1.6
2,4,6-Trichlorophenol	7.27	7.19	7.33	22.5	25.0	-10.0
2,3,6-Trichlorophenol	7.62	7.55	7.69	22.2	25.0	-11.2
2,4,5-Trichlorophenol	8.23	8.15	8.29	26.8	25.0	7.2
2,3,4-Trichlorophenol	8.78	8.70	8.84	27.0	25.0	8.0
2,3,5,6-Tetrachlorophenol	9.01	8.93	9.07	26.7	25.0	6.8
2,3,4,5-Tetrachlorophenol	10.41	10.33	10.47	26.9	25.0	7.6
2,4-Dichlorophenol	6.89	6.81	6.95	260	250	4.0
2,4,6-Tribromophenol (surr	10.00	9.93	10.07	26.8	25.0	7.2

AVERAGE %D = 7.1

FORM VII PCP

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1753

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.66	11.59	11.73	27.5	25.0	10.0
2,4,6-Trichlorophenol	7.33	7.25	7.39	24.5	25.0	-2.0
2,3,6-Trichlorophenol	7.86	7.78	7.92	23.2	25.0	-7.2
2,4,5-Trichlorophenol	8.59	8.51	8.65	25.4	25.0	1.6
2,3,4-Trichlorophenol	9.36	9.28	9.42	26.7	25.0	6.8
2,3,5,6-Tetrachlorophenol	9.27	9.19	9.33	25.3	25.0	1.2
2,3,4,5-Tetrachlorophenol	11.12	11.04	11.18	26.8	25.0	7.2
2,4-Dichlorophenol	7.15	7.08	7.22	286	250	14.4
2,4,6-Tribromophenol (surr	10.64	10.57	10.71	26.8	25.0	7.2

AVERAGE %D = 6.4

FORM VII PCP

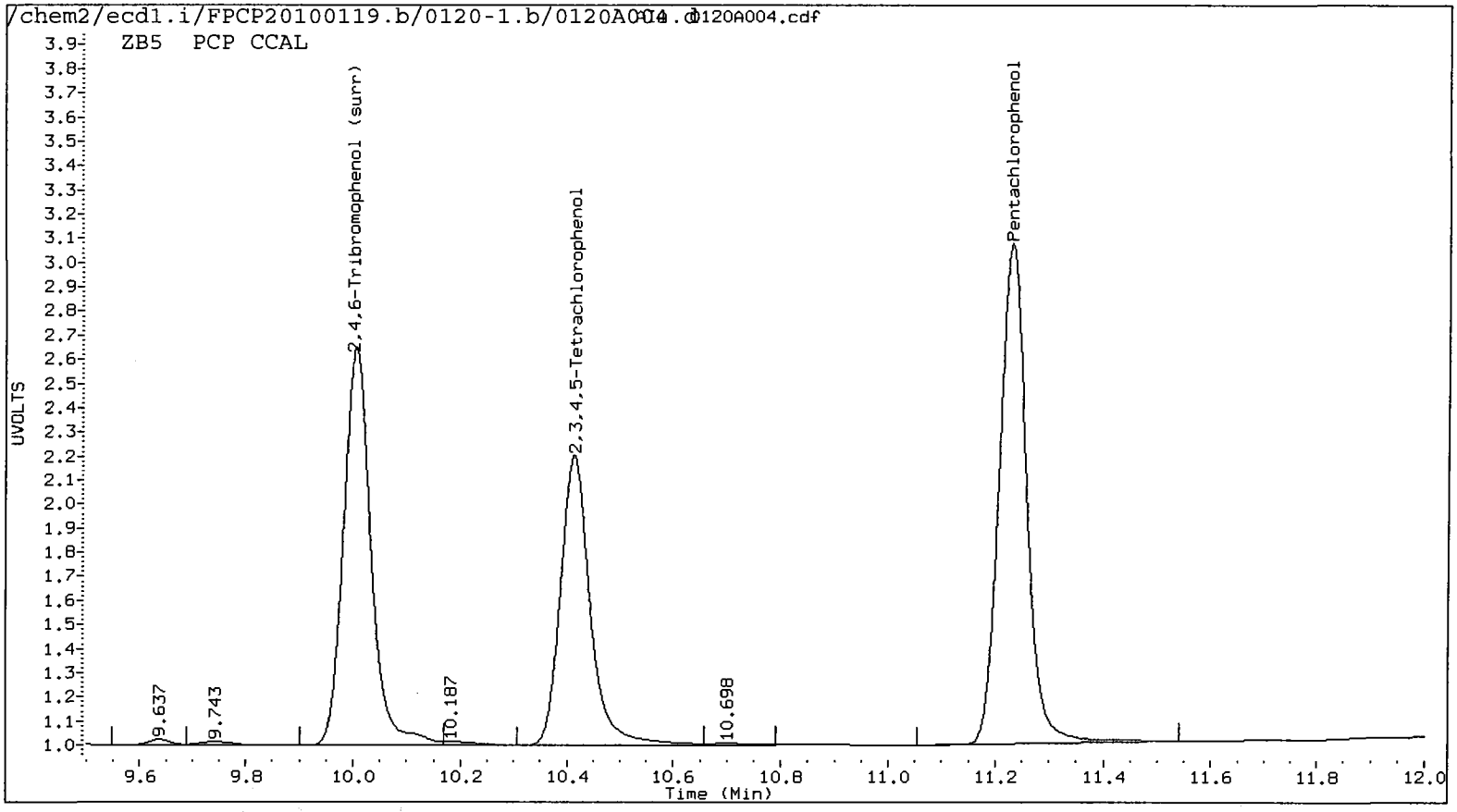
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0120-1.b/0120A004.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0120-2.b/0120A004.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 17:53
Compound Sublist: all Report Date: 01/21/2010 12:13
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
11.230	0.005	370138	11.663	0.007	449072	25.3889	27.4903	7.9	Pentachlorophenol
7.267	0.003	206871	7.329	0.005	260337	22.5183	24.5037	8.4	2,4,6-Trichlorophenol
7.621	0.004	199722	7.859	0.005	252223	22.2036	23.1534	4.2	2,3,6-Trichlorophenol
8.227	0.011	111437	8.595	0.010	134280	26.7883	25.4370	5.2	2,4,5-Trichlorophenol
8.778	0.012	142232	9.363	0.011	176255	26.9668	26.7265	0.9	2,3,4-Trichlorophenol
9.007	0.006	354590	9.269	0.008	384227	26.6697	25.2764	5.4	2,3,5,6-Tetrachlorophenol
10.413	0.011	235639	11.121	0.010	284861	26.8930	26.8438	0.2	2,3,4,5-Tetrachlorophenol
6.887	0.004	100598	7.155	0.006	126842	259.8175	285.7635	9.5	2,4-Dichlorophenol
10.003	0.007	295557	10.644	0.009	376598	26.8	26.9	0.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	101.6	110.0
2,4,6-Trichlorophenol	90.1	98.0
2,3,6-Trichlorophenol	88.8	92.6
2,4,5-Trichlorophenol	107.2	101.7
2,3,4-Trichlorophenol	107.9	106.9
2,3,5,6-Tetrachlorophenol	106.7	101.1
2,3,4,5-Tetrachlorophenol	107.6	107.4
2,4-Dichlorophenol	103.9	114.3
2,4,6-TBP (surr)	107.4	107.4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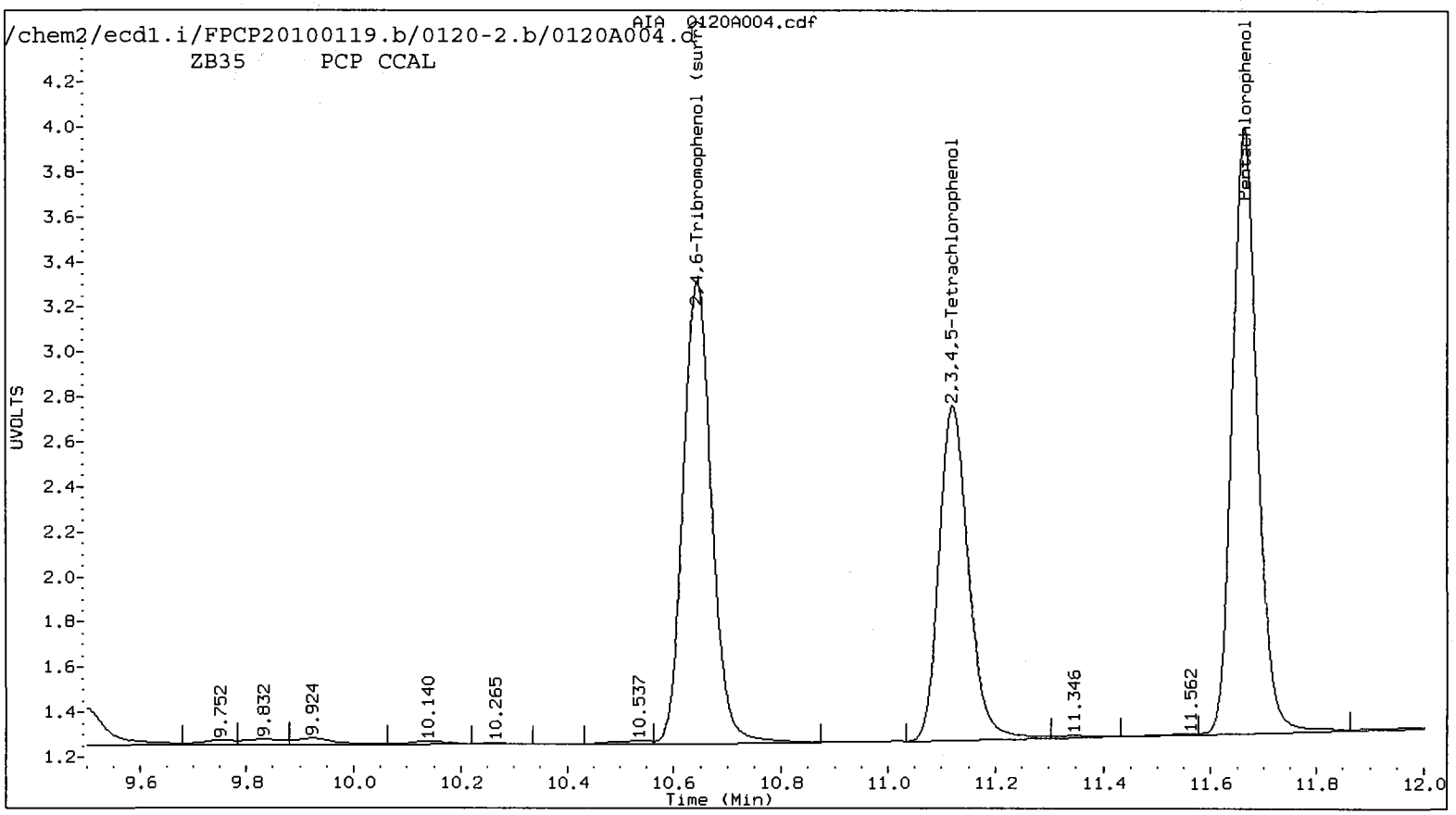
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.637
9.743
10.187
10.698
Time (Min)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ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.752
9.832
9.924
10.140
10.265
10.537
11.346
11.562
Time (Min)

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB5 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1853

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.23	11.16	11.30	25.0	25.0	0.0
2,4,6-Trichlorophenol	7.26	7.19	7.33	22.9	25.0	-8.4
2,3,6-Trichlorophenol	7.62	7.55	7.69	22.2	25.0	-11.2
2,4,5-Trichlorophenol	8.22	8.15	8.29	27.1	25.0	8.4
2,3,4-Trichlorophenol	8.77	8.70	8.84	25.2	25.0	0.8
2,3,5,6-Tetrachlorophenol	9.00	8.93	9.07	23.5	25.0	-6.0
2,3,4,5-Tetrachlorophenol	10.41	10.33	10.47	26.7	25.0	6.8
2,4-Dichlorophenol	6.89	6.81	6.95	264	250	5.6
2,4,6-Tribromophenol (surr	10.00	9.93	10.07	26.1	25.0	4.4

AVERAGE %D = 5.7

FORM VII PCP

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

ARI Job No.: QF10 Project: POS-LORA LAKE APTS

GC Column: ZB35 ID: 0.53 (mm)

Init. Calib. Date(s): 01/19/10 01/19/10

Client Sample No.(PCP): Date Analyzed :01/20/10

Lab Sample ID (PCP): PCP CCAL Time Analyzed :1853

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	11.66	11.59	11.73	27.2	25.0	8.8
2,4,6-Trichlorophenol	7.33	7.25	7.39	24.1	25.0	-3.6
2,3,6-Trichlorophenol	7.86	7.78	7.92	23.1	25.0	-7.6
2,4,5-Trichlorophenol	8.59	8.51	8.65	24.7	25.0	-1.2
2,3,4-Trichlorophenol	9.36	9.28	9.42	26.4	25.0	5.6
2,3,5,6-Tetrachlorophenol	9.26	9.19	9.33	25.2	25.0	0.8
2,3,4,5-Tetrachlorophenol	11.12	11.04	11.18	26.6	25.0	6.4
2,4-Dichlorophenol	7.15	7.08	7.22	282	250	12.8
2,4,6-Tribromophenol (surr	10.64	10.57	10.71	26.6	25.0	6.4

AVERAGE %D = 5.9

FORM VII PCP

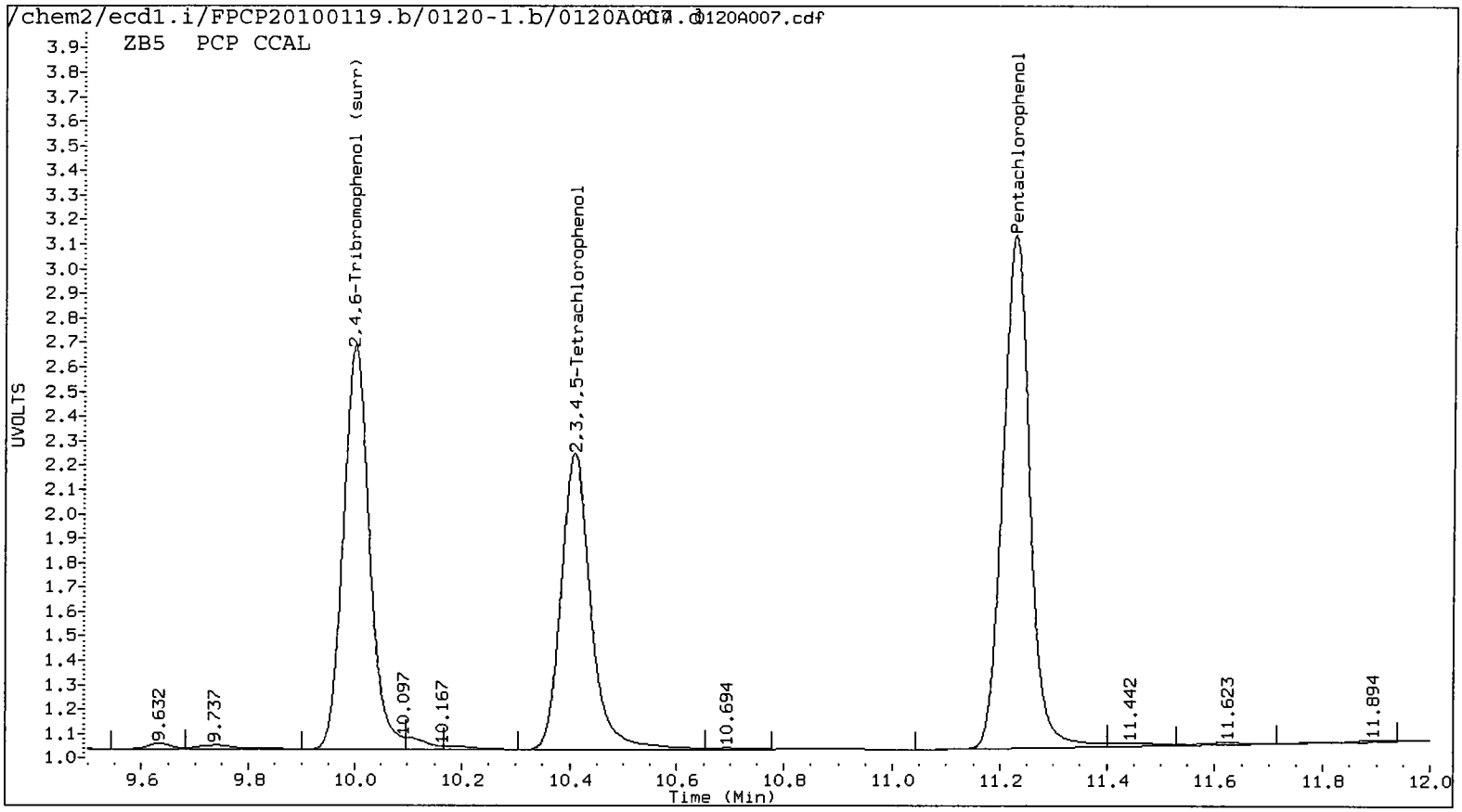
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0120-1.b/0120A007.d ARI ID: PCP CCAL
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0120-2.b/0120A007.d Client ID:
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 18:53
Compound Sublist: all Report Date: 01/21/2010 12:13
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
11.227	0.002	364514	11.660	0.004	443540	25.0032	27.1516	8.2	Pentachlorophenol
7.263	0.000	210772	7.327	0.002	256521	22.9429	24.1445	5.1	2,4,6-Trichlorophenol
7.618	0.001	199713	7.857	0.003	251699	22.2026	23.1053	4.0	2,3,6-Trichlorophenol
8.223	0.008	112740	8.592	0.007	130297	27.1015	24.6825	9.3	2,4,5-Trichlorophenol
8.774	0.008	133077	9.360	0.008	173934	25.2310	26.3744	4.4	2,3,4-Trichlorophenol
9.003	0.003	312833	9.265	0.004	383374	23.5290	25.2202	6.9	2,3,5,6-Tetrachlorophenol
10.409	0.007	234322	11.117	0.006	282593	26.7427	26.6301	0.4	2,3,4,5-Tetrachlorophenol
6.887	0.004	102173	7.153	0.004	125061	263.8853	281.7499	6.5	2,4-Dichlorophenol
10.000	0.003	287067	10.640	0.005	373055	26.1	26.6	2.0	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	100.0	108.6
2,4,6-Trichlorophenol	91.8	96.6
2,3,6-Trichlorophenol	88.8	92.4
2,4,5-Trichlorophenol	108.4	98.7
2,3,4-Trichlorophenol	100.9	105.5
2,3,5,6-Tetrachlorophenol	94.1	100.9
2,3,4,5-Tetrachlorophenol	107.0	106.5
2,4-Dichlorophenol	105.6	112.7
2,4,6-TBP (surr)	104.3	106.4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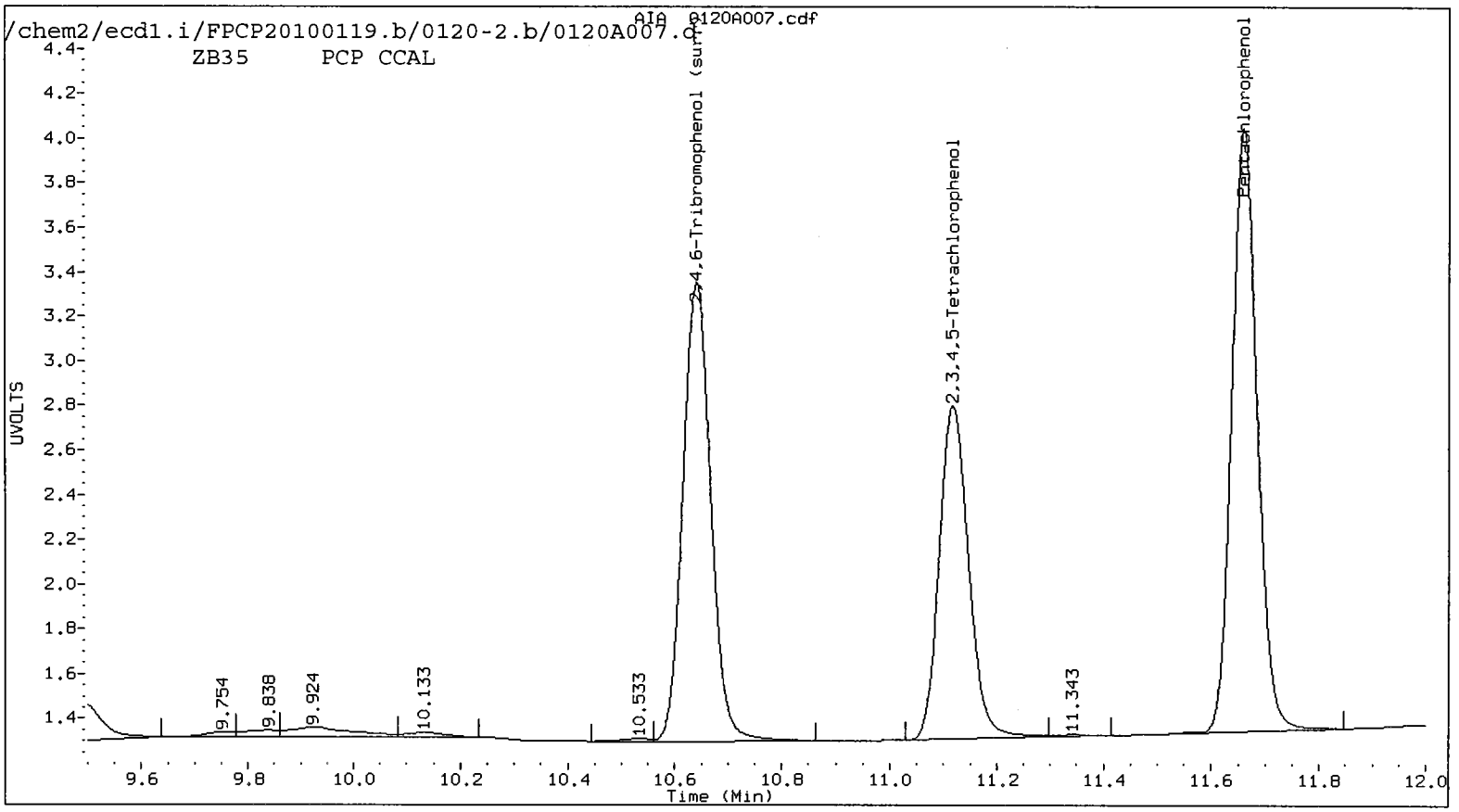
0120A007.cdf
ZB5 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.632
9.737
10.097
10.167
10.694
11.442
11.623
11.894
Time (Min)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0120A007.cdf
ZB35 PCP CCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.754
9.838
9.924
10.133
10.533
11.343
Time (Min)

QF10:00508

PCP/Chlorophenols ANALYSIS
QC Raw Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

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-011410
METHOD BLANK

Lab Sample ID: MB-011410
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: NA
Date Received: NA

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 04:26
Instrument/Analyst: ECD1/AAR

Sample Amount: 10.0 g
Final Extract Volume: 25 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	6.2	< 6.2 U

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	64.0%

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

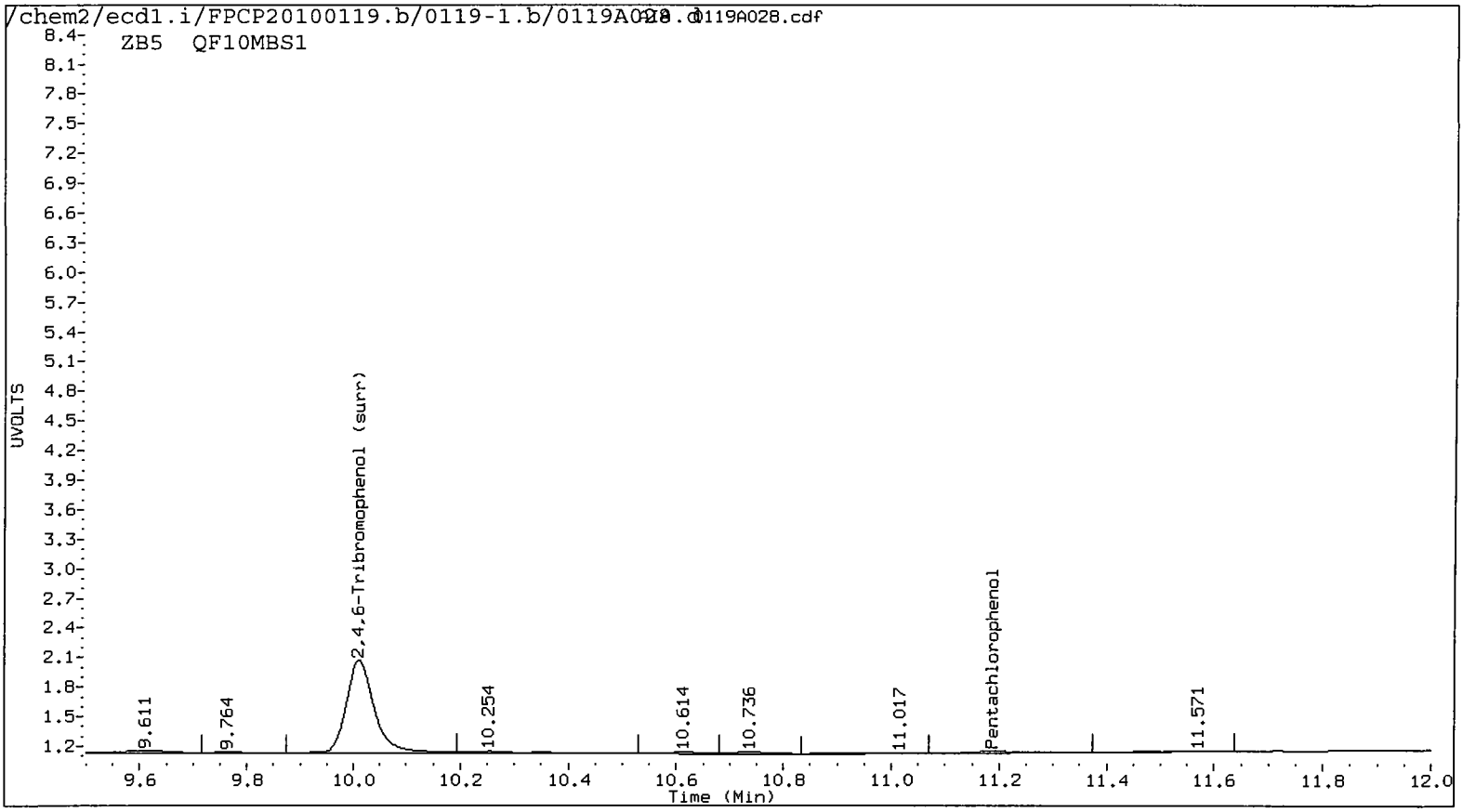
AR 1/20/2010

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A028.d ARI ID: QF10MBS1
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A028.d Client ID: QF10MBS1
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 04:26
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
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
11.187	-0.038	6189	----			0.4245	0.0000 LRC	---	Pentachlorophenol
7.289	0.026	31205	7.368	0.043	26525	3.3967	2.4966	30.5	2,4,6-Trichlorophenol
----			7.841	-0.013	4179	0.0000	0.3836	---	2,3,6-Trichlorophenol
8.147	-0.068	2019	----			0.4855	0.0000	---	2,4,5-Trichlorophenol
8.774	0.008	2595	----			0.4920	0.0000	---	2,3,4-Trichlorophenol
9.037	0.037	9876	9.265	0.005	8526	0.7428	0.5609	27.9	2,3,5,6-Tetrachlorophenol
----			----			0.0000	0.0000	---	2,3,4,5-Tetrachlorophenol
6.854	-0.029	3990	7.130	-0.019	9067	10.3064	20.4270 NR	65.9*	2,4-Dichlorophenol
10.012	0.015	176560	10.650	0.014	214235	16.0	15.3	4.9	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	64.1	61.1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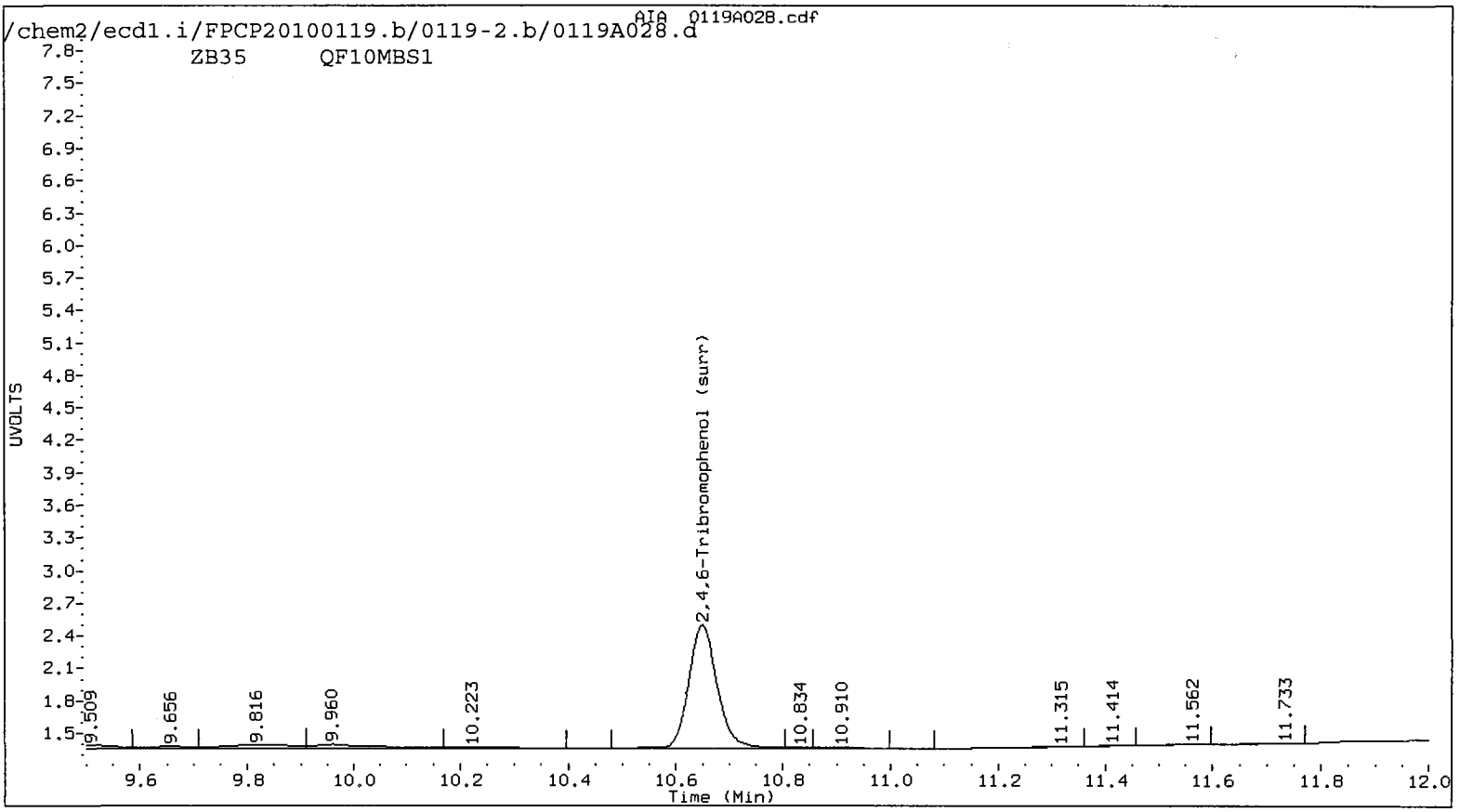
AIA 0119A028.cdf
ZB5 QF10MBS1
UVOLTS
2,4,6-Tribromophenol (surr)
Pentachlorophenol
9.611
9.764
10.254
10.614
10.736
11.017
11.571
Time (Min)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AIA 0119A028.cdf
ZB35 QF10MBS1
UVOLTS
2,4,6-Tribromophenol (surr)
9.509
9.656
9.816
9.960
10.223
10.834
10.910
11.315
11.414
11.562
11.733
Time (Min)

QF10:0059H

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Page 1 of 1

Sample ID: CB31A011110SED
MATRIX SPIKE

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:25
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.91 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	79	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	79.8%

FORM I

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

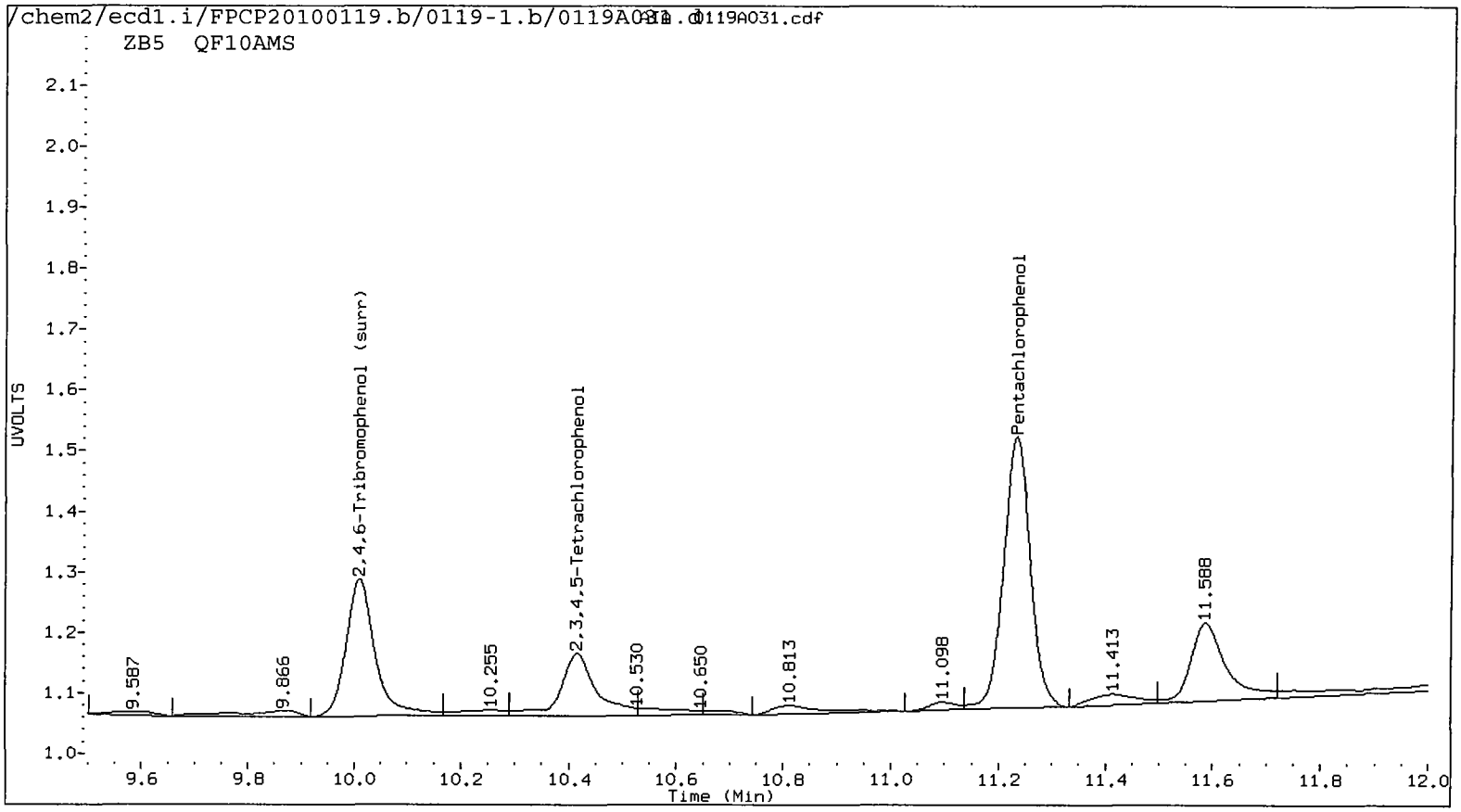
AR 1/20/2010

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A031.d ARI ID: QF10AMS
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A031.d Client ID: CB31A011110SED MS
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 05:25
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 10.000

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
11.234	0.009	78023	11.667	0.011	84228	5.3519	5.1561	3.7	Pentachlorophenol
7.267	0.003	29043	7.332	0.007	21113	3.1614	1.9873	45.6*	2,4,6-Trichlorophenol
7.623	0.006	24456	7.863	0.009	21477	2.7189	1.9715	31.9	2,3,6-Trichlorophenol
8.233	0.018	9250	8.600	0.015	13454	2.2237	2.5487	13.6	2,4,5-Trichlorophenol
8.786	0.021	15995	9.370	0.018	7867	3.0326	1.1929	87.1*	2,3,4-Trichlorophenol
9.016	0.015	44844	9.273	0.012	29778	3.3728	1.9589	53.0*	2,3,5,6-Tetrachlorophenol
10.417	0.015	23886	11.124	0.013	20879	2.7261	1.9675	32.3	2,3,4,5-Tetrachlorophenol
6.896	0.013	1930	7.153	0.004	7189	4.9847	16.1961	105.9*	2,4-Dichlorophenol
10.010	0.014	43896	10.647	0.012	46611	4.0	3.3	18.1	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	214.1	206.2
2,4,6-Trichlorophenol	126.5	79.5
2,3,6-Trichlorophenol	108.8	78.9
2,4,5-Trichlorophenol	88.9	101.9
2,3,4-Trichlorophenol	121.3	47.7
2,3,5,6-Tetrachlorophenol	134.9	78.4
2,3,4,5-Tetrachlorophenol	109.0	78.7
2,4-Dichlorophenol	19.9	64.8
2,4,6-TBP (surr)	79.7	66.5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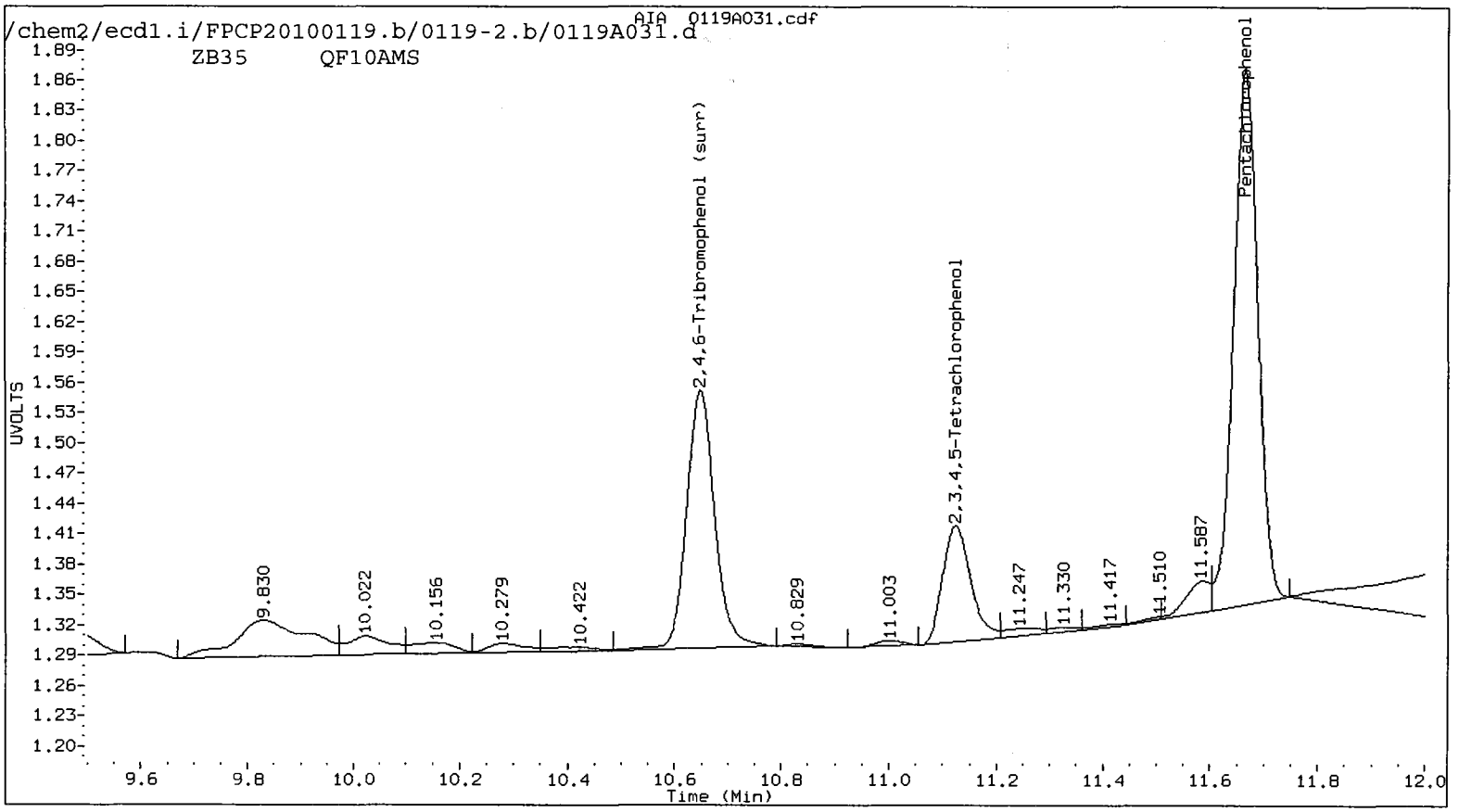
ZB5 QF10AMS
UVOLTS
Time (Min)
9.587
9.866
2,4,6-Tribromophenol (surr)
10.255
2,3,4,5-Tetrachlorophenol
10.530
10.650
10.813
11.098
Pentachlorophenol
11.413
11.588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AIA 0119A031.cdf
ZB35 QF10AMS
UVOLTS
Time (Min)
9.830
10.022
10.156
10.279
10.422
2,4,6-Tribromophenol (surr)
10.829
11.003
2,3,4,5-Tetrachlorophenol
11.247
11.330
11.417
11.510
11.587
Pentachlorophenol

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041

Sample ID: CB31A011110SED
MATRIX SPIKE DUP

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/21/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/14/10
Date Analyzed: 01/20/10 05:45
Instrument/Analyst: ECD1/AAR

Sample Amount: 7.90 g-dry-wt
Final Extract Volume: 25 mL
Dilution Factor: 10.0
Percent Moisture: 21.6%

CAS Number	Analyte	RL	Result
87-86-5	Pentachlorophenol	79	---

Reported in µg/kg (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	117%

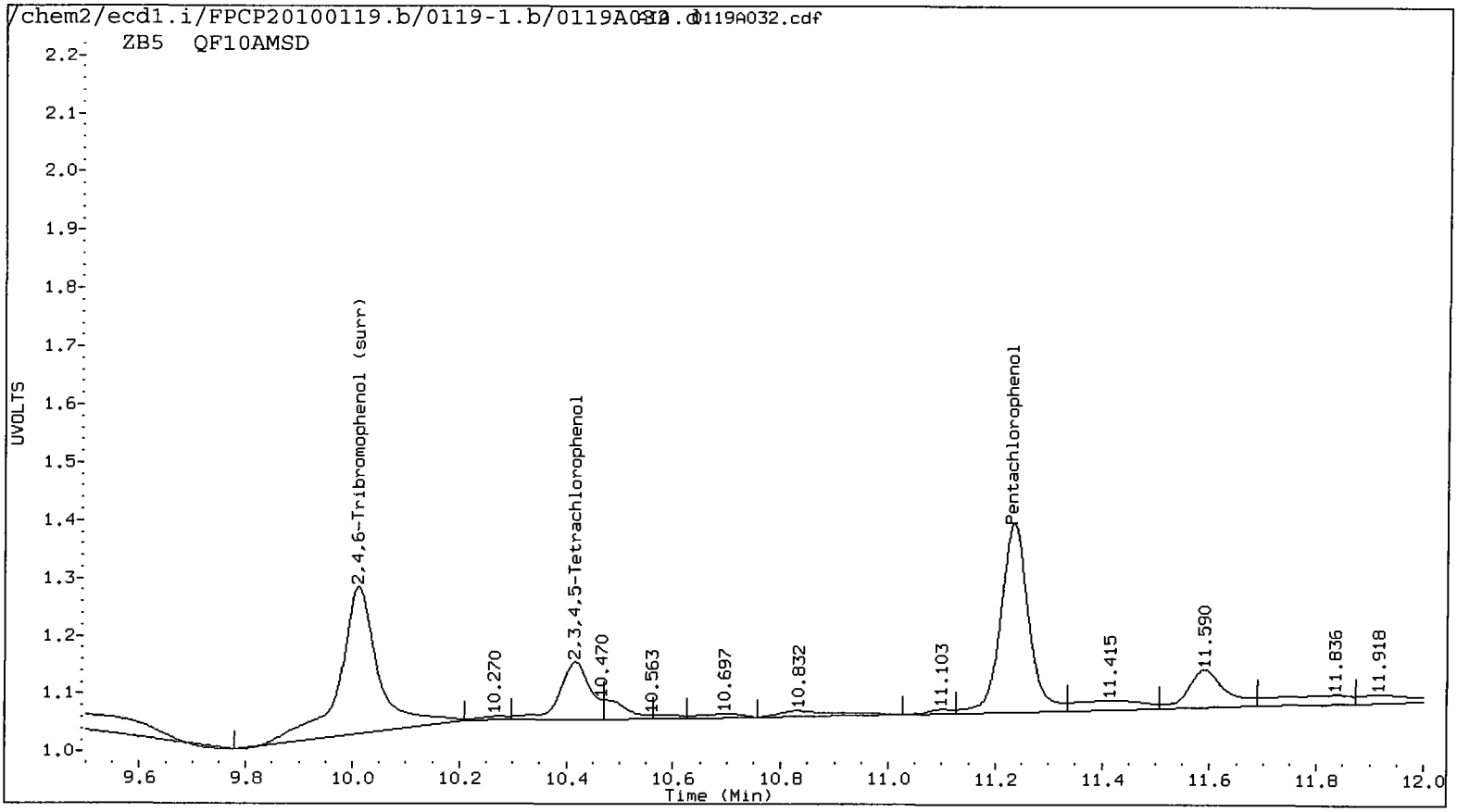
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report AR 1/20/2010

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A032.d ARI ID: QF10AMSD
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A032.d Client ID: CB31A011110SED MSD
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 05:45
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
Operator: ar Dilution Factor: 10.000

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
11.233	0.008	59768	11.667	0.011	68474	4.0997	4.1917	2.2	Pentachlorophenol
7.267	0.003	30271	7.333	0.008	22289	3.2950	2.0980	44.4*	2,4,6-Trichlorophenol
7.623	0.006	20642	7.863	0.009	22136	2.2949	2.0320	12.1	2,3,6-Trichlorophenol
8.240	0.024	10345	8.602	0.017	11179	2.4868	2.1178	16.0	2,4,5-Trichlorophenol
8.788	0.023	8261	9.371	0.019	9294	1.5663	1.4093	10.6	2,3,4-Trichlorophenol
9.017	0.016	40718	9.273	0.012	31323	3.0625	2.0606	39.1	2,3,5,6-Tetrachlorophenol
10.417	0.015	20537	11.125	0.014	21942	2.3438	2.0677	12.5	2,3,4,5-Tetrachlorophenol
6.893	0.010	2398	7.153	0.004	6795	6.1947	15.3096	84.8*	2,4-Dichlorophenol
10.011	0.015	64204	10.650	0.015	50215	5.8	3.6	47.8*	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	164.0	167.7
2,4,6-Trichlorophenol	131.8	83.9
2,3,6-Trichlorophenol	91.8	81.3
2,4,5-Trichlorophenol	99.5	84.7
2,3,4-Trichlorophenol	62.7	56.4
2,3,5,6-Tetrachlorophenol	122.5	82.4
2,3,4,5-Tetrachlorophenol	93.8	82.7
2,4-Dichlorophenol	24.8	61.2
2,4,6-TBP (surr)	116.6	71.6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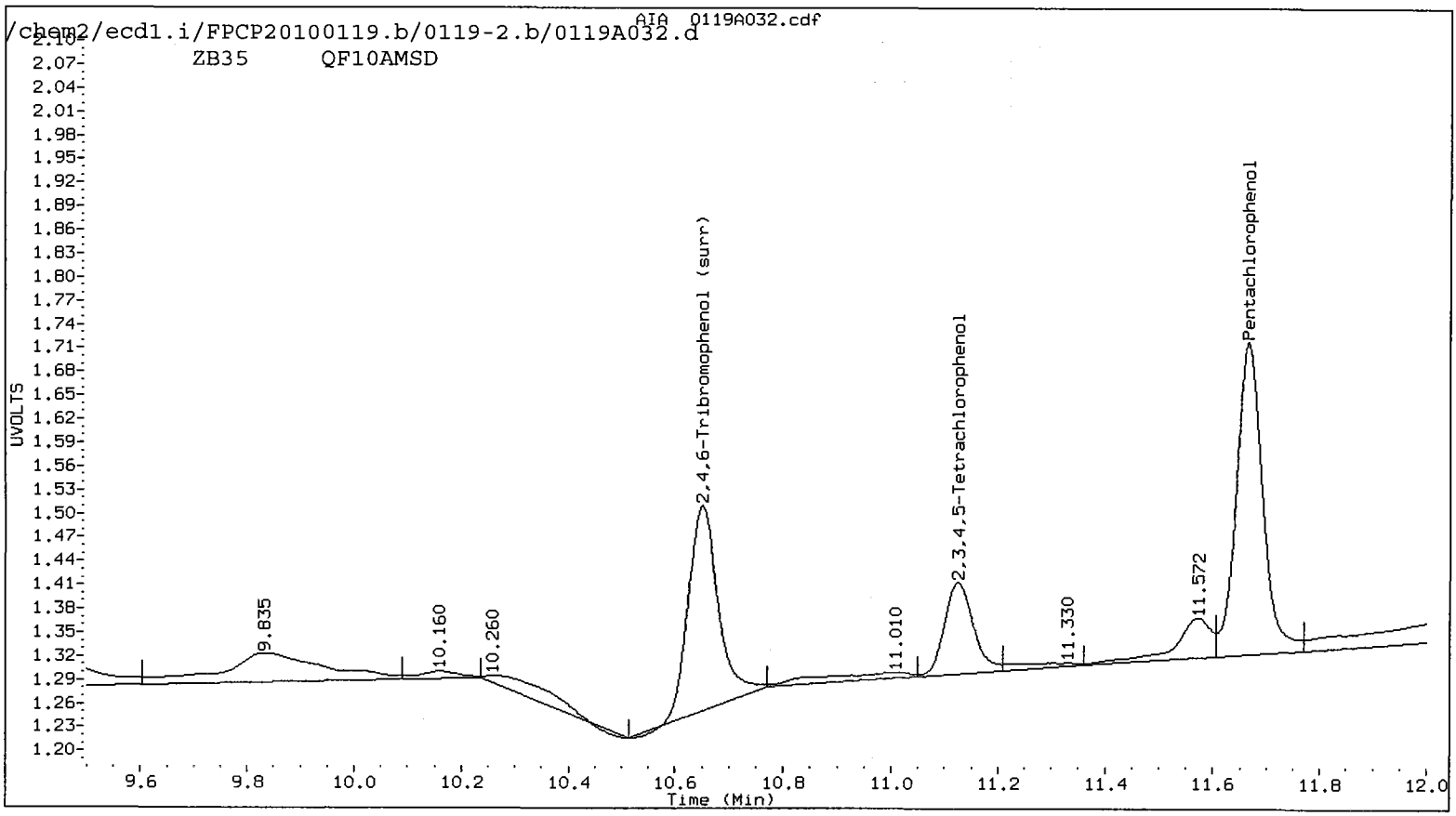
ZB5 QF10AMSD
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
10.270
10.470
10.563
10.697
10.832
11.103
11.415
11.590
11.836
11.918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AIA 0119A032.cdf
ZB35 QF10AMSD
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.835
10.160
10.260
11.010
11.330
11.572

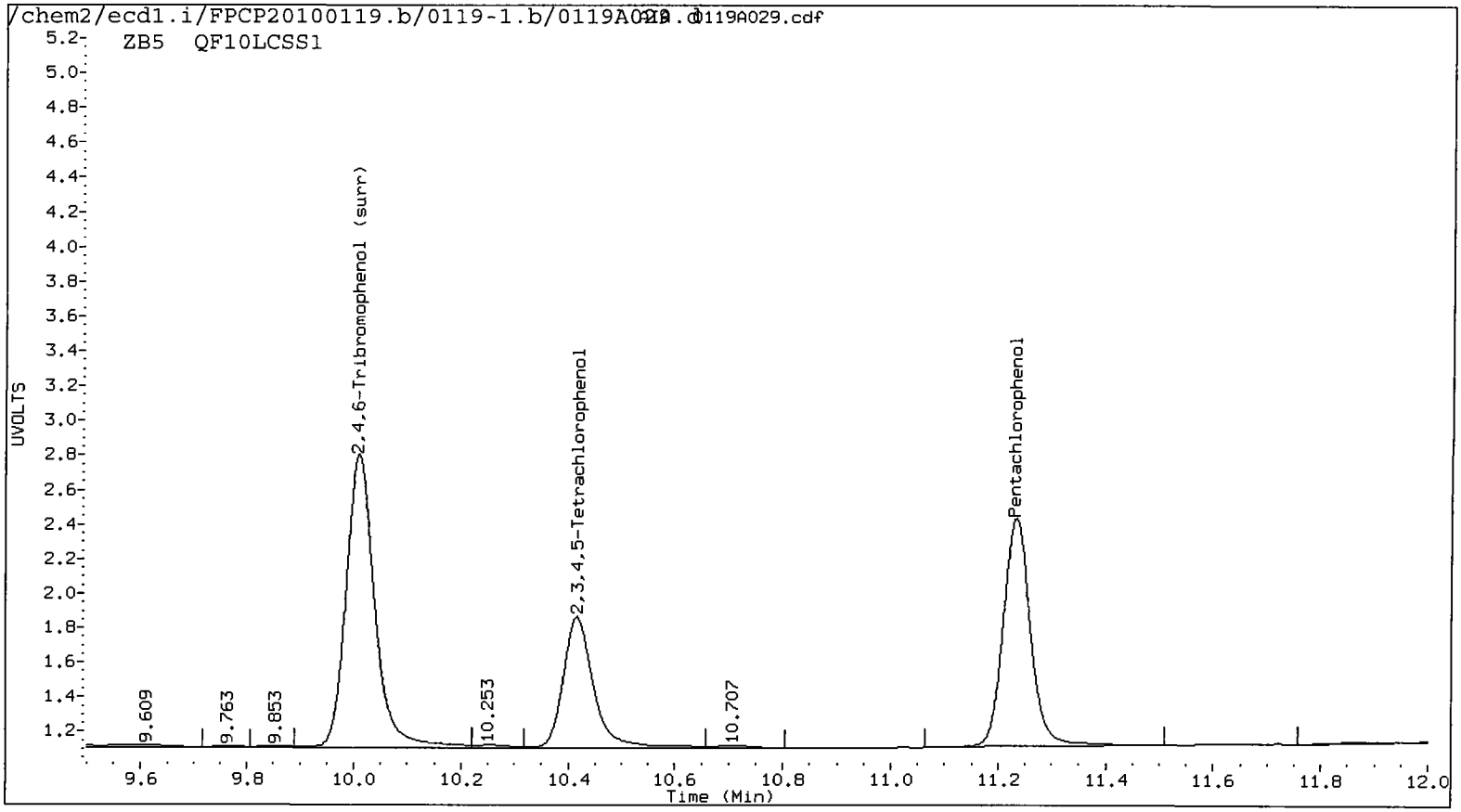
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/FPCP20100119.b/0119-1.b/0119A029.d ARI ID: QF10LCSS1
Data file 2: /chem2/ecd1.i/FPCP20100119.b/0119-2.b/0119A029.d Client ID: QF10LCSS1
Method: /chem2/ecd1.i/FPCP20100119.b/FPCP.m Injection Date: 20-JAN-2010 04:46
Compound Sublist: all Report Date: 01/20/2010 13:03
Instrument: ecd1.i Matrix: SOIL
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
11.233	0.008	235560	11.666	0.010	278832	16.1578	17.0689	5.5	Pentachlorophenol
7.267	0.003	136715	7.332	0.007	149547	14.8816	14.0758	5.6	2,4,6-Trichlorophenol
7.623	0.006	138256	7.862	0.008	153205	15.3703	14.0638	8.9	2,3,6-Trichlorophenol
8.233	0.018	77773	8.601	0.016	74789	18.6959	14.1676	27.6	2,4,5-Trichlorophenol
8.787	0.021	76078	9.370	0.018	101064	14.4242	15.3249	6.1	2,3,4-Trichlorophenol
9.012	0.011	210952	9.273	0.012	235679	15.8663	15.5042	2.3	2,3,5,6-Tetrachlorophenol
10.416	0.014	152525	11.125	0.014	178103	17.4074	16.7835	3.6	2,3,4,5-Tetrachlorophenol
6.893	0.010	28295	7.158	0.009	37216	73.0796	83.8439	13.7	2,4-Dichlorophenol
10.010	0.013	316840	10.648	0.013	387154	28.8	27.6	4.2	2,4,6-Tribromophenol (surr)

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	64.6	68.3
2,4,6-Trichlorophenol	59.5	56.3
2,3,6-Trichlorophenol	61.5	56.3
2,4,5-Trichlorophenol	74.8	56.7
2,3,4-Trichlorophenol	57.7	61.3
2,3,5,6-Tetrachlorophenol	63.5	62.0
2,3,4,5-Tetrachlorophenol	69.6	67.1
2,4-Dichlorophenol	29.2	33.5
2,4,6-TBP (surr)	57.6	55.2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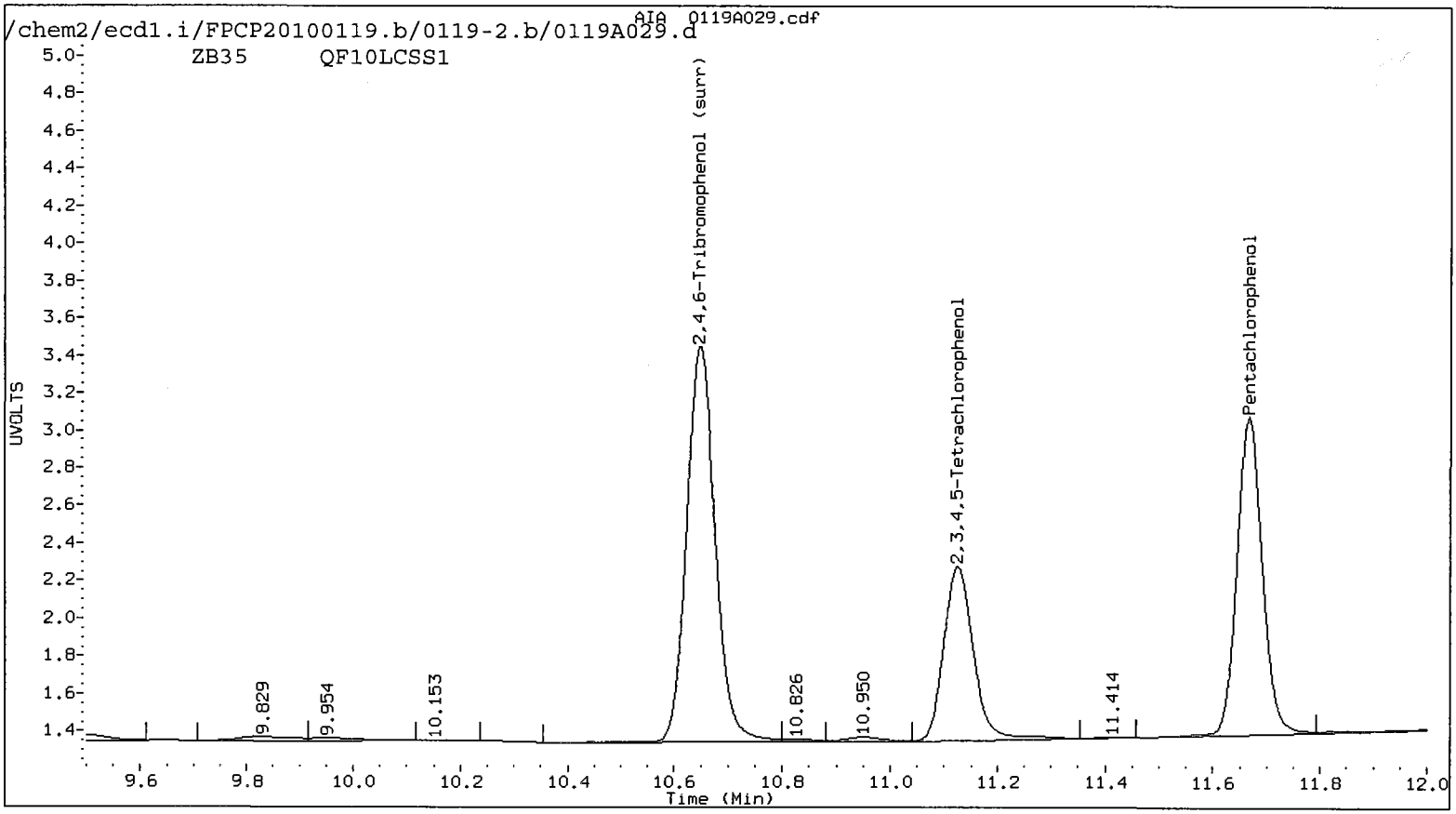
ZB5 QF10LCSS1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.609
9.763
9.853
10.253
10.707
Time (Min)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AIA 0119A029.cdf
ZB35 QF10LCSS1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
9.829
9.954
10.153
10.826
10.950
11.414
Time (Min)

PCP/Chlorophenols ANALYSIS
Extraction Bench Sheets/Run Logs

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – (Soil) / Sediment
Sonication (3550B) (SOP # 367S)

Preparation Test PCP # 3

In-House

ARI Job No(s) QF10

Batch set up by: SH

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
	QF10 MB	Date 01/14/10	10.00g			25mL	1-2mL		
	SB	↓	↓						
15	A	checked	10.02						
15	AMS		10.09						
15	AMSD		10.08						
7	B		10.09						
Analyst/Date: AR 01/14/10				RF/TS 1/15/10	MD 01/15/10	MD 01/15/10	MD 01/15/10		

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
Surrogate	F 1683-3	50µL 12.5	12/07/10		TH
Spike	6 1655-3	50µL 12.5	9/24/10		TH
Extraction Time:	14:22	125			

SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers. 2. Acidify all with ¼ pipet conc. Sulfuric Acid. 3. Add surr/spike.

4. Leave in DCM overnight. 5. Extract 3X DCM. 6. Pour directly into KD (NO Glasswool). 7. KD to 5mL at 80°.

8. Exchange (2 X with 20mL) Hexane at 100°. 9. *Note: if filtering is necessary: Pre-rinse filter with 0.05% HCL in Acetone+Post Rinse with Hexane.

10. Turbo Vap to 1mL 11. Pipet into Herb Tubes. 12. GC Analyst to Derivitize.

QA# 1242

A. Need Total Solids Y / (N) B. Archive / Freeze Y / (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: QF10 Client ID: Floyd-Snider

Parameter: PCP Client Project: POS-Lora Lake Apts Interim Action

SOP Number(s): 3675 No Anomalies:

List problems, concerns, corrective actions and any other pertinent information

LIGHT PRECIPITATE, WHITE IN COLOR, IN MB AND SB. no 01/18/10

Analyst Initials: Date:

5F

Revision 006
1/12/07

QF10:00605

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: Phenols Curve Client ID: ARI

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): Cl. Phenols, Method 8041, 4125

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: 1/19/2010 Analysis Start: 1/19/2010

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

ICV
~~CCal~~ Meets RF & %RSD Criteria YES / NO

Surrogate Recovery In Control? YES / NO / NA

Internal Standard Meets Criteria? YES / NO / NA

Special Analysis Criteria Met? YES / NO / NA AR 1/20/10

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

1st col 2,4-dichlorophenol linear-forced

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 1/20/2010

Reviewer's Signature: _____ **Date:** 1/20/10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: QF10 Client ID: Floyd-Snider

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): Cl. Phenols, 4125, Method 8041

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: 1/19/2010 Analysis Start: 1/19/2010

Endrin/DDT Breakdown <15%? YES / NO / NA

Method Blank In Control? YES / NO (1)

ICal Meets RF & %RSD Criteria? YES / NO

LCS/LCSD Recovery In Control? YES / NO (1)

CCal Meets RF & %RSD Criteria YES / NO (1)

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):

(1) For requested analytes

* Diluted Samples to avoid matrix (previous POS LLA hindered inst. performance & resulted in recurving); however, the MS/MSD on SampA were good at 10X the sample (A) needed to be run at 1x (just below ½ RL at 10X) I reported both the 1x & 10X runs. ~~Elac~~ AR 1/21/2010 11.3 & ~~15.8~~ 7.9 AR 35.4%RPD

I also spoke w/ Matt to ensure no problems with reporting.

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 1/20/2010

Reviewer's Signature: _____ **Date:** 1/21/10

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: Floyd-Snider (AR 1/21/2010) Client ID: QF10

ARI SOP: **403S**(PCB) **405S**(Herbicides) **407S**(TPH-D) **409S**(HCID) **423S**(Pesticides) **Other**

Parameter(s): Cl. Phenols

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: 1/19/2010 Analysis Start: 1/20/2010

Endrin/DDT Breakdown <15%? YES / NO / NA

Method Blank In Control? YES / NO / NA

ICal Meets RF & %RSD Criteria? YES / NO (1)

LCS/LCSD Recovery In Control? YES / NO / NA

CCal Meets RF & %RSD Criteria YES / NO (1)

Surrogate Recovery In Control? YES / NO

Internal Standard Meets Criteria? YES / NO / NA

Special Analysis Criteria Met? YES / NO / NA

VDT

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

(1) For requested compounds.

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 1/21/2010

Reviewer's Signature: _____ **Date:** 1/21/10

TPHD Analysis
QC Summary Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA

Client ID	OTER	TOT OUT
MB-011210	97.0%	0
LCS-011210	95.4%	0
CB31A011110SED	88.4%	0
CB31A011110SED MS	78.9%	0
CB31A011110SED MSD	86.6%	0
CB99011110SED	91.2%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(63-115)	(49-120)

Prep Method: SW3546
Log Number Range: 10-690 to 10-691

FORM-II TPHD

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: CB31A011110SED**
Page 1 of 1 **MS/MSD**

Lab Sample ID: QF10A
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted MS/MSD: 01/12/10

Date Analyzed MS: 01/14/10 23:49
MSD: 01/15/10 00:09
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 8.00 g-dry-wt
MSD: 7.94 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.0
MSD: 1.0
Percent Moisture: 21.6%

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	54.4	158	188	55.1%	185	189	69.1%	15.7%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	78.9%	86.6%

Results reported in mg/kg
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-011210**
LAB CONTROL

Lab Sample ID: LCS-011210
LIMS ID: 10-690
Matrix: Soil
Data Release Authorized:
Reported: 01/19/10

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Action
POS-LLA
Date Sampled: 01/11/10
Date Received: 01/12/10

Date Extracted: 01/12/10
Date Analyzed: 01/14/10 23:10
Instrument/Analyst: FID/MS

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL
Dilution Factor: 1.0

Range	Lab Control	Spike Added	Recovery
Diesel	132	150	88.0%

TPHD Surrogate Recovery

o-Terphenyl	95.4%

Results reported in mg/kg

TPH METHOD BLANK SUMMARY

BLANK NO.

QF10MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

SDG No.: QF10 Project No.: POS-LLA

Date Extracted: 01/12/10 Matrix: SOLID

Date Analyzed : 01/14/10 Instrument ID : FID9

Time Analyzed : 2251

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	QF10LCSS1	QF10LCSS1	01/14/10
02	CB31A011110S	QF10A	01/14/10
03	CB31A011110S	QF10AMS	01/14/10
04	CB31A011110S	QF10AMSD	01/15/10
05	CB99011110SE	QF10B	01/15/10

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC Client: FLOYD-SNIDER

SDG No.: QF10 Project: POS-LLA

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/14/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.90 TRIAC: 7.07

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/14/10	1250	4.90	7.07
02	IB	IB	01/14/10	1310	4.91	7.08
03	DIESEL#3	DIESEL#3	01/14/10	2211	4.90	7.07
04	MOIL#3	MOIL#3	01/14/10	2231	4.90	7.08
05	QF10MBS1	QF10MBS1	01/14/10	2251	4.90	7.07
06	QF10LCSS1	QF10LCSS1	01/14/10	2310	4.91	7.07
07	CB31A011110S	QF10A	01/14/10	2330	4.90	7.10
08	CB31A011110S	QF10AMS	01/14/10	2349	4.91	7.10
09	CB31A011110S	QF10AMSD	01/15/10	0009	4.91	7.11
10	CB99011110SE	QF10B	01/15/10	0028	4.90	7.10
11	DIESEL#4	DIESEL#4	01/15/10	0048	4.90	7.07
12	MOIL#4	MOIL#4	01/15/10	0107	4.90	7.08

	QC LIMITS
TERPH = o-terph	(+/- 0.05 MINUTES)
TRIAC = Triacon Surr	(+/- 0.05 MINUTES)

* Values outside of QC limits.

TPH ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES, INC. Client: FLOYD-SNIDER

Instrument: FID9.I Project: POS-LLA

Calibration Date: 22-DEC-2009 SDG No.: QF10

Run Date: 12/22/09

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.90 TRIAC: 7.07

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	12/22/09	1905	4.90	7.07
02	IB	IB	12/22/09	1924	4.90	7.07
03	DIESEL50	DIESEL50	12/22/09	1944	4.90	7.06
04	DIESEL100	DIESEL100	12/22/09	2003	4.90	7.06
05	DIESEL250	DIESEL250	12/22/09	2023	4.90	7.06
06	DIESEL500	DIESEL500	12/22/09	2042	4.91	7.08
07	DIESEL1000	DIESEL1000	12/22/09	2101	4.92	7.08
08	DIESEL2500	DIESEL2500	12/22/09	2121	4.96*	7.08
09	DIESELICV	DIESELICV	12/22/09	2140	4.90	7.06
10	MOIL100	MOIL100	12/22/09	2200	4.91	7.06
11	MOIL250	MOIL250	12/22/09	2219	4.91	7.07
12	MOIL500	MOIL500	12/22/09	2239	4.91	7.08
13	MOIL1000	MOIL1000	12/22/09	2258	4.91	7.09
14	MOIL2500	MOIL2500	12/22/09	2318	4.90	7.11
15	MOIL5000	MOIL5000	12/22/09	2337	4.90	7.14*
16	MOILICV	MOILICV	12/22/09	2357	4.91	7.07

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.: QF10 Project: POS-LLA

Instrument ID: FID9 GC Column: RTX-1

Run Date: 01/05/10

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS, IS GIVEN BELOW:

SURROGATE RT FROM DAILY STANDARD
TERPH: 4.90 TRIAC: 7.08

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TERPH RT #	TRIAC RT #
01	RT	RT	01/05/10	1232	4.90	7.08
02		IB	01/05/10	1252	4.90	7.08
03	MOIL 100	MOIL 100	01/05/10	1937	4.90	7.08
04	MOIL 250	MOIL 250	01/05/10	1956	4.90	7.08
05	MOIL 500	MOIL 500	01/05/10	2016	4.90	7.09
06	MOIL 1000	MOIL 1000	01/05/10	2035	4.90	7.09
07	MOIL 2500	MOIL 2500	01/05/10	2055	4.90	7.12
08	MOIL 5000	MOIL 5000	01/05/10	2115	4.90	7.14*
09		MOIL ICV	01/05/10	2134	4.91	7.08

QC LIMITS

TERPH = o-terph (+/- 0.05 MINUTES)
TRIAC = Triacon Surr (+/- 0.05 MINUTES)

* Values outside of QC limits.

TPHD Analysis
Sample Data

prepared
for

Floyd-Snider

Project: POS-Lora Lake Apts Interim Action, POS-LLA

ARI JOB NO: QF10

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: Soil

QC Report No: QF10-Floyd-Snider
Project: POS-Lora Lake Apts Interim Acti
POS-LLA

Data Release Authorized: JB
Reported: 01/19/10

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-011210	Method Blank	01/12/10	01/14/10	1.00	Diesel	5.0	< 5.0 U
10-690	HC ID: ---		FID9	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		97.0%
QF10A	CB31A011110SED	01/12/10	01/14/10	1.00	**Diesel**	**6.3**	**54**
10-690	HC ID: **DIESEL/MOTOR OIL**		FID9	1.0	**Motor Oil**	**12**	**270**
					o-Terphenyl		88.4%
QF10B	CB99011110SED	01/12/10	01/15/10	1.00	**Diesel**	**6.0**	**31**
10-691	HC ID: **DIESEL/MOTOR OIL**		FID9	1.0	**Motor Oil**	**12**	**200**
					o-Terphenyl		91.2%

Reported in mg/kg (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/20100114.b/0114A033.D
Method: /chem2/fid9.i/20100114.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 01/18/2010
Macro: 05-JAN-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:22-DEC-2009 M.Oil:05-JAN-2010

ARI ID: QF10A
Client ID: CB31A011110SED
Injection: 14-JAN-2010 23:30

Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.803	-0.011	45034816	93909144	GAS (Tol-C12)	94902503	7332
C8	1.998	0.000	3749	3902	DIESEL (C12-C24)	7326829	434
C10	2.601	-0.013	3030	3450	M.OIL (C24-C38)	29367913	2125
C12	3.239	0.032	2588	3044	AK-102 (C10-C25)	8958265	474
C14	3.736	0.003	10532	10332	AK-103 (C25-C36)	26788789	2833
C16	4.206	0.000	27187	21586			
C18	4.671	0.001	36881	43915			
C20	5.210	-0.001	48140	65277			
C22	5.689	0.000	93131	110607			
C24	6.104	0.006	170471	212204			
C25	6.283	-0.001	195089	50139			
C26	6.458	0.003	252898	242220			
C28	6.786	0.013	314569	261268			
C32	7.364	0.001	249860	134052			
C34	7.706	0.003	145554	114472	BUNKERC (C10-C38)	37493709	4275
Filter Peak	9.134	0.001	23724	9366			
C36	8.135	0.007	82041	37119			
C38	8.668	-0.001	41522	22873			
C40	9.387	0.003	17899	13602			
o-terph	4.903	0.001	1101686	838714			
Triacon Surr	7.101	0.027	1221745	830075			

Range Times: NW Diesel(3.207 - 6.098) AK102(2.61 - 6.28) Jet A(2.61 - 4.67)
NW M.Oil(6.10 - 8.67) AK103(6.28 - 8.13) OR Diesel(2.61 - 6.77)

Surrogate	Area	Amount	%Rec
o-Terphenyl	838714	39.8	88.4
Triacontane	830075	37.8	84.1

Analyte	RF	Curve Date
o-Terph Surr	21077.0	22-DEC-2009
Triacon Surr	21935.7	05-JAN-2010
Gas	12943.2	01-OCT-2009
Diesel	16885.2	22-DEC-2009
Motor Oil	13817.7	05-JAN-2010
AK102	18884.0	22-DEC-2009
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

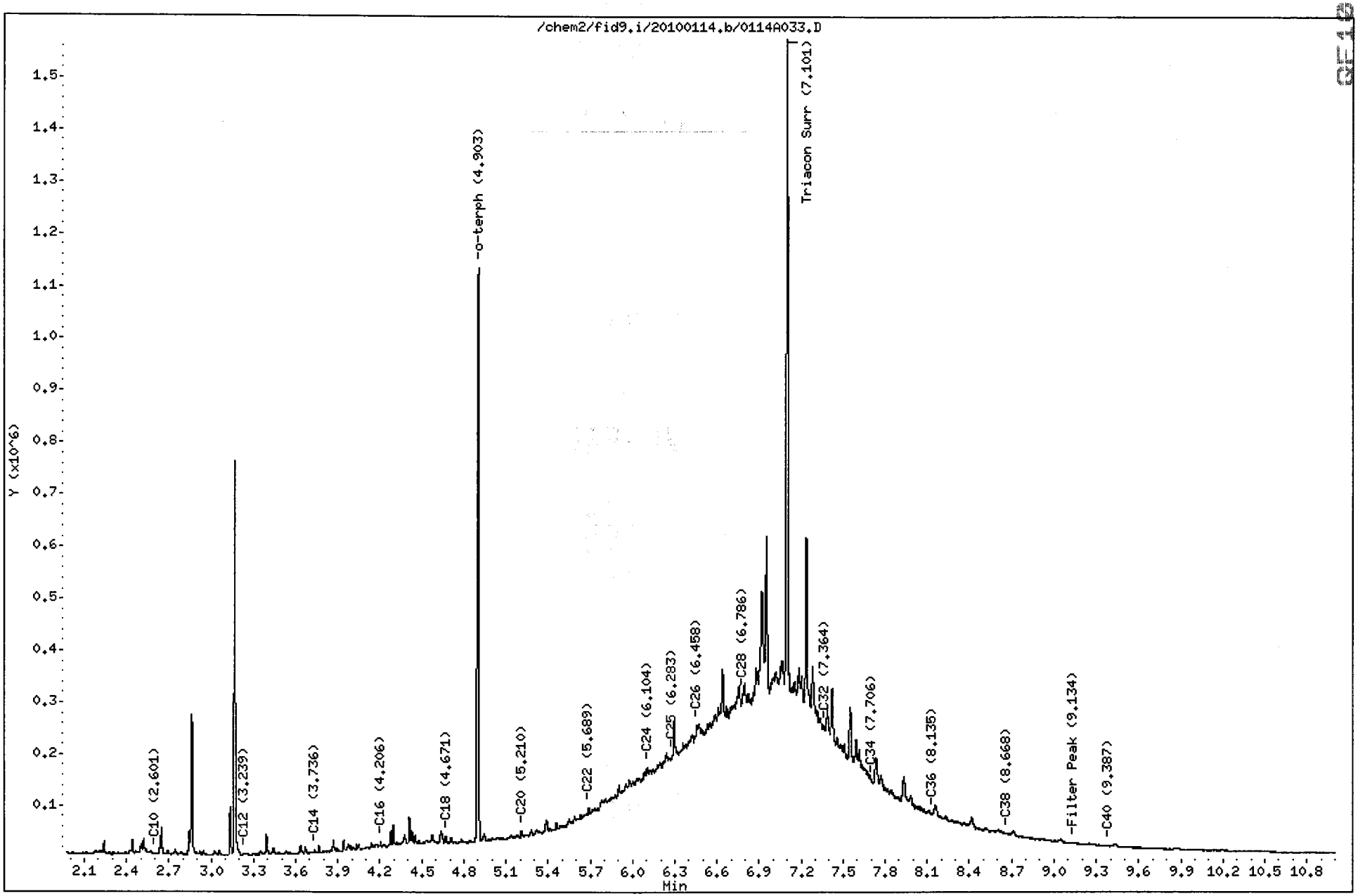
Data File: /chem2/fid9.i/20100114.b/0114A033.D
Date : 14-JAN-2010 23:30
Client ID: CB31A011110SED
Sample Info: QF10A

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

QF10:000029



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem2/fid9.i/20100114.b/0114A036.D
Method: /chem2/fid9.i/20100114.b/ftphfid9a.m
Instrument: fid9.i
Operator: MS
Report Date: 01/18/2010
Macro: 05-JAN-2010
Calibration Dates: Gas:01-OCT-2009 Diesel:22-DEC-2009 M.Oil:05-JAN-2010

ARI ID: QF10B
Client ID: CB99011110SED
Injection: 15-JAN-2010 00:28
Dilution Factor: 1

FID:9 RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.845	0.031	5210	6332	GAS (Tol-C12)	220689	17
C8	2.001	0.004	4577	6652	DIESEL (C12-C24)	4393520	260
C10	2.641	0.026	23904	23516	M.OIL (C24-C38)	23525777	1703
C12	3.196	-0.010	4377	3074	AK-102 (C10-C25)	5138096	272
C14	3.738	0.005	6297	4664	AK-103 (C25-C36)	21580201	2282
C16	4.209	0.003	10769	8332			
C18	4.671	0.001	15167	14153			
C20	5.210	0.000	26492	34973			
C22	5.690	0.001	69146	83471			
C24	6.102	0.005	141205	161681			
C25	6.279	-0.005	161284	87898			
C26	6.457	0.001	207176	246639			
C28	6.773	0.000	261045	88016			
C32	7.361	-0.002	190322	90310			
C34	7.694	-0.009	111473	91517	BUNKERC (C10-C38)	27999571	3192
Filter Peak	9.138	0.005	16659	13640			
C36	8.126	-0.002	59372	32260			
C38	8.661	-0.008	29704	26121			
C40	9.381	-0.004	13303	7102			
o-terph	4.903	0.001	1154242	865166			
Triacon Surr	7.096	0.022	1283843	876396			

Range Times: NW Diesel(3.207 - 6.098) AK102(2.61 - 6.28) Jet A(2.61 - 4.67)
NW M.Oil(6.10 - 8.67) AK103(6.28 - 8.13) OR Diesel(2.61 - 6.77)

Surrogate	Area	Amount	%Rec
o-Terphenyl	865166	41.0	91.2
Triacontane	876396	40.0	88.8

Analyte	RF	Curve Date
o-Terph Surr	21077.0	22-DEC-2009
Triacon Surr	21935.7	05-JAN-2010
Gas	12943.2	01-OCT-2009
Diesel	16885.2	22-DEC-2009
Motor Oil	13817.7	05-JAN-2010
AK102	18884.0	22-DEC-2009
AK103	9457.0	10-DEC-2009
Bunker C	8770.6	05-JAN-2010

Data File: /chem2/fid9.i/20100114.b/0114A036.D
Date : 15-JAN-2010 00:28
Client ID: CB99011110SED
Sample Info: QF10B

Column phase: RTX-1

Instrument: fid9.i

Operator: MS
Column diameter: 0.25

QF10 : 060622