

## **ANALYTICAL DATA**

### **METHOD 23**



17 February 2010

Craig McKenzie  
GEL Laboratories, LLC  
2040 Savage Road  
Charleston, SC 29407

Ph.: 843-556-8171  
Fax: 843-766-1178

Subject: Certificate of Results

Dear Craig;

Attached to this narrative are the analytical results you requested on the samples submitted for the determination of polychlorinated dibenzo-*p*-dioxins and dibenzofurans, polychlorinated biphenyls and polynuclear aromatic hydrocarbons. The insert below summarizes the relevant information pertaining to your project. In particular, QC annotations bring to your attention specific analytical observations and assessments made during the sample handling and data interpretation phases. A brief description of the report's components is provided on the next page. Results reported relate only to the items tested.

Project Information Summary	When applicable, see QC Annotations for details
Client Project No.	CRBG 00107
AP Project No.	P1977
Analytical Protocol	Methods 23, 1668A, HRP AH
No. Samples Submitted	4
No. Samples Analyzed	12 (4 samples by 3 methods)
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
No. Outstanding Samples	none
Date Received	21-Jan-2010
Condition Received	good
Temperature upon Receipt (C)	19
Extraction within Holding Time	yes
Analysis within Holding Time	yes
Data meet QA/QC Requirements	yes
Exceptions	none
Analytical Difficulties	none

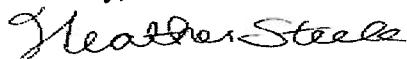
2714 EXCHANGE DRIVE  
WILMINGTON, NC 28405  
PH.: 910-794-1613

**QC Annotations:**

1. The “EMPC” data qualifier is used for analytes reported as an Estimated Maximum Possible Concentration. This flag indicates that a peak is detected with an ion-abundance ratio outside the allowed theoretical range.
2. The “C” qualifier is assigned when two or more isomers elute at similar retention times and cannot be resolved. The reported concentration is the total of the co-eluting isomers.
3. A “J” data qualifier is used for analytes with a concentration below the reporting limit.
4. An ‘RJ’ appended to sample IDs indicates results reported from a second analysis/re-injection of the sample extract.
5. An asterisk (\*) qualifier denotes a concentration determined to be above the method’s calibration range but within the instrument’s analytical range; such a value should therefore be considered as an estimate.
6. Analytes are flagged “PR” to indicate that the specific analyte is poorly resolved.

Analytical Perspectives remains committed to serving you in the most effective manner. Should you have any questions or need additional information and technical support, do not hesitate to contact us. Thank you for choosing Analytical Perspectives as part of your analytical support team.

Sincerely,



Heather Steele, Ph.D.  
Project Manager

The electronic version of this report contains 954 pages.  
(add one page in count for the NELAC compliance statement) (+1)

P1977

ANALYTICAL PERSPECTIVES

Part 1

Narrative

41 pgs

✓Letter

✓QC Annotations

✓Project Information

ANALYTICAL PERSPECTIVES

Part 2

Path

26 pgs

✓Overview

✓Protocol

✓Extraction

✓Analysis

✓Spike Profile

✓SOPs

✓QC

✓Reporting

✓Special Requirements

Extraction  
Tracking Sheets

Fractionation  
Tracking Sheets

Injection  
Tracking Sheets

ANALYTICAL PERSPECTIVES

Part 3

Results

D/Fs: 85 pgs

PCBs: 135 pgs

PAHs: 55 pgs

✓Summary Topsheets

✓Raw Data

✓SICPs

✓Areas

✓Retention Times

✓S/N

✓Ion Abundance Ratios

ANALYTICAL PERSPECTIVES

Part 4

Performance

D/Fs: 114 pgs

PCBs: 137 pgs

PAHs: 46 pgs

✓Mass Spectrometry

✓Gas Chromatography

✓Initial Calibration

✓Continuing Calibration

✓BCS<sub>3</sub>, OPR

Part 4D

ICAL

D/Fs: 94 pgs

PCBs: 154 pgs

PAHs: 53 pgs

Part 4E

Audit

N/A

STATE CERTIFICATION ID #s	
ARKANSAS	88-0628
CALIFORNIA	2640
FLORIDA	E87608
LOUISIANA	04024
MICHIGAN	9951
NEW JERSEY	NC005
NORTH CAROLINA	37783
PENNSYLVANIA	68-01849
SOUTH CAROLINA	99054
WASHINGTON	C2027

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT FOR IN FULL  
WITHOUT THE ORIGINAL APPROVAL OF THE LABORATORY



# P1977 - TEQ

## Project ID: CRBG 00107

Sample Summary		ANALYTICAL PERSPECTIVES				Method 23
Part 1		0_7528_MB001	SSI #1-Blank	SSI #1-R-1	SSI #1-R-2	SSI #1-R-3
Analyte		pg	pg	pg	pg	pg
2,3,7,8-TCDD		(2.16)	(2.38)	(2.19)	(2.45)	(2.03)
1,2,3,7,8-PeCDD		(2.36)	(2.86)	(3.58)	(2.61)	(2.28)
1,2,3,4,7,8-HxCDD		(3.24)	(2.59)	(3.37)	(2.78)	(2.85)
1,2,3,6,7,8-HxCDD		(3.34)	(2.86)	(3.82)	(2.98)	(3.01)
1,2,3,7,8,9-HxCDD		(3.72)	(3.06)	(4.12)	(3.51)	(3.27)
1,2,3,4,6,7,8-HpCDD		(3.34)	8.16	(6.08)	6.62	(3.72)
OCDD		(5.58)	[11.4]	17.3	25.1	[18.7]
2,3,7,8-TCDF		(1.35)	44.3	28.6	[13.2]	17.9
1,2,3,7,8-PeCDF		(2.12)	[3.79]	(1.86)	(2)	(1.72)
2,3,4,7,8-PeCDF		(2.15)	3.26	(1.74)	(2.02)	[2.8]
1,2,3,4,7,8-HxCDF		(1.78)	[1.18]	(3)	(1.95)	(1.71)
1,2,3,6,7,8-HxCDF		(1.69)	[1.52]	(3.09)	(1.77)	(1.67)
2,3,4,6,7,8-HxCDF		(1.73)	(1.8)	(3.11)	(1.86)	(1.88)
1,2,3,7,8,9-HxCDF		(2.26)	(2.29)	(4.48)	(2.29)	(2.33)
1,2,3,4,6,7,8-HpCDF		(1.5)	[4.23]	(4.09)	[3.65]	[3.03]
1,2,3,4,7,8,9-HpCDF		(2.19)	(2.88)	(5.46)	(2.72)	(2.95)
OCDF		(4.29)	(4.75)	(9.7)	[8.01]	(3.76)
ITEF TEQ (ND=0; EMPC=0)		0.00	6.14	2.87	0.0912	1.79
ITEF TEQ (ND=0; EMPC=EMPC)		0.00	6.65	2.87	1.46	3.24
ITEF TEQ (ND=DL/2; EMPC=0)		3.26	8.93	6.68	3.51	4.76
ITEF TEQ (ND=DL/2; EMPC=EMPC)		3.26	9.21	6.68	4.76	5.74
ITEF TEQ (ND=DL; EMPC=EMPC)		6.52	11.8	10.5	8.06	8.24
Checkcode		687-527	646-161	326-468	908-955	959-761
Lab ID		MB1_7528_DF_SDS	P1977_7528_001	P1977_7528_002RJ	P1977_7528_003	P1977_7528_004

() = DL

[ ] = EMPC

Reviewer HS  
Date 17 Feb 10

# P1977 - WHO-2005-TEQ

Project ID: CRBG 00107

Sample Summary Part 1		ANALYTICAL PERSPECTIVES				Method 23	
Analyte	0_7528_MB001 pg	SSI #1-Blank pg	SSI #1-R-1 pg	SSI #1-R-2 pg	SSI #1-R-3 pg		
2,3,7,8-TCDD	(2.16)	(2.38)	(2.19)	(2.45)	(2.03)		
1,2,3,7,8-PeCDD	(2.36)	(2.86)	(3.58)	(2.61)	(2.28)		
1,2,3,4,7,8-HxCDD	(3.24)	(2.59)	(3.37)	(2.78)	(2.85)		
1,2,3,6,7,8-HxCDD	(3.34)	(2.86)	(3.82)	(2.98)	(3.01)		
1,2,3,7,8,9-HxCDD	(3.72)	(3.06)	(4.12)	(3.51)	(3.27)		
1,2,3,4,6,7,8-HpCDD	(3.34)	8.16	(6.08)	6.62	(3.72)		
OCDD	(5.58)	[11.4]	17.3	25.1	[18.7]		
2,3,7,8-TCDF	(1.35)	44.3	28.6	[13.2]	17.9		
1,2,3,7,8-PeCDF	(2.12)	[3.79]	(1.86)	(2)	(1.72)		
2,3,4,7,8-PeCDF	(2.15)	3.26	(1.74)	(2.02)	[2.8]		
1,2,3,4,7,8-HxCDF	(1.78)	[1.18]	(3)	(1.95)	(1.71)		
1,2,3,6,7,8-HxCDF	(1.69)	[1.52]	(3.09)	(1.77)	(1.67)		
2,3,4,6,7,8-HxCDF	(1.73)	(1.8)	(3.11)	(1.86)	(1.88)		
1,2,3,7,8,9-HxCDF	(2.26)	(2.29)	(4.48)	(2.29)	(2.33)		
1,2,3,4,6,7,8-HpCDF	(1.5)	[4.23]	(4.09)	[3.65]	[3.03]		
1,2,3,4,7,8,9-HpCDF	(2.19)	(2.88)	(5.46)	(2.72)	(2.95)		
OCDF	(4.29)	(4.75)	(9.7)	[8.01]	(3.76)		
WHO-2005 TEQ (ND=0; EMPC=0)	0.00	5.49	2.86	0.0737	1.79		
WHO-2005 TEQ (ND=0; EMPC=EMPC)	0.00	5.92	2.86	1.43	2.67		
WHO-2005 TEQ (ND=DL/2; EMPC=0)	3.61	8.97	7.36	3.92	5.12		
WHO-2005 TEQ (ND=DL/2; EMPC=EMPC)	3.61	9.19	7.36	5.17	5.72		
WHO-2005 TEQ (ND=DL; EMPC=EMPC)	7.22	12.5	11.9	8.90	8.77		
Checkcode Lab ID	687-527 MB1_7528_DF_SDS	646-161 P1977_7528_001	326-468 P1977_7528_002RJ	908-955 P1977_7528_003	959-761 P1977_7528_004		

() = DL

[] = EMPC

Reviewer HS  
Date 17 Feb 10

# P1977 - Totals

## Project ID: CRBG 00107

Sample Summary		ANALYTICAL PERSPECTIVES				Method 23	
Part 2							
Analyte	0_7528_MB001	SSI #1-Blank	SSI #1-R-1	SSI #1-R-2	SSI #1-R-3		
	pg	pg	pg	pg	pg		
Totals							
TCDDs	0	6.37	6.6	6.01	0		
PeCDDs	0	0	0	0	0		
HxCDDs	0	14.3	0	8.63	3.46		
HpCDDs	0	20.5	0	12.3	0		
OCDD	0	11.4	17.3	25.1	18.7		
TCDFs	0	105	80	35.4	47.4		
PeCDFs	0	3.26	0	0	0		
HxCDFs	0	6.21	0	0	0		
HpCDFs	0	0	0	0	0		
OCDF	0	0	0	8.01	0		
Total PCDD/Fs (ND=0; EMPC=0)	0.00	156	104	87.4	50.8		
Total PCDD/Fs (ND=0; EMPC=EMPC)	0.00	211	128	116	87.2		
Total PCDD/Fs (2378-X ND=DL; EMPC=EMPC)	44.8	236	188	145	120		
Total 2378s (ND=0; EMPC=0)	0.00	55.7	45.9	31.7	17.9		
Total 2378s (ND=0.5; EMPC=0)	22.4	74.9	75.7	50.1	39.0		
Total 2378s (ND=1; EMPC=0)	44.8	94.1	106	68.5	60.2		
Total 2378s (ND=0; EMPC=1)	0.00	133	91.8	88.2	60.3		
Total 2378s (ND=0.5; EMPC=1)	22.4	90.5	75.7	71.0	59.0		
Total 2378s (ND=1; EMPC=1)	44.8	103	106	85.5	75.6		
Checkcode	687-527	646-161	326-468	908-955	959-761		
Lab ID	MB1_7528_DF_SDS	P1977_7528_001	P1977_7528_002RJ	P1977_7528_003	P1977_7528_004		

() = DL  
[] = EMPC

Reviewer HS  
Date 17 Feb 10

# P1977 - Others

## Project ID: CRBG 00107

Sample Summary		ANALYTICAL PERSPECTIVES				Method 23
Part 3						
Analyte	0_7528_MB001 pg	SSI #1-Blank pg	SSI #1-R-1 pg	SSI #1-R-2 pg	SSI #1-R-3 pg	
Other PCDD/Fs (ND=0, EMPC=0)						
Other TCDD	0	6.37	6.6	6.01	0	
Other PeCDD	0	0	0	0	0	
Other HxCDD	0	14.3	0	8.63	3.46	
Other HpCDD	0	12.3	0	5.66	0	
Other TCDF	0	61	51.5	35.4	29.5	
Other PeCDF	0	0	0	0	0	
Other HxCDF	0	6.21	0	0	0	
Other HpCDF	0	0	0	0	0	
Other PCDD/Fs (ND=0, EMPC=EMPC)						
Other TCDD	0	6.37	6.6	6.01	6.39	
Other PeCDD	0	0	0	0	0	
Other HxCDD	0	14.3	0	8.63	8.94	
Other HpCDD	0	12.3	0	5.66	0	
Other TCDF	0	88.3	75.4	39.6	29.5	
Other PeCDF	0	3.47	0	0	0	
Other HxCDF	0	8.23	0	0	0	
Other HpCDF	0	0	0	0	0	
Checkcode Lab ID	687-527 MB1_7528_DF SDS	646-161 P1977_7528_001	326-468 P1977_7528_002RJ	908-955 P1977_7528_003	959-761 P1977_7528_004	

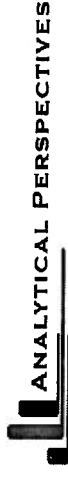
() = DL  
[] = EMPC

Reviewer HS  
Date 17 Feb 10

# P1977 - DLs

Project ID: CRBG 00107

## Sample Summary Part 4



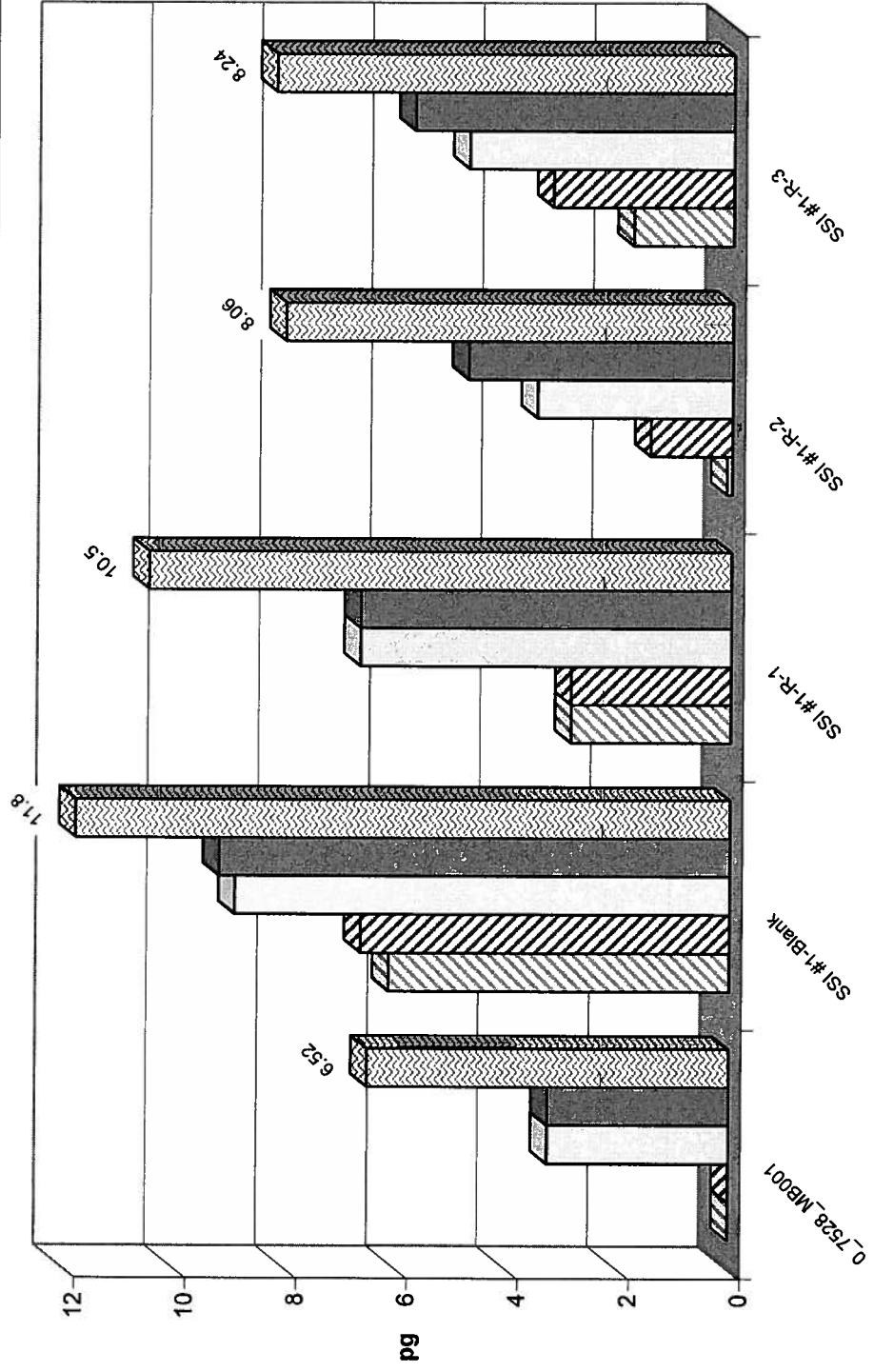
## Method 23

Analyte	0_7528_MB001 pg	SSI #1-Blank pg	SSI #1-R-1 pg	SSI #1-R-2 pg	SSI #1-R-3 pg
2,3,7,8-TCDD	2.16	2.38	2.19	2.45	2.03
1,2,3,7,8-PeCDD	2.36	2.86	3.58	2.61	2.28
1,2,3,4,7,8-HxCDD	3.24	2.59	3.37	2.78	2.85
1,2,3,6,7,8-HxCDD	3.34	2.86	3.82	2.98	3.01
1,2,3,7,8,9-HxCDD	3.72	3.06	4.12	3.51	3.27
1,2,3,4,6,7,8-HpCDD	3.34	3.96	6.08	3.01	3.72
OCDD	5.58	5.65	9.44	5.2	5.21
2,3,7,8-TCDF	1.35	1.75	1.54	2	1.05
1,2,3,7,8-PeCDF	2.12	1.95	1.86	2	1.72
2,3,4,7,8-PeCDF	2.15	1.9	1.74	2.02	1.83
1,2,3,4,7,8-HxCDF	1.78	1.75	3	1.95	1.71
1,2,3,6,7,8-HxCDF	1.69	1.69	3.09	1.77	1.67
2,3,4,6,7,8-HxCDF	1.73	1.8	3.11	1.86	1.88
1,2,3,7,8,9-HxCDF	2.26	2.29	4.48	2.29	2.33
1,2,3,4,6,7,8-HpCDF	1.5	1.94	4.09	1.98	2.08
1,2,3,4,7,8,9-HpCDF	2.19	2.88	5.46	2.72	2.95
OCDF	4.29	4.75	9.7	3.86	3.76
Total TCDD	2.16	2.38	2.19	2.45	2.03
Total PeCDD	2.36	2.86	3.58	2.61	2.28
Total HxCDD	3.42	2.82	3.75	3.07	3.03
Total HpCDD	3.34	3.96	6.08	3.01	3.72
Total TCDF	1.35	1.75	1.54	2	1.05
Total PeCDF	2.14	1.92	1.8	2.01	1.77
Total HxCDF	1.84	1.86	3.35	1.95	1.88
Total HpCDF	1.81	2.36	4.71	2.31	2.47
Checkcode Lab ID	687-527 MB1_7528_DF_SDS	646-161 P1977_7528_001	326-468 P1977_7528_002RJ	908-955 P1977_7528_003	959-761 P1977_7528_004

Reviewer HS  
Date 17 Feb 10

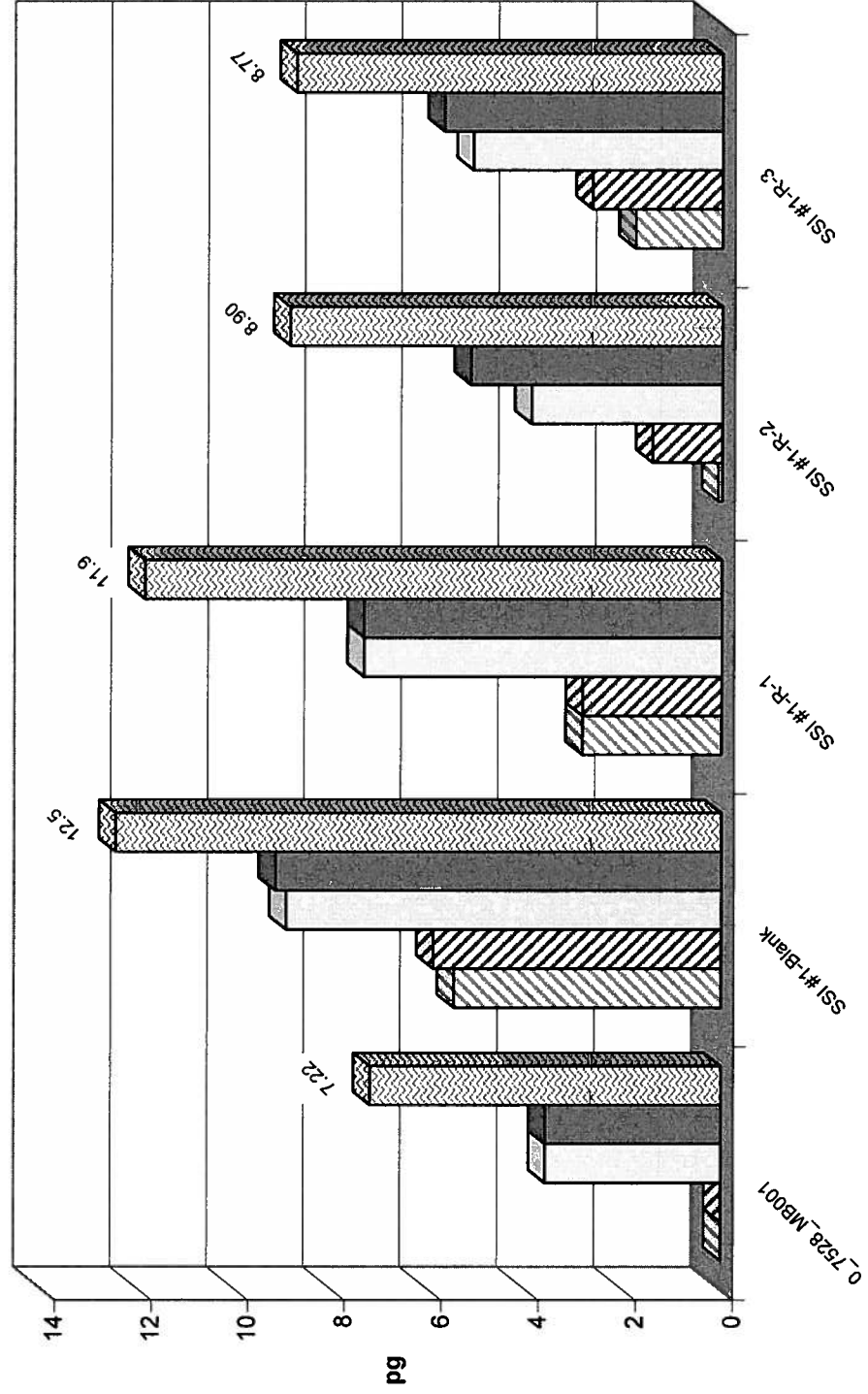
**ITEF-TEQ**  
**Project ID: CRBG 00107**  
**P1977**

- ND=0; EMPC=0
- ▨ ND=0; EMPC=EMPC
- ND=DL/2; EMPC=0
- ND=DL/2; EMPC=EMPC
- ▩ ND=DL; EMPC=EMPC



**WHO-2005-TEQ**  
**Project ID: CRBG 00107**  
**P1977**

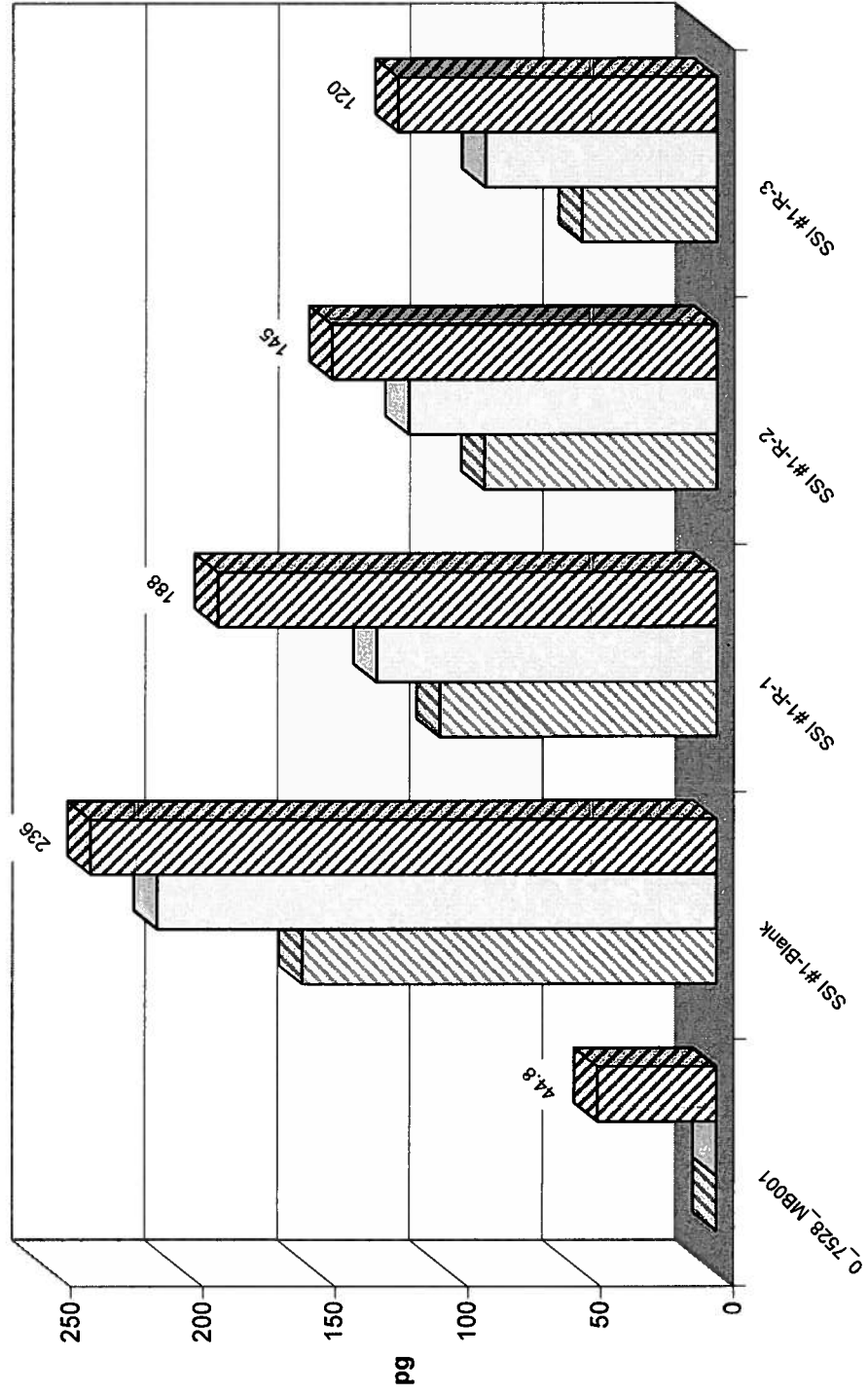
□ ND=0; EMPC=0  
 ▨ ND=0; EMPC=EMPC  
 □ ND=DL/2; EMPC=0  
 ■ ND=DL/2; EMPC=EMPC  
 ▩ ND=DL; EMPC=EMPC



# Totals

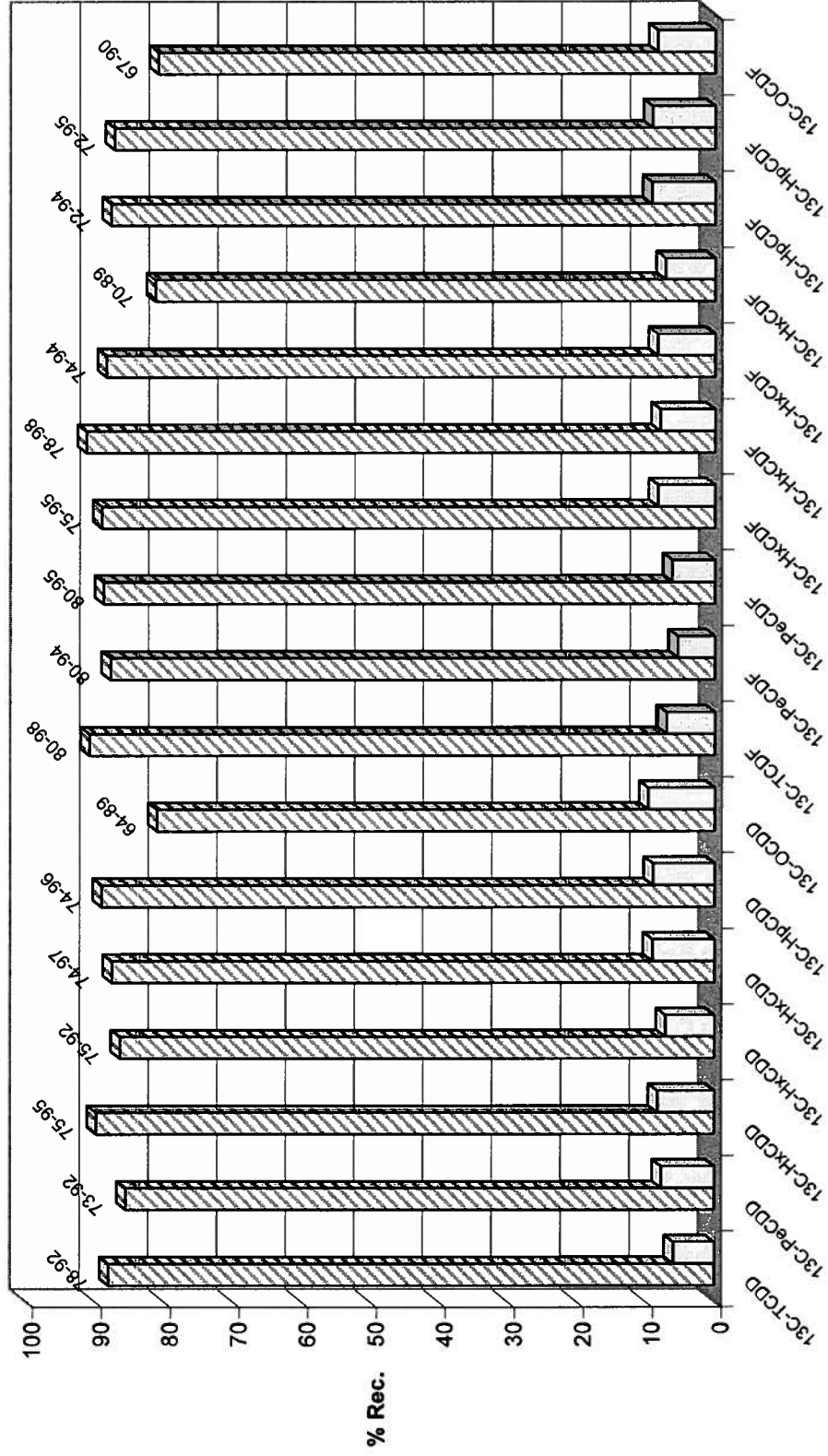
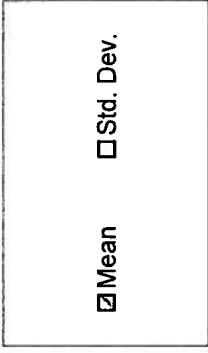
Project ID: CRBG 00107  
P1977

- ▨ Total PCDD/Fs (ND=0; EMPC=0)
- Total PCDD/Fs (ND=0; EMPC=EMPC)
- ▨ Total PCDD/Fs (2378-X ND=DL; EMPC=EMPC)



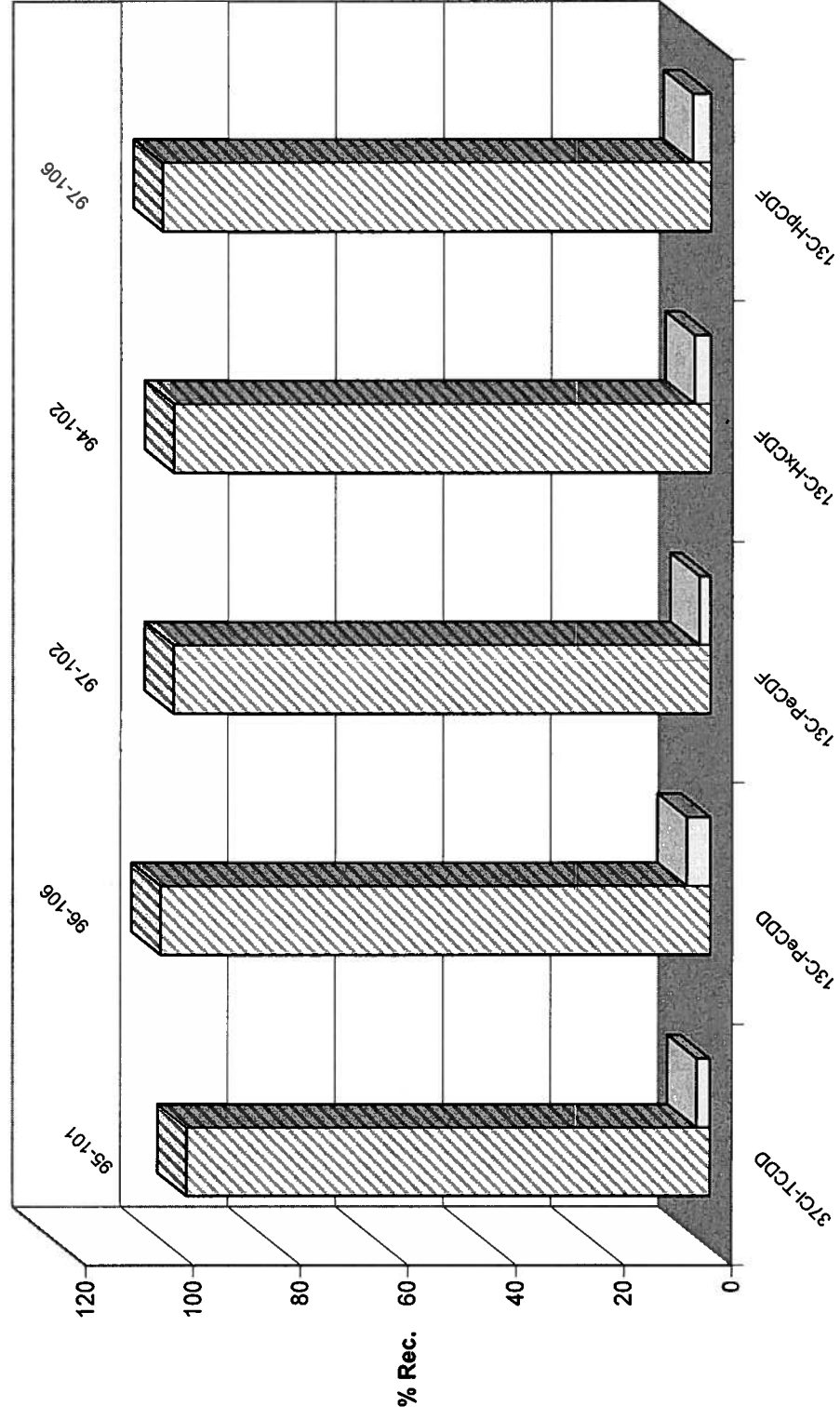
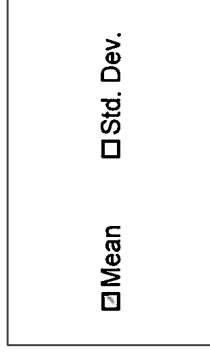


**Mean Recoveries of Extraction Standards (N=5)**  
**Project ID: CRBG 00107**  
**P1977**



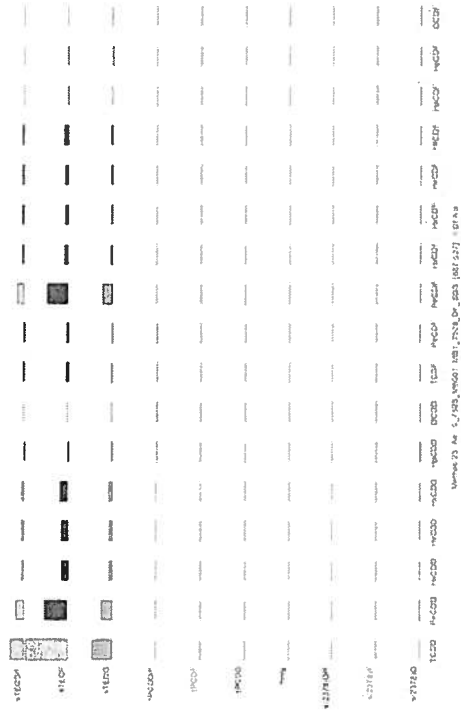
Method Specification Limits: Tetra-Hexa ES: 40-130%, Hepta-Octa ES: 25-130% (F = fail)

Mean Recoveries of Sampling Standards (N=5)  
 Project ID: CRBG 00107  
 P1977

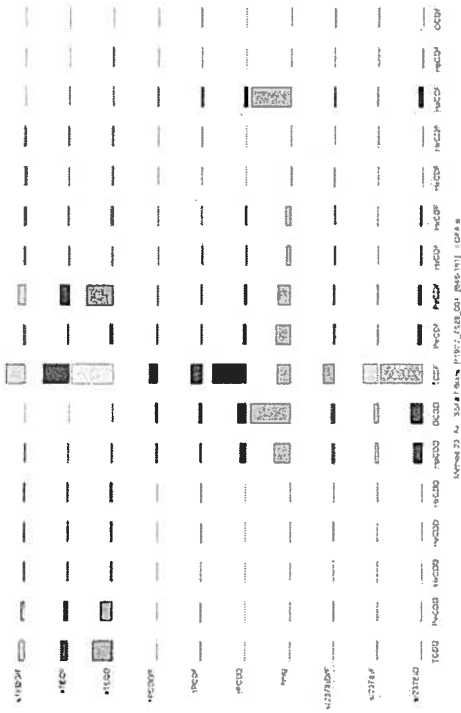


Method Specification Limits: Tetra-Octa SS: 70-130% (F = fail)

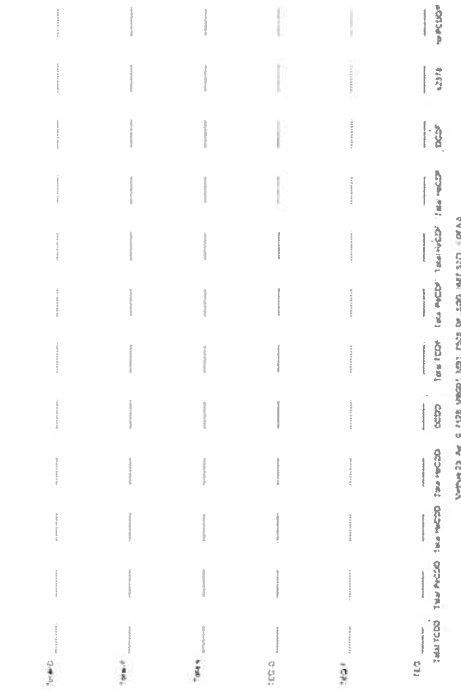
## ANALYTICAL PERSPECTIVES



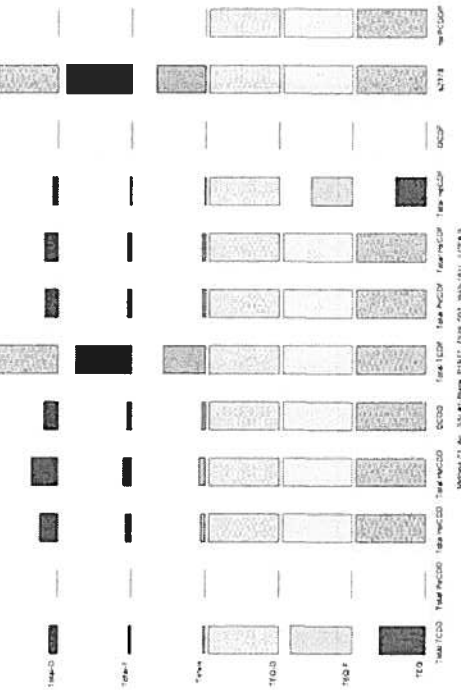
## ANALYTICAL PERSPECTIVES



## ANALYTICAL PERSPECTIVES

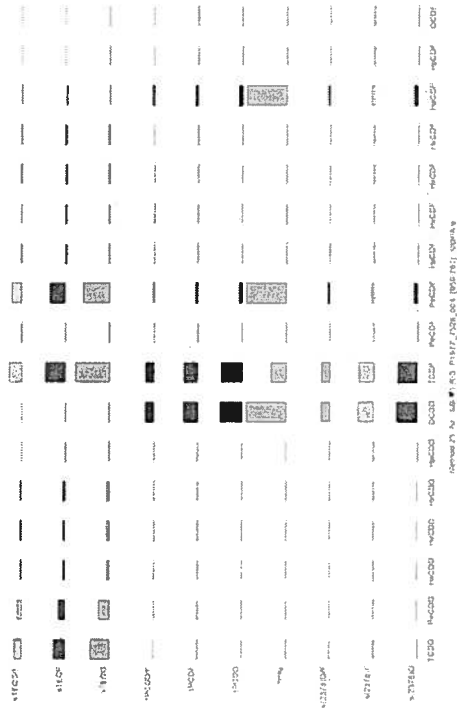


## ANALYTICAL PERSPECTIVES

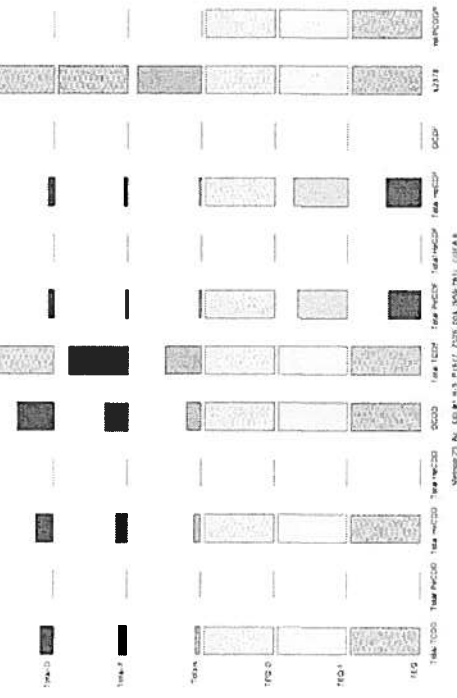





# ANALYTICAL PERSPECTIVES



# ANALYTICAL PERSPECTIVES




Sample ID: 0_7528_MB001					Method 23				
Client Data		Sample Data		Laboratory Data					
Name: General Engineering Laboratories		Matrix: Air		Lab Project ID: P1977		Date Received: n/a			
Project ID: CRBG 00107		Weight/Volume: 1		Lab Sample ID MB1_7528_DF_SDS		Date Extracted: 25 Jan 2010			
Date Collected: n/a		Split: 2		QC Batch No: 7528		Date Analyzed: 02 Feb 2010			
				Dilution: -		Time Analyzed: 12:30:32			
Analyte	Conc. (pg)	DL (pg)	EMPC (pg)	Qualifiers	Standard	ES Recoveries	Qualifiers		
2378-TCDD	ND	2.16			ES 2378-TCDD	92.2			
12378-PeCDD	ND	2.36			ES 12378-PeCDD	92			
123478-HxCDD	ND	3.24			ES 123478-HxCDD	95.1			
123678-HxCDD	ND	3.34			ES 123678-HxCDD	89.2			
123789-HxCDD	ND	3.72			ES 123789-HxCDD	97.1			
1234678-HpCDD	ND	3.34			ES 1234678-HpCDD	94.4			
OCDD	ND	5.58			ES OCDD	82.8			
2378-TCDF	ND	1.35			ES 2378-TCDF	94.7			
12378-PeCDF	ND	2.12			ES 12378-PeCDF	92.5			
23478-PeCDF	ND	2.15			ES 23478-PeCDF	93.8			
123478-HxCDF	ND	1.78			ES 123478-HxCDF	91.5			
123678-HxCDF	ND	1.69			ES 123678-HxCDF	94.3			
234678-HxCDF	ND	1.73			ES 234678-HxCDF	93.9			
123789-HxCDF	ND	2.26			ES 123789-HxCDF	84.1			
1234678-HpCDF	ND	1.5			ES 1234678-HpCDF	94.3			
1234789-HpCDF	ND	2.19			ES 1234789-HpCDF	93.4			
OCDF	ND	4.29			ES OCDF	84.1			
Totals					Standard	SS/AS Recoveries			
Total TCDD	ND	2.16	ND		SS 37Cl-2378-TCDD	97.1			
Total PeCDD	ND	2.36	ND		SS 12347-PeCDD	95.5			
Total HxCDD	ND	3.42	ND		SS 12346-PeCDF	96.7			
Total HpCDD	ND	3.34	ND		SS 123469-HxCDF	102			
					SS 1234689-HpCDF	97.1			
Total TCDF	ND	1.35	ND		AS 1368-TCDD	97.1			
Total PeCDF	ND	2.14	ND		AS 1368-TCDF	95.3			
Total HxCDF	ND	1.84	ND						
Total HpCDF	ND	1.81	ND						
Total PCDD/Fs	ND		ND						
ITEF TEQs									
TEQ: ND=0	0		0		2714 Exchange Drive				
TEQ: ND=DL/2	3.26		3.26		ANALYTICAL PERSPECTIVES Wilmington, NC 28405 , USA				
TEQ: ND=DL	6.52		6.52		info@ultratrace.com				
					Tel: +1 910 794-1613 (Fax: -3919); Toll-Free 866 846-8290www.ultratrace.com				


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# Sample ID: SSI #1-Blank

## Method 23

Client Data			Sample Data		Laboratory Data			Date Received: 21 Jan 2009	
Name: General Engineering Laboratories			Matrix: Air		Lab Project ID: P1977			Date Extracted: 25 Jan 2010	
Project ID: CRBG 00107			Weight/Volume: 1		Lab Sample ID P1977_7528_001			Date Analyzed: 02 Feb 2010	
Date Collected: 20 Jan 2009			Split: 2		QC Batch No: 7528			Time Analyzed: 13:20:57	
Analyte	Conc. (pg)	DL (pg)	EMPC (pg)	Qualifiers	Standard	ES Recoveries	Qualifiers		
2378-TCDD	ND	2.38			ES 2378-TCDD	77.8			
12378-PeCDD	ND	2.86			ES 12378-PeCDD	72.9			
123478-HxCDD	ND	2.59			ES 123478-HxCDD	75.2			
123678-HxCDD	ND	2.86			ES 123678-HxCDD	74.8			
123789-HxCDD	ND	3.06			ES 123789-HxCDD	73.8			
1234678-HpCDD	8.16			J	ES 1234678-HpCDD	74			
OCDD	EMPC		11.4	J	ES OCDD	64.3			
2378-TCDF	44.3				ES 2378-TCDF	79.7			
12378-PeCDF	EMPC		3.79	J	ES 12378-PeCDF	80.4			
23478-PeCDF	3.26			J	ES 23478-PeCDF	80.2			
123478-HxCDF	EMPC		1.18	J	ES 123478-HxCDF	74.7			
123678-HxCDF	EMPC		1.52	J	ES 123678-HxCDF	77.9			
234678-HxCDF	ND	1.8			ES 234678-HxCDF	73.9			
123789-HxCDF	ND	2.29			ES 123789-HxCDF	70.2			
1234678-HpCDF	EMPC		4.23	J	ES 1234678-HpCDF	72.4			
1234789-HpCDF	ND	2.88			ES 1234789-HpCDF	72.3			
OCDF	ND	4.75			ES OCDF	67.4			
Totals					Standard	SS/AS Recoveries			
Total TCDD	6.37		6.37		SS 37Cl-2378-TCDD	97.8			
Total PeCDD	ND	2.86	ND		SS 12347-PeCDD	106			
Total HxCDD	14.3		14.3		SS 12346-PeCDF	101			
Total HpCDD	20.5		20.5		SS 123469-HxCDF	101			
					SS 1234689-HpCDF	103			
Total TCDF	105		133		AS 1368-TCDD	77.4			
Total PeCDF	3.26		10.5		AS 1368-TCDF	80.7			
Total HxCDF	6.21		10.9						
Total HpCDF	ND		4.23						
Total PCDD/Fs	156		211						
ITEF TEQs									
TEQ: ND=0	6.14		6.65						
TEQ: ND=DL/2	8.93		9.21						
TEQ: ND=DL	11.7		11.8						
								2714 Exchange Drive	
				ANALYTICAL PERSPECTIVES				Wilmington, NC 28405 , USA	
				Tel: +1 910 794-1613 (Fax: +3919) Toll-Free 866-846-8296				www.ultratrace.com	
				info@ultratrace.com					


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Sample ID: SSI #1-R-1					Method 23			
Client Data		Sample Data		Laboratory Data				
Name:	General Engineering Laboratories	Matrix:	Air	Lab Project ID:	P1977	Date Received:	21 Jan 2009	
Project ID:	CRBG 00107	Weight/Volume:	1	Lab Sample ID	P1977_7528_002RJ	Date Extracted:	25 Jan 2010	
Date Collected:	20 Jan 2009	Split:	2	QC Batch No:	7528	Date Analyzed:	02 Feb 2010	
				Dilution:	-	Time Analyzed:	23:46:30	
Analyte	Conc. (pg)	DL (pg)	EMPC (pg)	Qualifiers	Standard	ES Recoveries	Qualifiers	
2378-TCDD	ND	2.19			ES 2378-TCDD	92.3		
12378-PeCDD	ND	3.58			ES 12378-PeCDD	85.4		
123478-HxCDD	ND	3.37			ES 123478-HxCDD	92.6		
123678-HxCDD	ND	3.82			ES 123678-HxCDD	84.5		
123789-HxCDD	ND	4.12			ES 123789-HxCDD	83.8		
1234678-HpCDD	ND	6.08			ES 1234678-HpCDD	88.4		
OCDD	17.3			J	ES OCDD	85.9		
2378-TCDF	28.6				ES 2378-TCDF	92.8		
12378-PeCDF	ND	1.86			ES 12378-PeCDF	87.1		
23478-PeCDF	ND	1.74			ES 23478-PeCDF	90.9		
123478-HxCDF	ND	3			ES 123478-HxCDF	94.7		
123678-HxCDF	ND	3.09			ES 123678-HxCDF	90.9		
234678-HxCDF	ND	3.11			ES 234678-HxCDF	91		
123789-HxCDF	ND	4.48			ES 123789-HxCDF	78.7		
1234678-HpCDF	ND	4.09			ES 1234678-HpCDF	86.1		
1234789-HpCDF	ND	5.46			ES 1234789-HpCDF	86		
OCDF	ND	9.7			ES OCDF	81.8		
Totals					Standard	SS/AS Recoveries		
Total TCDD	6.6		6.6		SS 37Cl-2378-TCDD	94.8		
Total PeCDD	ND	3.58	ND		SS 12347-PeCDD	106		
Total HxCDD	ND	3.75	ND		SS 12346-PeCDF	99.2		
Total HpCDD	ND	6.08	ND		SS 123469-HxCDF	100		
			ND		SS 1234689-HpCDF	103		
Total TCDF	80		104		AS 1368-TCDD	94.5		
Total PeCDF	ND	1.8	ND		AS 1368-TCDF	95		
Total HxCDF	ND	3.35	ND					
Total HpCDF	ND	4.71	ND					
Total PCDD/Fs	104		128					
ITEF TEQs								
TEQ: ND=0	2.87		2.87				2714 Exchange Drive	
TEQ: ND=DL/2	6.68		6.68				ANALYTICAL PERSPECTIVES Wilmington, NC 28405 , USA	
TEQ: ND=DL	10.5		10.5				info@ultratrace.com	
							Tel: +1 910 794-1613 (Fax: -3919); Toll-Free 866 846-8290www.ultratrace.com	




Sample ID: SSI #1-R-2				Method 23			
Client Data		Sample Data		Laboratory Data		Date Received:	
Name: General Engineering Laboratories		Matrix: Air		Lab Project ID: P1977		21 Jan 2009	
Project ID: CRBG 00107		Weight/Volume: 1		Lab Sample ID P1977_7528_003		Date Extracted: 25 Jan 2010	
Date Collected: 20 Jan 2009		Split: 2		QC Batch No: 7528		Date Analyzed: 02 Feb 2010	
Analyte	Conc. (pg)	DL (pg)	EMPC (pg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.45			ES 2378-TCDD	88.7	
12378-PeCDD	ND	2.61			ES 12378-PeCDD	85.8	
123478-HxCDD	ND	2.78			ES 123478-HxCDD	94.2	
123678-HxCDD	ND	2.98			ES 123678-HxCDD	92.5	
123789-HxCDD	ND	3.51		J	ES 123789-HxCDD	91.1	
1234678-HpCDD	6.62			J	ES 1234678-HpCDD	96.5	
OCDD	25.1				ES OCDD	88.8	
2378-TCDF	EMPC		13.2		ES 2378-TCDF	89.1	
12378-PeCDF	ND	2			ES 12378-PeCDF	85.4	
23478-PeCDF	ND	2.02			ES 23478-PeCDF	84.5	
123478-HxCDF	ND	1.95			ES 123478-HxCDF	94.5	
123678-HxCDF	ND	1.77			ES 123678-HxCDF	97.8	
234678-HxCDF	ND	1.86			ES 234678-HxCDF	94	
123789-HxCDF	ND	2.29			ES 123789-HxCDF	88.7	
1234678-HpCDF	EMPC		3.65	J	ES 1234678-HpCDF	94.2	
1234789-HpCDF	ND	2.72			ES 1234789-HpCDF	95.4	
OCDF	EMPC		8.01	J	ES OCDF	90.1	
Totals					Standard	SS/AS Recoveries	
Total TCDD	6.01		6.01		SS 37Cl-2378-TCDD	101	
Total PeCDD	ND	2.61	ND		SS 12347-PeCDD	101	
Total HxCDD	8.63		8.63		SS 12346-PeCDF	102	
Total HpCDD	12.3		12.3		SS 123469-HxCDF	101	
Total TCDF	35.4		52.7		SS 1234689-HpCDF	106	
Total PeCDF	ND	2.01	ND		AS 1368-TCDD	95.5	
Total HxCDF	ND	1.95	ND		AS 1368-TCDF	94.7	
Total HpCDF	ND		3.65				
Total PCDD/Fs	87.4		116				
ITEF TEQs							
TEQ: ND=0	0.0912		1.46				
TEQ: ND=DL/2	3.51		4.76				
TEQ: ND=DL	6.92		8.06				

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# Sample ID: SSI #1-R-3

# Method 23

Client Data			Sample Data			Laboratory Data			Date Received: 21 Jan 2009		
Name: General Engineering Laboratories			Matrix: Air			Lab Project ID: P1977			Date Extracted: 25 Jan 2010		
Project ID: CRBG 00107			Weight/Volume: 1			Lab Sample ID P1977_7528_004			Date Analyzed: 02 Feb 2010		
Date Collected: 20 Jan 2009			Split: 2			QC Batch No: 7528			Time Analyzed: 15:52:21		
Analyte	Conc. (pg)	DL (pg)	EMPC (pg)	Qualifiers	Standard	ES Recoveries	Qualifiers				
2378-TCDD	ND	2.03			ES 2378-TCDD	89.3					
12378-PeCDD	ND	2.28			ES 12378-PeCDD	91.7					
123478-HxCDD	ND	2.85			ES 123478-HxCDD	92.2					
123678-HxCDD	ND	3.01			ES 123678-HxCDD	91					
123789-HxCDD	ND	3.27			ES 123789-HxCDD	92.1					
1234678-HpCDD	ND	3.72			ES 1234678-HpCDD	92.2					
OCDD	EMPC		18.7	J	ES OCDD	83.4					
2378-TCDF	17.9				ES 2378-TCDF	98.1					
12378-PeCDF	ND	1.72			ES 12378-PeCDF	93.8					
23478-PeCDF	EMPC		2.8	J	ES 23478-PeCDF	94.8					
123478-HxCDF	ND	1.71			ES 123478-HxCDF	90					
123678-HxCDF	ND	1.67			ES 123678-HxCDF	95.8					
234678-HxCDF	ND	1.88			ES 234678-HxCDF	89.5					
123789-HxCDF	ND	2.33			ES 123789-HxCDF	85.1					
1234678-HpCDF	EMPC		3.03	J	ES 1234678-HpCDF	91.8					
1234789-HpCDF	ND	2.95			ES 1234789-HpCDF	89.4					
OCDF	ND	3.76			ES OCDF	81.1					
Totals					Standard	SS/AS Recoveries					
Total TCDD	ND		6.39		SS 37Cl-2378-TCDD	95.2					
Total PeCDD	ND	2.28	ND		SS 12347-PeCDD	102					
Total HxCDD	3.46		8.94		SS 12346-PeCDF	99.7					
Total HpCDD	ND	3.72	ND		SS 123469-HxCDF	94.5					
Total TCDF	47.4		47.4		SS 1234689-HpCDF	100					
Total PeCDF	ND	1.88	2.8		AS 1368-TCDD	96.8					
Total HxCDF	ND		ND		AS 1368-TCDF	97.2					
Total HpCDF	ND		3.03								
Total PCDD/Is	50.8		87.2								
ITEF TEQs											
TEQ: ND=0	1.79		3.24								
TEQ: ND=DL/2	4.76		5.74								
TEQ: ND=DL	7.72		8.24								
								2714 Exchange Drive Wilmington, NC 28405 , USA info@ultratrace.com			
								Tel: +1 910 794-1613 (Fax: +3919) Toll-Free 866 846-8296www.ultratrace.com			

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Sample Summary					ANALYTICAL PERSPECTIVES			HR-PCB	
Analyte	MB1_7528_PCB_SDS	Conc. pg	SSI #1-Blank	Conc. pg	SSI #1-R-1	Conc. pg	SSI #1-R-2	Conc. pg	SSI #1-R-3
PCB-77	(4.91)	414	260	165	280				
PCB-81	(4.89)	23.1	18.4	(5.76)	17.8				
PCB-105	(4.42)	791	409	265	424				
PCB-114	(4.66)	62.7	32.0	(5.23)	25.3				
PCB-118	7.07	2210	1120	719	1100				
PCB-123	(4.69)	31.1	25.2	(5.78)	23.5				
PCB-126	(5.45)	(8.21)	(8.82)	(7.34)	(7.68)				
PCB-156/157	(7.76)	166	81.2	57.9	83.2				
PCB-167	(5.39)	74.0	39.1	26.2	42.4				
PCB-169	(6.58)	(7.7)	(8.81)	(6.37)	(6.45)				
PCB-189	(4.74)	10.8	6.87	(5.96)	(7.61)				
Total Mono-CBs	22.7	4440	3400	3040	3000				
Total Di-CBs	197	32200	26100	25200	19900				
Total Tri-CBs	76.5	23800	15200	18900	15200				
Total Tetra-CBs	60.2	36800	23400	18300	18900				
Total Penta-CBs	42.2	18200	9100	6360	9220				
Total Hexa-CBs	[25.1]	13200	6310	3930	6480				
Total Hepta-CBs	10.6	5090	2320	1480	2370				
Total Octa-CBs	2.89	913	412	160	427				
Total Nona-CBs	(9.44)	106	47.7	(8.4)	54.3				
PCB-209	(6.21)	20.1	12.7	(9.91)	(12)				
TEQs (WHO 2005 MH)									
ND = 0; EMPC = 0	0.000212	0.149	0.0831	0.0485	0.0842				
ND = 0; EMPC = EMPC	0.000212	0.149	0.0831	0.0485	0.0842				
ND = DL/2; EMPC = 0	0.373	0.674	0.656	0.512	0.565				
ND = DL/2; EMPC = EMPC	0.373	0.674	0.656	0.512	0.565				
ND = DL; EMPC = 0	0.745	1.20	1.23	0.976	1.05				
ND = DL; EMPC = EMPC	0.745	1.20	1.23	0.976	1.05				

Checkcode

0 = DL  
0 = EMPC

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Reviewer HS  
Date 17 Feb 10

PCB Recoveries					ANALYTICAL PERSPECTIVES		HR-PCB	
Standard	MB1_7528_PCB_SDS	SSI #1-Blank	SSI #1-R-1	SSI #1-R-2	SSI #1-R-3			
ES PCB-1	76.8	73.8	91.4	80.7	87.8			
ES PCB-3	83.6	76.7	94.2	84.7	91.1			
ES PCB-4	88.8	92.8	110	104	114			
ES PCB-15	110	86.5	102	98.0	106			
ES PCB-19	104	96.5	124	108	113			
ES PCB-37	97.0	74.3	91.4	84.6	89.9			
ES PCB-54	85.4	96.0	105	99.4	116			
ES PCB-77	104	115	105	140	131			
ES PCB-81	102	112	103	139	133			
ES PCB-104	91.8	56.7	92.4	60.3	73.1			
ES PCB-105	98.5	80.2	99.4	87.0	92.3			
ES PCB-114	94.2	79.4	95.1	88.1	90.3			
ES PCB-118	94.8	77.9	95.0	89.0	92.9			
ES PCB-123	94.3	81.6	104	89.5	95.2			
ES PCB-126	97.3	72.0	84.3	83.8	91.4			
ES PCB-153	97.5	83.0	101	97.2	98.5			
ES PCB-155	96.1	78.6	96.7	94.5	105			
ES PCB-156/157	92.0	70.2	80.1	84.3	94.7			
ES PCB-167	93.6	62.8	75.4	81.0	89.7			
ES PCB-169	91.1	65.5	79.8	76.3	82.2			
ES PCB-170	91.0	102	128	109	128			
ES PCB-180	91.6	101	126	114	134			
ES PCB-188	92.0	89.7	105	106	111			
ES PCB-189	99.2	79.5	93.9	97.4	104			
ES PCB-202	95.3	85.6	93.3	111	116			
ES PCB-205	99.6	81.8	96.6	93.6	99.5			
ES PCB-206	97.9	83.9	100	95.3	98.1			
ES PCB-208	94.1	92.5	106	115	121			
ES PCB-209	100	85.9	88.7	89.1	86.2			

Checkcode

() = DL

[] = EMPC

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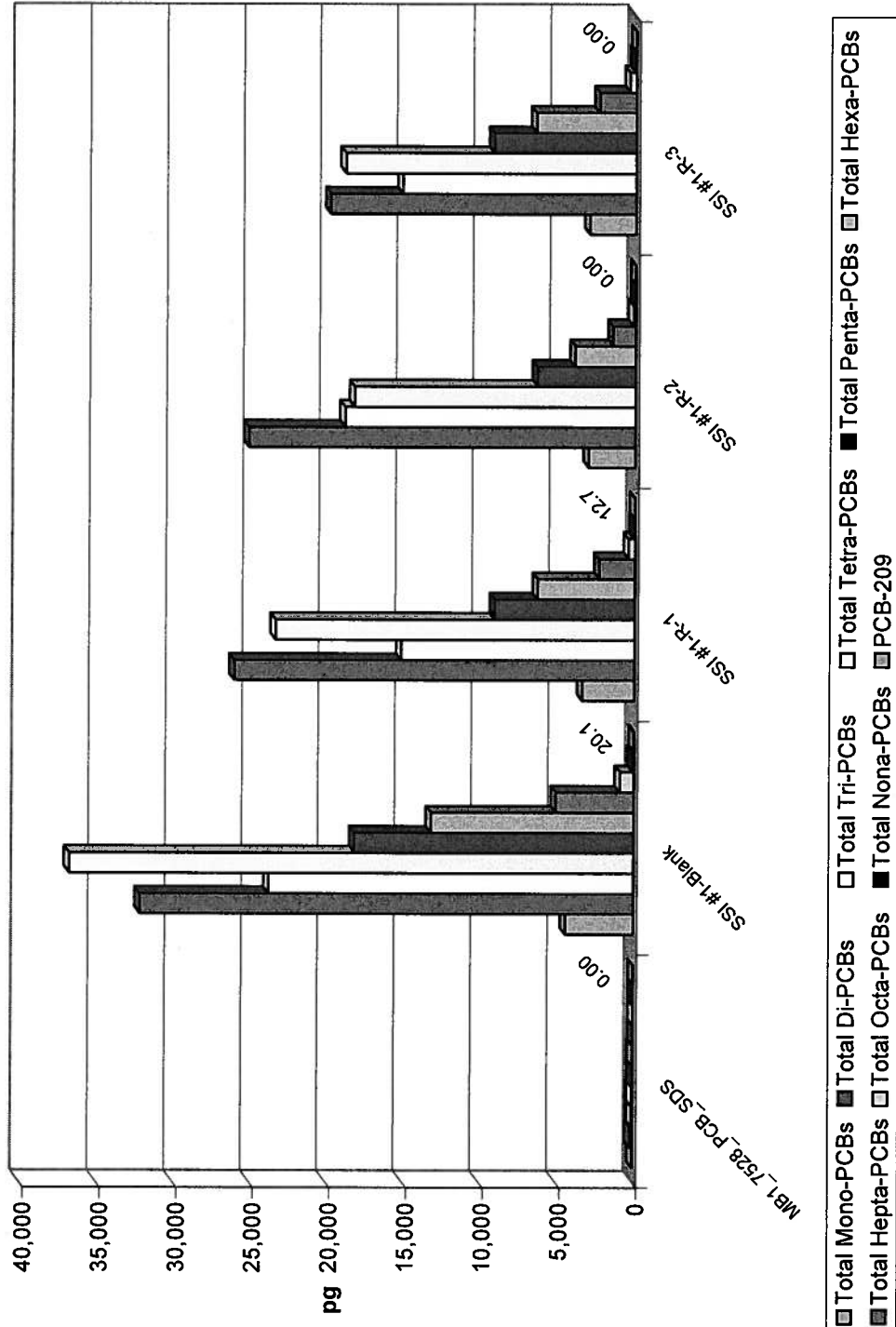
βω

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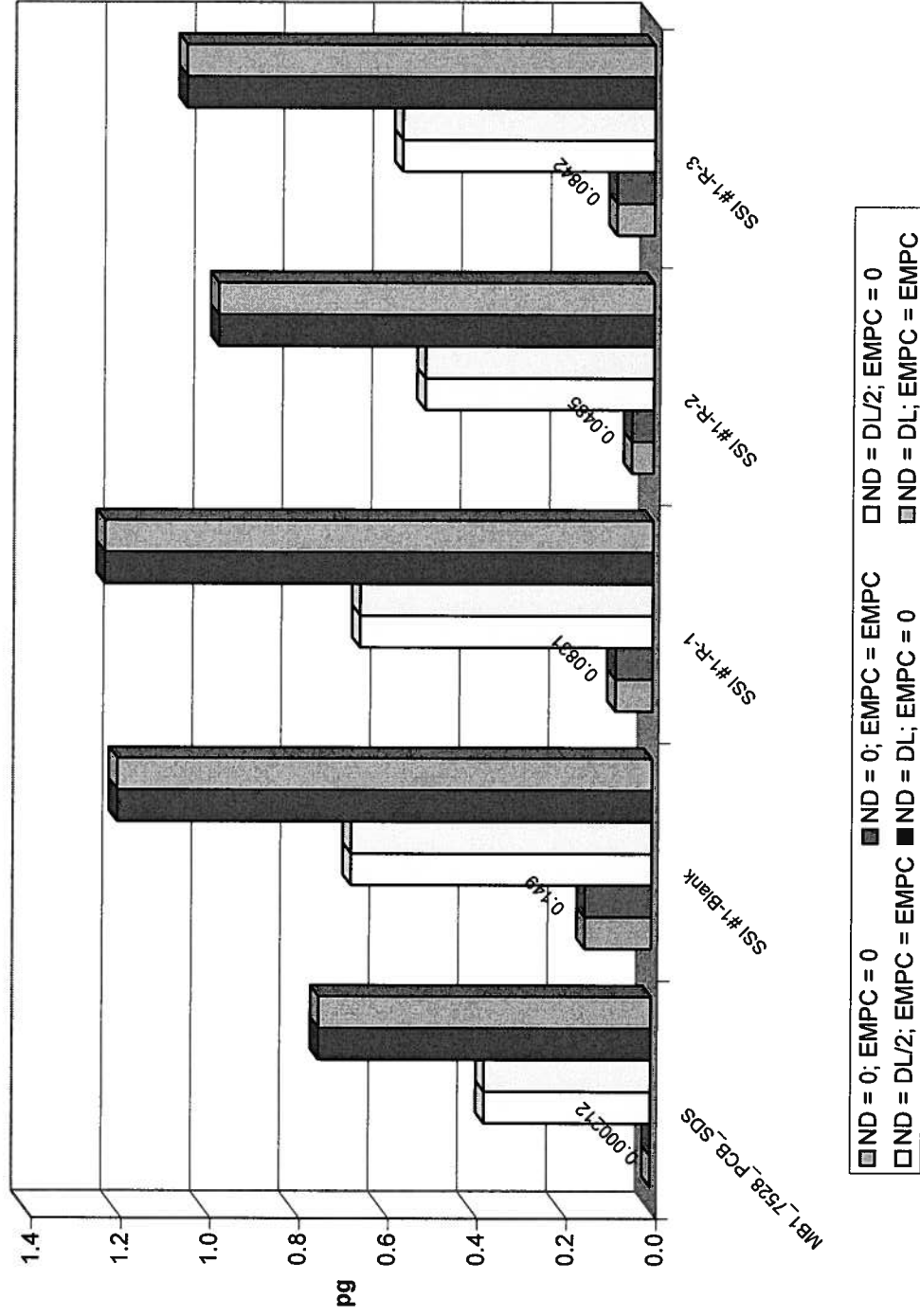
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Reviewer HS  
Date 17 Feb 10

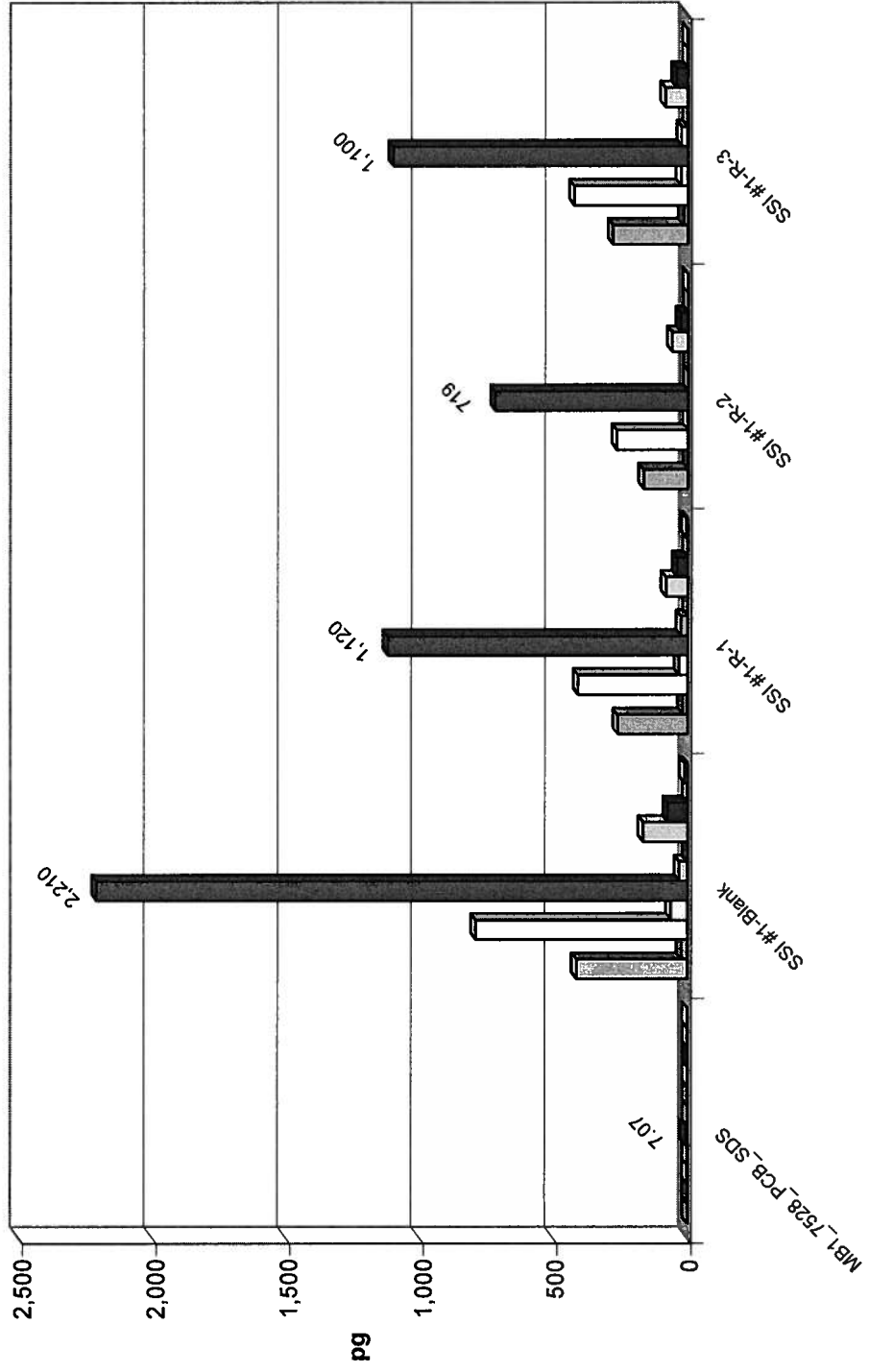
PCB Homologues  
Project ID: CRBG 00107  
P1977



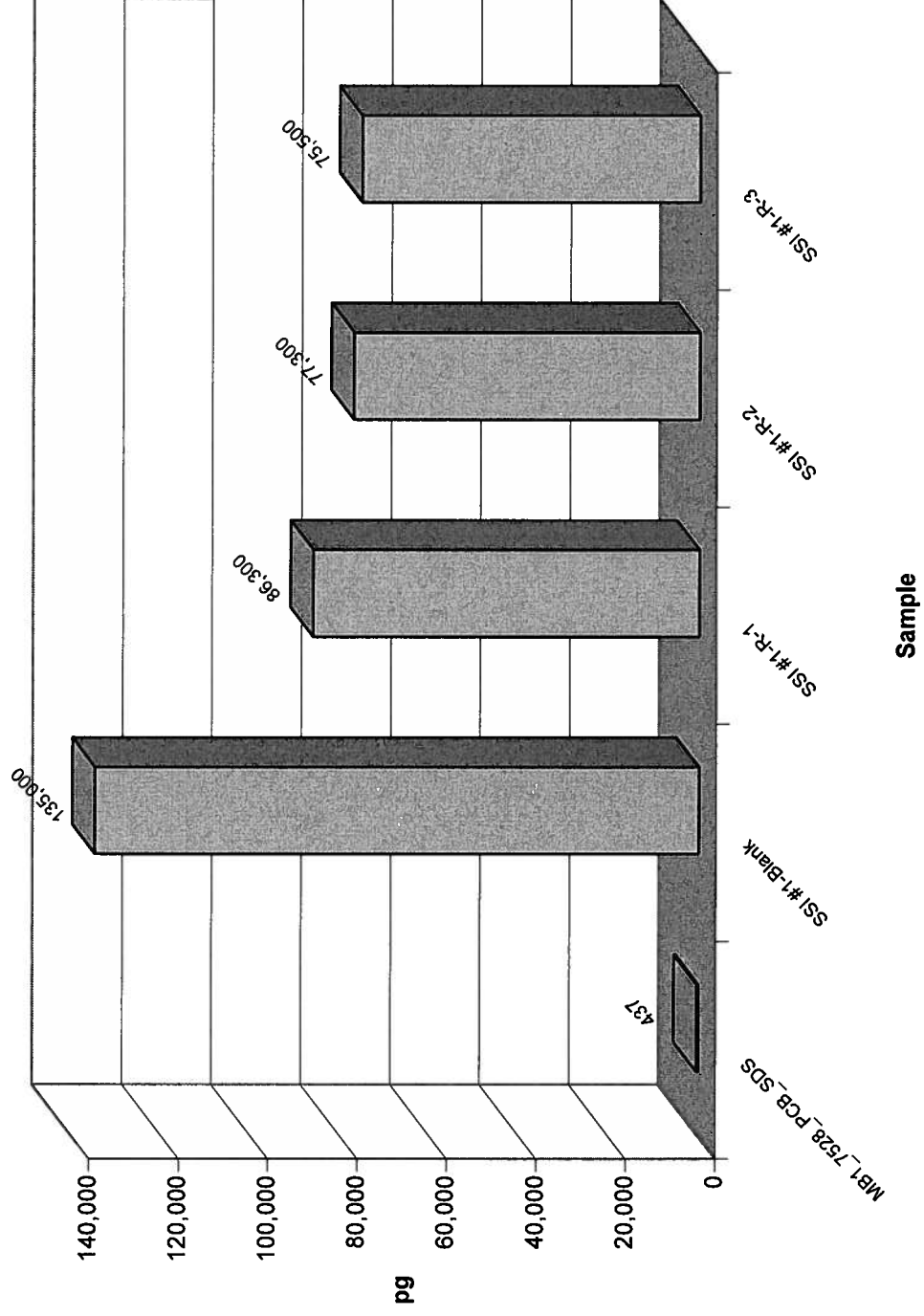
PCB TEQ  
Project ID: CRBG 00107  
P1977



PCB WHO  
Project ID: CRBG 00107  
P1977

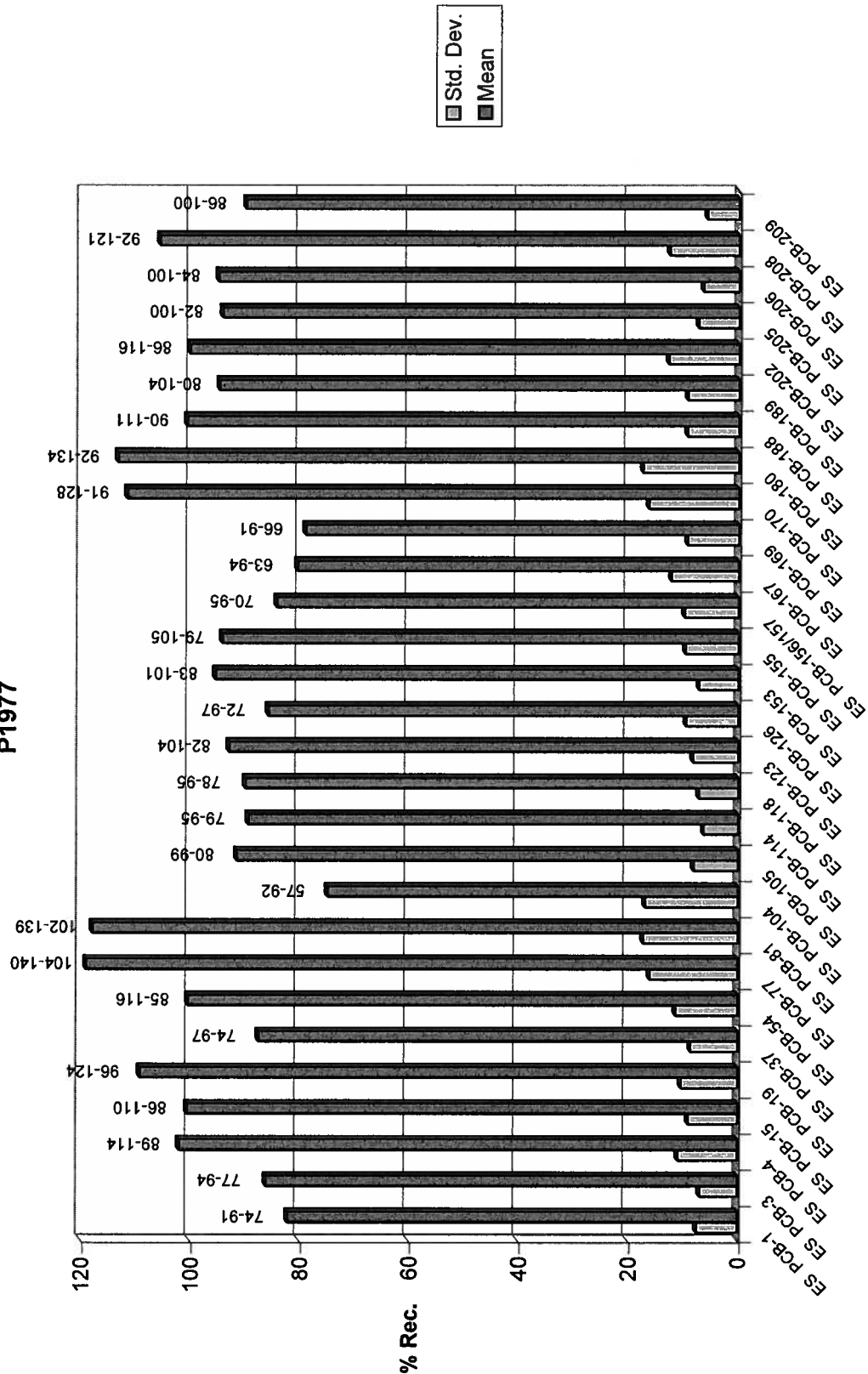


PCB Totals  
Project ID: CRBG 00107  
P1977





Mean Recoveries of Extraction Standards (N=5)  
Project ID: CRBG 00107  
P1977



Sample ID: MB1_7528_PCB_SDS				Method HR-PCB			
Client Data		Sample Data		Laboratory Data			
Name: General Engineering Laboratories		Matrix:		Project No.:		P1977	
Project ID: CRBG 00107		Weight/Volume:		Sample ID:		MB1_7528_PCB_SDS	
Date Collected: n/a				QC Batch No.:		7528	
Analyte	Conc.	DL	EMPC	Qualifier	Standard	Recovery	
	pg	pg	pg			%	
PCB-77 33'44'-TeCB	ND	4.91			ES PCB-1	76.8	
PCB-81 34'45'-TeCB	ND	4.89			ES PCB-3	83.6	
PCB-105 233'44'-PeCB	ND	4.42			ES PCB-4	88.8	
PCB-114 234'45'-PeCB	ND	4.66			ES PCB-15	110	
PCB-118 23'44'5'-PeCB	7.07			J	ES PCB-19	104	
PCB-123 2'344'5'-PeCB	ND	4.69			ES PCB-37	97	
PCB-126 33'44'5'-PeCB	ND	5.45			ES PCB-54	85.4	
PCB-156/157 233'44'5'/233'44'5'	ND	7.76		C	ES PCB-77	104	
PCB-167 23'44'55'-HxCB	ND	5.39			ES PCB-81	102	
PCB-169 33'44'55'-HxCB	ND	6.58			ES PCB-104	91.8	
PCB-189 233'44'55'-HpCB	ND	4.74			ES PCB-105	98.5	
					ES PCB-114	94.2	
TEQs (WHO M/H)					ES PCB-118	94.8	
					ES PCB-123	94.3	
ND = 0	0.000212				ES PCB-126	97.3	
ND = 0.5 x DL	0.373		0.000212		ES PCB-153	97.5	
					ES PCB-155	96.1	
Totals					ES PCB-156/157	92	
					ES PCB-167	93.6	
Mono-CBs	22.7		32.2		ES PCB-169	91.1	
Di-CBs	197				ES PCB-170	91	
Tri-CBs	76.5		85.6		ES PCB-180	91.6	
Tetra-CBs	60.2				ES PCB-188	92	
Penta-CBs	42.2				ES PCB-189	99.2	
Hexa-CBs			25.1		ES PCB-202	95.3	
Hepta-CBs	10.6				ES PCB-205	99.6	
Octa-CBs	2.89				ES PCB-206	97.9	
Nona-CBs	ND	9.44			ES PCB-208	94.1	
PCB-209 DeCB	ND	6.21			ES PCB-209	100	
					SS PCB-28	94.4	
					SS PCB-111	101	
					SS PCB-178	101	

CT

2714 Exchange Drive T: 910 794-1613  
Wilmington F: 910 794-3919  
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USA www.ultratrace.com

ANALYTICAL PERSPECTIVES



# Sample ID: SSI #1-Blank

## Method HR-PCB

Client Data		Sample Data		Laboratory Data		Date Received:	
Name:	General Engineering Laboratories	Matrix:	Air	Project No.:	DL	P1977	21-Jan-09
Project ID:	CRBG 00107	Weight/Volume:	1	Sample ID:	pg	P1977_7528_PCB_001	25-Jan-10
Date Collected:	20-Jan-09			QC Batch No.:	pg	7528	5-Feb-10
Analyte	Conc.	DL	EMPC	Qualifier	Standard	Recovery	%
PCB-77 33'44'-TeCB	414				ES PCB-1		73.8
PCB-81 344'5'-TeCB	23.1				ES PCB-3		76.7
PCB-105 233'44'-PeCB	791				ES PCB-4		92.8
PCB-114 2344'5'-PeCB	62.7				ES PCB-15		86.5
PCB-118 23'44'5'-PeCB	2,210				ES PCB-19		96.5
PCB-123 2'344'5'-PeCB	31.1				ES PCB-37		74.3
PCB-126 33'44'5'-PeCB	ND	8.21			ES PCB-54		96
PCB-156/157 233'44'5'/233'44'5'	166			C	ES PCB-77		115
PCB-167 23'44'55'-HxCB	74				ES PCB-81		112
PCB-169 33'44'55'-HxCB	ND	7.7			ES PCB-104		56.7
PCB-189 233'44'55'-HpCB	10.8			J	ES PCB-105		80.2
TEQs (WHO M/H)							
ND = 0					ES PCB-114		79.4
ND = 0.5 x DL					ES PCB-118		77.9
	0.149				ES PCB-123		81.6
	0.674				ES PCB-126		72
					ES PCB-153		83
					ES PCB-155		78.6
					ES PCB-156/157		70.2
					ES PCB-167		62.8
Mono-CBs	4.440				ES PCB-169		65.5
Di-CBs	32,200				ES PCB-170		102
Tri-CBs	23,800				ES PCB-180		101
Tetra-CBs	36,800				ES PCB-188		89.7
Penta-CBs	18,200				ES PCB-189		79.5
Hexa-CBs	13,200				ES PCB-202		85.6
Hepta-CBs	5,090				ES PCB-205		81.8
Octa-CBs	913				ES PCB-206		83.9
Nona-CBs	106				ES PCB-208		92.5
PCB-209 DeCB	20.1				ES PCB-209		85.9
					SS PCB-28		98.3
					SS PCB-111		94.3
					SS PCB-178		102

001

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ANALYTICAL PERSPECTIVES



# Sample ID: SSI #1-R-1

# Method HR-PCB

Client Data			Sample Data		Laboratory Data		Project No.: P1977		Date Received: 21-Jan-09	
Name: General Engineering Laboratories			Matrix: CRBG 00107		Air		P1977_7528_PCB_002		25-Jan-10	
Project ID: CRBG 00107			Weight/Volume:		1		Date Analyzed: 7528		5-Feb-10	
Date Collected: 20-Jan-09										
Analyte	Conc.	DL	EMPC	Qualifier	Standard	Recovery				
	pg	pg	pg			%				
PCB-77 33'44'-TeCB	260				ES PCB-1	91.4				
PCB-81 344'5'-TeCB	18.4			J	ES PCB-3	94.2				
PCB-105 233'44'-PeCB	409				ES PCB-4	110				
PCB-114 2344'5'-PeCB	32				ES PCB-15	102				
PCB-118 23'44'5'-PeCB	1,120				ES PCB-19	124				
PCB-123 2'344'5'-PeCB	25.2				ES PCB-37	91.4				
PCB-126 33'44'5'-PeCB	ND	8.82			ES PCB-54	105				
PCB-156/157 233'44'5/233'44'5'	81.2			C	ES PCB-77	105				
PCB-167 23'44'55'-HxCB	39.1				ES PCB-81	103				
PCB-169 33'44'55'-HxCB	ND	8.81			ES PCB-104	92.4				
PCB-189 233'44'55'-HpCB	6.87			J	ES PCB-105	99.4				
							ES PCB-114	95.1		
							ES PCB-118	95		
							ES PCB-123	104		
ND = 0	0.0831		0.0831		ES PCB-126	84.3				
ND = 0.5 x DL	0.656		0.656		ES PCB-153	101				
							ES PCB-155	96.7		
							ES PCB-156/157	80.1		
							ES PCB-167	75.4		
							ES PCB-169	79.8		
Mono-CBs	3,400				ES PCB-170	128				
Di-CBs	26,100		15,200		ES PCB-180	126				
Tri-CBs	15,200		23,400		ES PCB-188	105				
Tetra-CBs	23,400		9,100		ES PCB-189	93.9				
Penta-CBs	9,100		6,310		ES PCB-202	93.3				
Hexa-CBs	6,310		2,320		ES PCB-205	96.6				
Hepta-CBs	2,320		412		ES PCB-206	100				
Octa-CBs	412		47.7		ES PCB-208	106				
Nona-CBs	47.7		12.7	J	ES PCB-209	88.7				
PCB-209 DeCB	12.7				SS PCB-28	99.8				
							SS PCB-111	93.5		
							SS PCB-178	103		

# Sample ID: SSI #1-R-2

# Method HR-PCB

Client Data		Sample Data		Laboratory Data		Project No.: P1977		Date Received: 21-Jan-09	
Name: General Engineering Laboratories		Matrix: CRBG 00107		Air 1		P1977_7528_PCB_003		Date Extracted: 25-Jan-10	
Project ID: 20-Jan-09		Weight/Volume:		DL pg		7528		Date Analyzed: 5-Feb-10	
Analyte	Conc.	pg	DL	EMPC	Qualifier	Standard	Recovery		
PCB-77 33'44'-TeCB	165	pg		pg		ES PCB-1	80.7		
PCB-81 344'5'-TeCB	ND		5.76			ES PCB-3	84.7		
PCB-105 233'44'-PeCB	265					ES PCB-4	104		
PCB-114 2344'5'-PeCB	ND		5.23			ES PCB-15	98		
PCB-118 2344'5'-PeCB	719					ES PCB-19	108		
PCB-123 2'344'5'-PeCB	ND		5.78			ES PCB-37	84.6		
PCB-126 33'44'5'-PeCB	ND		7.34			ES PCB-54	99.4		
PCB-156/157 233'44'5'/233'44'5'	57.9				C	ES PCB-77	140		
PCB-167 23'44'55'-HxCB	26.2					ES PCB-81	139		
PCB-169 33'44'55'-HxCB	ND		6.37			ES PCB-104	60.3		
PCB-189 233'44'55'-HpCB	ND		5.96			ES PCB-105	87		
TEQs (WHO M/H)						ES PCB-114	88.1		
						ES PCB-118	89		
						ES PCB-123	89.5		
ND = 0	0.0485					ES PCB-126	83.8		
ND = 0.5 x DL	0.512					ES PCB-153	97.2		
Totals						ES PCB-155	94.5		
						ES PCB-156/157	84.3		
						ES PCB-167	81		
Mono-CBs	3,040					ES PCB-169	76.3		
Di-CBs	25,200					ES PCB-170	109		
Tri-CBs	18,900					ES PCB-180	114		
Tetra-CBs	18,300					ES PCB-188	106		
Penta-CBs	6,360					ES PCB-189	97.4		
Hexa-CBs	3,930					ES PCB-202	111		
Hepta-CBs	1,480					ES PCB-205	93.6		
Octa-CBs	160					ES PCB-206	95.3		
Nona-CBs	ND		8.4			ES PCB-208	115		
PCB-209 DeCB	ND		9.91			ES PCB-209	89.1		
						SS PCB-28	98.2		
						SS PCB-111	96.3		
						SS PCB-178	96.6		

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Wilmington F: 910 794-3919  
North Carolina 28405 info@ultratrace.com  
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ANALYTICAL PERSPECTIVES

## Method HR-PCB

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P1977

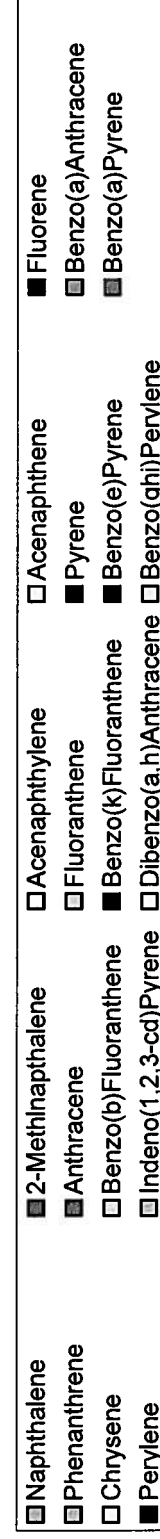
Project ID: CRBG 00107

Sample Summary		ANALYTICAL PERSPECTIVES			Method HRPAAH
Analyte	0_7528_MB001 Conc ng/Train	SSI #1-Blank Conc ng/Train	SSI #1-R-1 Conc ng/Train	SSI #1-R-2 Conc ng/Train	SSI #1-R-3 Conc ng/Train
Naphthalene	1,040	5,050	4,650	3,550	3,880
2-Methylnaphthalene	84.8	3,780	2,050	1,570	1,950
Acenaphthylene	3.86	124	151	110	116
Acenaphthene	16.2	579	337	219	279
Fluorene	37.8	801	514	367	441
Phenanthrene	96.3	2,610	2,040	1,400	1,740
Anthracene	3.12	117	85.9	49.2	71.7
Fluoranthene	17.4	508	426	341	338
Pyrene	5.9	256	165	343	158
Benzo(a)Anthracene	< 0.3	27.2	13.7	12	14.1
Chrysene	0.47	89.8	61	84.9	51.5
Benzo(b)Fluoranthene	1.31	86.7	54.4	161	45.6
Benzo(k)Fluoranthene	< 0.577	26.5	15.2	31.9	12.6
Benzo(e)Pyrene	0.591	51.4	26.9	99.7	26.9
Benzo(a)Pyrene	< 0.804	18.8	7.23	8.14	6.28
Perylene	< 0.865	3.47	2.05	1.34	1.55
Indeno(1,2,3-cd)Pyrene	< 1.47	27.6	12.6	34.5	16.6
Dibenzo(a,h)Anthracene	< 1.71	7.01	1.82	6.72	4.43
Benzo(ghi)Perylene	< 1.19	23.2	9	23	15.3

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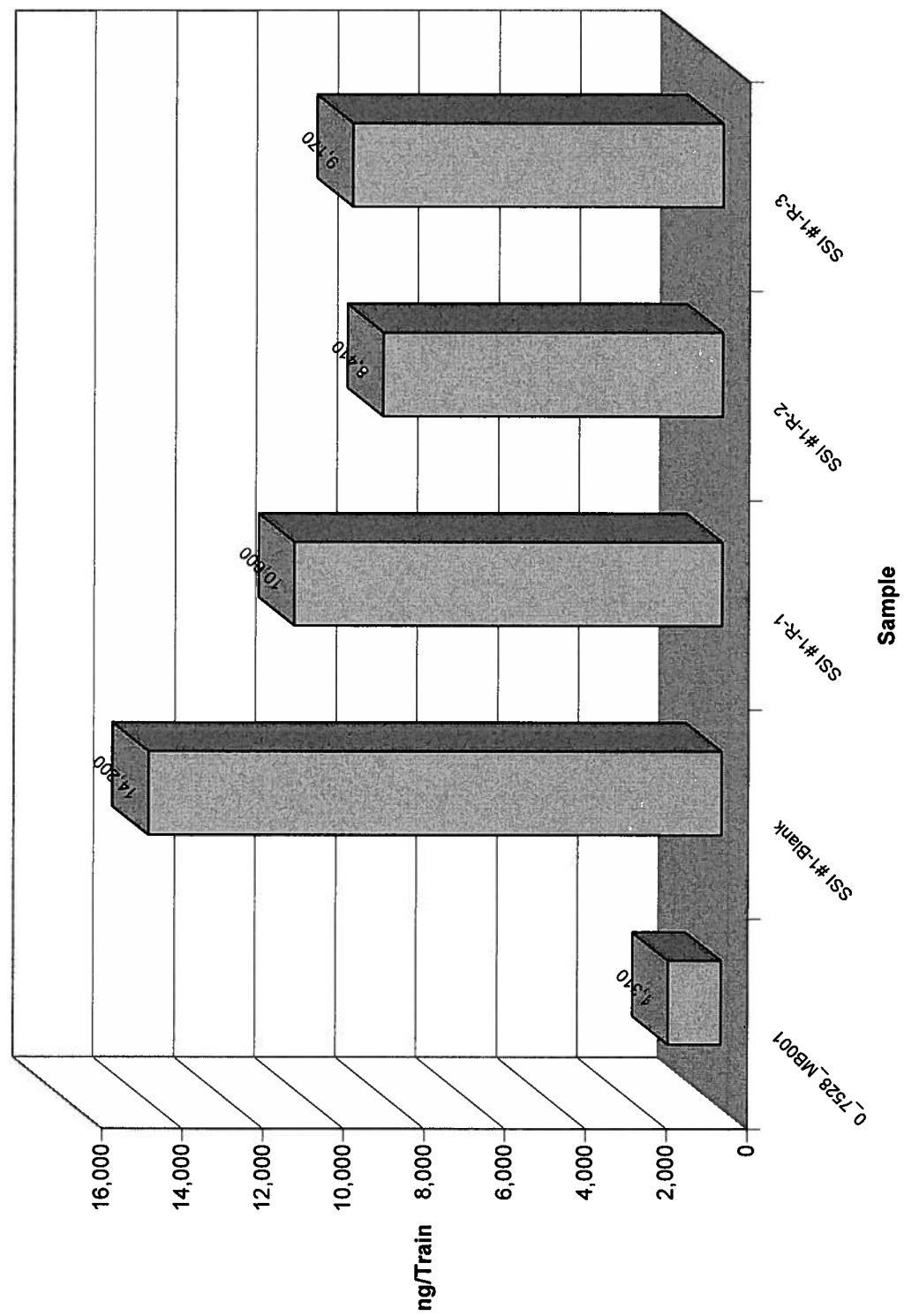
Reviewer HS  
Date 17 Feb 10

Sample	ng/Train
0_7528_MB001	400
SSI #1-Blank	5500
SSI #1-R-1	4650
SSI #1-R-2	3600
SSI #1-R-3	3200





# P1977 Total PAHs



Sample ID: 0_7528_MB001				Method HR-PAH		
Client Data		Sample Data		Laboratory Data		
Name:	GEL Laboratories, LLC	Matrix:	Air	Project No.:	P1977	Date Received:
Project ID:	CRBG 00107	Weight/Volume:	1 Train	Sample ID:	MB1_7528_PAH_SDS	Date Extracted:
Date Collected:	20 Jan 10			QC Batch No.:	7528	Date Analyzed:
Analyte	Conc.	DL	Qual.	Extraction Standards (ES)	Recovery	Qual.
	ng/Train	ng/Train			%	
Naphthalene	1040		*	<sup>13</sup> C <sub>6</sub> -Naphthalene	67.9	
2-Methylnaphthalene	84.8			<sup>13</sup> C <sub>6</sub> -2-Methylnaphthalene	77.8	
Acenaphthylene	3.86		J	<sup>13</sup> C <sub>6</sub> -Acenaphthylene	75.6	
Acenaphthene	16.2			<sup>13</sup> C <sub>6</sub> -Acenaphthene	81.7	
Fluorene	37.8			<sup>13</sup> C <sub>6</sub> -Fluorene	89.9	
Phenanthrene	96.3			<sup>13</sup> C <sub>6</sub> -Phenanthrene	99.1	
Anthracene	3.12		J	<sup>13</sup> C <sub>6</sub> -Anthracene	91.0	
Fluoranthene	17.4			<sup>13</sup> C <sub>6</sub> -Fluoranthene	87.7	
Pyrene	5.9			<sup>13</sup> C <sub>3</sub> -Pyrene	93.3	
Benzo(a)Anthracene	ND	0.3		<sup>13</sup> C <sub>6</sub> -Benzo(a)Anthracene	88.5	
Chrysene	0.47		J	<sup>13</sup> C <sub>6</sub> -Chrysene	91.8	
Benzo(b)Fluoranthene	1.31		J PR	<sup>13</sup> C <sub>6</sub> -Benzo(b)Fluoranthene	91.7	
Benzo(k)Fluoranthene	ND	0.577		<sup>13</sup> C <sub>6</sub> -Benzo(k)Fluoranthene	85.8	
Benzo(e)Pyrene	0.591		J	<sup>13</sup> C <sub>4</sub> -Benzo(e)Pyrene	87.3	
Benzo(a)Pyrene	ND	0.804		<sup>13</sup> C <sub>4</sub> -Benzo(a)Pyrene	77.2	
Perylene	ND	0.865		d <sub>12</sub> -Perylene	73.6	
Indeno(1,2,3-cd)Pyrene	ND	1.47		<sup>13</sup> C <sub>6</sub> -Indeno(1,2,3-cd)Pyrene	79.6	
Dibenzo(a,h)Anthracene	ND	1.71		<sup>13</sup> C <sub>6</sub> -Dibenzo(ah)Anthracene	79.3	
Benzo(ghi)Perylene	ND	1.19		<sup>13</sup> C <sub>12</sub> -Benzo(ghi)Perylene	81.9	
ANALYTICAL PERSPECTIVES				Alternate Standard (AS)		
2714 Exchange Drive				d <sub>10</sub> -Anthracene	94.2	
Wilmington, NC 28405, USA						
Tel: 910 794-1613						
Fax: 910 794-3919				Sampling Standards (SS)		
info@ultratrace.com				d <sub>10</sub> -Fluorene	102.0	
www.ultratrace.com				d <sub>14</sub> -Terphenyl	105.0	

Reviewer ..... HS  
Date 17 Feb 10







Sample ID: SSI #1-R-3			Method HR-PAH			
<b>Client Data</b>		<b>Sample Data</b>		<b>Laboratory Data</b>		
Name:	GEL Laboratories, LLC	Matrix:	Air	Project No.:	P1977	Date Received: 21 Jan 10
Project ID:	CRBG 00107	Weight/Volume:	1 Train	Sample ID:	P1977_7528_004	Date Extracted: 25 Jan 10
Date Collected:	20 Jan 10			QC Batch No.:	7528	Date Analyzed: 01 Feb 10
Analyte	Conc. ng/Train	PQL/RL <sup>a</sup> ng/Train	Qual.	Extraction Standards (ES)	Recovery %	Qual.
Naphthalene	3880	25300	*	<sup>13</sup> C <sub>6</sub> -Naphthalene	71.2	
2-Methylnaphthalene	1950	18900	*	<sup>13</sup> C <sub>6</sub> -2-Methylnaphthalene	87.9	
Acenaphthylene	116	622		<sup>13</sup> C <sub>6</sub> -Acenaphthylene	94.0	
Acenaphthene	279	2890		<sup>13</sup> C <sub>6</sub> -Acenaphthene	92.7	
Fluorene	441	4000	*	<sup>13</sup> C <sub>6</sub> -Fluorene	96.9	
Phenanthrene	1740	13100	*	<sup>13</sup> C <sub>6</sub> -Phenanthrene	95.1	
Anthracene	71.7	584		<sup>13</sup> C <sub>6</sub> -Anthracene	100.0	
Fluoranthene	338	2540		<sup>13</sup> C <sub>6</sub> -Fluoranthene	108.0	
Pyrene	158	1280		<sup>13</sup> C <sub>3</sub> -Pyrene	92.2	
Benzo(a)Anthracene	14.1	136		<sup>13</sup> C <sub>6</sub> -Benzo(a)Anthracene	117.0	
Chrysene	51.5	449		<sup>13</sup> C <sub>6</sub> -Chrysene	115.0	
Benzo(b)Fluoranthene	45.6	434	PR	<sup>13</sup> C <sub>6</sub> -Benzo(b)Fluoranthene	93.9	
Benzo(k)Fluoranthene	12.6	133		<sup>13</sup> C <sub>6</sub> -Benzo(k)Fluoranthene	92.1	
Benzo(e)Pyrene	26.9	257		<sup>13</sup> C <sub>4</sub> -Benzo(e)Pyrene	94.2	
Benzo(a)Pyrene	6.28	93.8		<sup>13</sup> C <sub>4</sub> -Benzo(a)Pyrene	90.4	
Perylene	1.55	17.3	J	d <sub>12</sub> -Perylene	67.8	
Indeno(1,2,3-cd)Pyrene	16.6	138		<sup>13</sup> C <sub>6</sub> -Indeno(1,2,3-cd)Pyrene	108.0	
Dibenzo(a,h)Anthracene	4.43	35.1		<sup>13</sup> C <sub>6</sub> -Dibenzo(a,h)Anthracene	110.0	
Benzo(ghi)Perylene	15.3	116		<sup>13</sup> C <sub>12</sub> -Benzo(ghi)Perylene	92.8	
<b>ANALYTICAL PERSPECTIVES</b>			<b>Alternate Standard (AS)</b>			
			d <sub>10</sub> -Anthracene			
			<b>Sampling Standards (SS)</b>			
			d <sub>10</sub> -Fluorene			
			d <sub>14</sub> -Terphenyl			

(a) Method 429, Sections 2.3.3 and 8.2.1

Reviewer ..... HS .....  
 Date 17 Feb 10 .....

P1977



**ANALYTICAL PERSPECTIVES**

## **PART 2**

# **SAMPLE PATH**

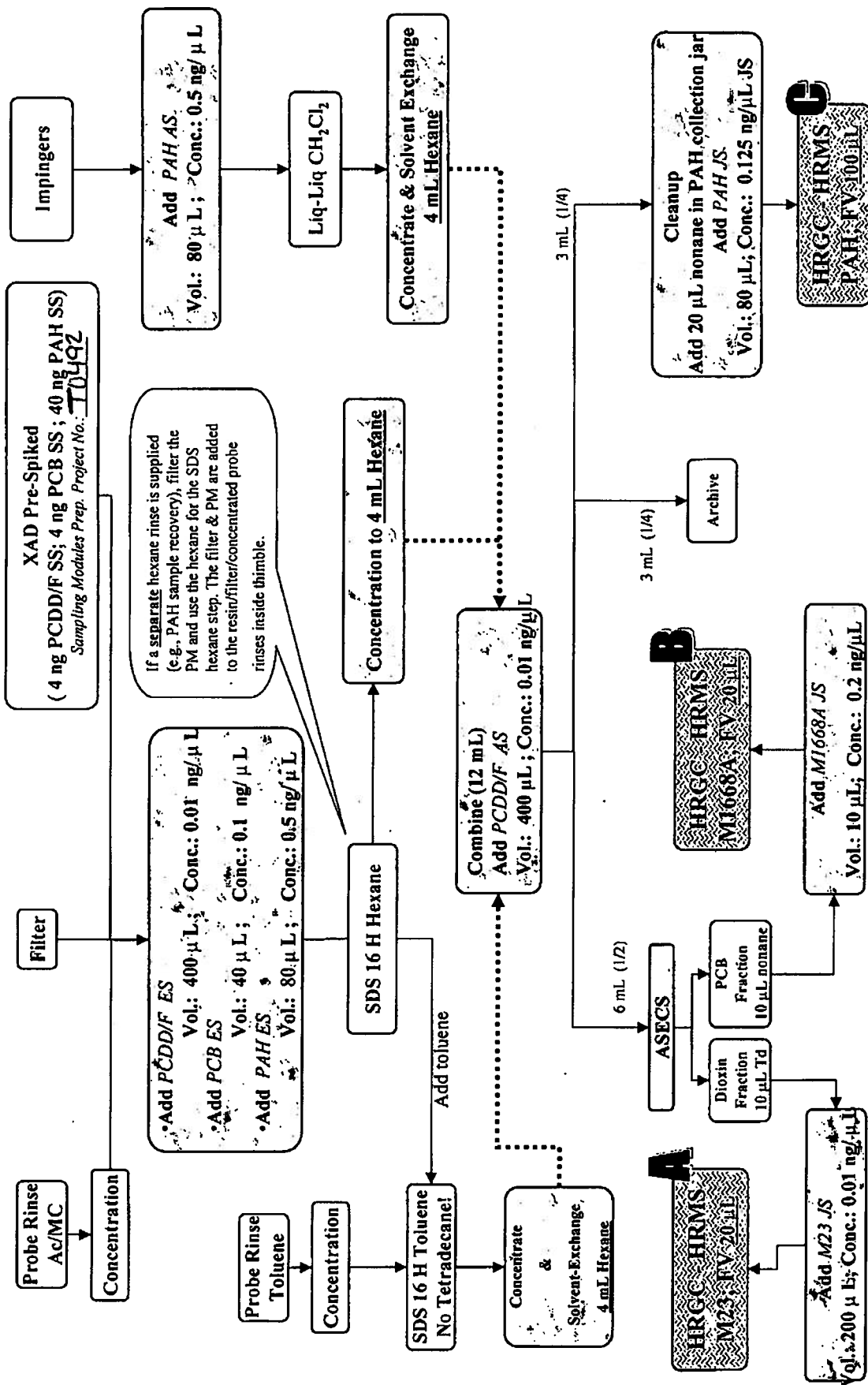
DOCUMENTATION FOR THE ANALYSIS  
OF  
HAPS

# SAMPLE PATH

## ANALYTICAL PERSPECTIVES

AP PROJECT NO.: P1977

PROTOCOL: PCDD/F &amp; PCB &amp; PAH





# AIR

TRANSFER: 11-12-10  
RECEIVED: 11-23-10

**PCDD/Fs**

Extraction Batch: 7528

**Project: P1977**

Extraction Group: 7528\_M23B

SDS #	AP Sample ID	Client Sample ID	Observations	40 µL	A 400 µL	B 40 µL	SDS HEX/TOL	AS 400 µL	RV COMB	SPLIT 1/2	ASECS Td yr	#
—	0-7528-BCS3	—	stds	Wt	Wt	Wt	—	Wt	—	—	Wt	—
8	0-7528-MB001	—	see spile	Wt	—	—	Wt	Wt	Wt	Wt	Wt	Wt
9	P1977-7528-001	SSI #1-Blank	see spile	Wt	—	—	Wt	Wt	Wt	Wt	Wt	Wt
10	P1977-7528-002	SSI #1-R-1	see spile	Wt	—	—	Wt	Wt	Wt	Wt	Wt	Wt
11	P1977-7528-003	SSI #1-R-2	see spile	Wt	—	—	Wt	Wt	Wt	Wt	Wt	Wt
12	P1977-7528-004	SSI #1-R-3	see spile	Wt	—	—	Wt	Wt	Wt	Wt	Wt	Wt

TMA92 MB000  
 GENERAL ENGINEERING LAB  
 PREP: 15 JAN 2010  
 ADV. EXP: 28 JAN 2010  
 4 NG Sampling Standard PCDD/F  
 40 NG Sampling Standard HR\_PAH  
 4 NG Sampling Standard HR\_PCS  
 AL

TM492, MB0600  
GENERAL ENGINEERING LAE  
PREP: 15 JAN 2010  
ADV. EXP: 28 JAN 2010  
4 NG Sampling Standard PCDD/F  
40 NG Sampling Standard HR\_PAH  
4 NG Sampling Standard HR\_PCB  
AL

ES (ID): <u>C11 DFE5</u>	A <sub>B</sub> (ID): <u>012102009</u>	AS (ID): <u>07012007D.AS</u>	JS (ID): <u>07012007M.JS</u>	<u>SDS Cycle Time:</u> 1-25-10 1-26-10 Start: 3:08 PM Start: 3:08 PM 1-26-10 1-25-10 Stop: 10:00 PM Stop: 9:30 PM *HEX *Toluene*
ES (conc): <u>100</u> pg/μL	A <sub>B</sub> (conc): <u>10</u> pg/μL	AS (conc): <u>10</u> pg/μL	JS (conc): <u>10</u> pg/μL	
ES (exp): <u>03/20/15</u>	A <sub>B</sub> (exp): <u>01/20/11</u>	AS (exp): <u>10/20/10</u>	JS (exp): <u>1/22/11</u>	
Vial #: <u>SLU-30-Z</u>	Vial #: <u>SLU-9-Z-Z</u>	Vial #: <u>SLU-9-57-1</u>	Vial #: <u>SLU-9-91-1</u>	
ES M23B <u>0.1</u> ng/μL	A <sub>B</sub> M23B 0.01 ng/μL	AS M23B 0.01 ng/μL	JS M23B 0.01 ng/μL	

# AIR

# PCBs

Extraction Batch: 7528

**Project: P1977**

**Extraction Group: 7528 M1668A**

[illegible]

# AIR

## Extraction Batch: 7528

**Extraction Group: 7528\_HRP AH**

ES (ID): 102220081-1		A <sub>x</sub> (ID): 102220081-1		AS (ID): 102220081-1		JS (ID): 102220081-1		SDS Cycle Time:	
ES (conc): 0.5 ng/μL	A <sub>x</sub> (conc): 0.5 ng/μL	AS (conc): 0.5 ng/μL	JS (conc): 0.125 ng/μL	1/24/10	1/24/10	1/24/10	1/24/10	Start: 3:00 PM	Stop: 3:00 PM
ES (exp): 1/13/12	A <sub>x</sub> (exp): N/A	AS (exp): 1/7/11	JS (exp): 1/7/11	1/24/10	1/24/10	1/24/10	1/24/10	Start: 3:00 PM	Stop: 3:00 PM
Vial #: 5119-89-1	Vial #: 5119-89-1	Vial #: 5119-89-2	Vial #: 5119-89-3	*HEX*	*TOL*	*CH <sub>2</sub> Cl <sub>2</sub> *			
ES HRPAAH 0.5 ng/μL	A <sub>x</sub> HRPAAH 0.5 ng/μL	AS HRPAAH 0.5 ng/μL	JS HRPAAH 0.125 ng/μL						



ANALYTICAL PERSPECTIVES

# SAMPLE PATH

AP PROJECT NO.: P1977

## OBSERVATIONS

Sample ID	Rinses	Filter	XAD Resin	Impingers
001	clean, clear	—	D, F	abs wood with ID
002	clean, clear	D, grey polka dot	M, S	abs wood with ID
003	clear, some PM	D, grey polka dot	M, S	M, wet
004	clear, some PM	D, grey polka dot	M, S	M, wet
005				
006				
007				
008				
009				
010				
011				
012				
013				
014				
015				
016				
017				
018				
019				

019-25-10

W = wet; S = sticky; C = clean; D = dry; F = free-flowing; WH = white; M = moist; B = bullseye; BE = beige; BK = black; YW = yellow; GY = grey; PM = particulates

## SAMPLE PATH

ANALYTICAL PERSPECTIVES

AP PROJECT NO.: P1977

## SPIKE PROFILE FOR PCDD/F &amp; PCB &amp; PAH SAMPLING TRAIN OR PUF

Analyte	Spiked Compounds	Spiked Amount	Spiked Volume	Spiking Solution Conc.	Split Factor	Final Volume	Final Solvent
PCDD/F <i>eeAP 2/17/10</i>	SS	4 ng	40 µL	0.1 ng/µL	2	20 µL	Td
	ES	4 ng	400 µL	0.01 ng/µL			
	AS	4 ng	400 µL	0.01 ng/µL			
	JS	2 ng	200 µL	0.01 ng/µL			
	Ax Batch CS3	0.4 ng	400 µL	0.001 ng/µL			
	Td Batch CS3				2	40 µL	Td
PCB <i>eeAP 2/17/10</i>	SS	4 ng	40 µL	0.1 ng/µL	2	20 µL	nonane
	ES	4 ng	40 µL	0.1 ng/µL			
	JS	2 ng	10 µL	0.2 ng/µL			
	Ax Batch CS3	2 ng	40 µL	0.05 ng/µL			
	Nonane Batch CS3		30 µL				
					2	40 µL	nonane
PAH	SS	40 ng	80 µL	0.5 ng/µL	4	100 µL	nonane
	ES	40 ng	80 µL	0.5 ng/µL			
	JS	10 ng	80 µL	0.125 ng/µL			
	AS	40 ng	80 µL	0.5 ng/µL			
	Ax Batch CS3	40 ng	80 µL	0.5 ng/µL			
	Nonane Batch CS3		80 µL		4	400 µL	nonane

*eeAP 2/17/10*



ANALYTICAL PERSPECTIVES

# SAMPLE PATH

AP PROJECT NO.: P1977

## COMMUNICATIONS

After reviewing the D/F portion, Mick mentioned that there may possibly be a sample switch between the Field Blank & one of the sample's. The PCBs, PAHs and D/Fs all showed the same pattern, so it is very unlikely that a switch occurred. HS 10 Feb 10

2/17/10

### SUPPLIES IDS

SAND	094090
TOLUENE	01202010
ACID SILICA	01222010
BASE SILICA	01222010
SILICA	01222010
FLORISIL	01201010
HEXANE	01201010
CH <sub>2</sub> CL <sub>2</sub>	01201010
TETRADECANE	01201010

## SAMPLE PATH

## ANALYTICAL PERSPECTIVES



## M23 / MOO23A PCDD/F SPIKE PROFILE

ANALYTE	SAMPLING STANDARDS AMOUNT SPIKED (NG)
<sup>37</sup> Cl <sub>4</sub> -2,3,7,8-TCDD	1.6
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7-PeCDD	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6-PeCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,9-HxCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,8,9-HpCDF	4

COMPOUND	INJECTION STANDARDS AMOUNT SPIKED NG
<sup>13</sup> C <sub>12</sub> -1,2,3,4-TCDD	2
<sup>13</sup> C <sub>12</sub> -1,2,3,4-TCDF	2
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7-HxCDD	1

COMPOUND	ALTERNATE STANDARD AMOUNT SPIKED NG
<sup>13</sup> C <sub>12</sub> -1,3,6,8-TCDD	4
<sup>13</sup> C <sub>12</sub> -1,3,6,8-TCDF	4

COMPOUND	EXTRACTION STANDARDS AMOUNT SPIKED
<sup>13</sup> C <sub>12</sub> -2,3,7,8-TCDD	NG
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8-PeCDD	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8-HxCDD	4
<sup>13</sup> C <sub>12</sub> -1,2,3,6,7,8-HxCDD	4
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8,9-HxCDD	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7,8-HpCDD	4
<sup>13</sup> C <sub>12</sub> -OCDD	8
<sup>13</sup> C <sub>12</sub> -2,3,7,8-TCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8-PeCDF	4
<sup>13</sup> C <sub>12</sub> -2,3,4,7,8-PeCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8-HxCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,6,7,8-HxCDF	4
<sup>13</sup> C <sub>12</sub> -2,3,4,6,7,8-HxCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8,9-HxCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8,9-HpCDF	4
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7,8-HpCDF	4
<sup>13</sup> C <sub>12</sub> -OCDF	8



ANALYTICAL PERSPECTIVES

## M1668A PCB SPIKE PROFILE

ANALYTE	CLEANUP STANDARDS AMOUNT SPIKED (NG)
<sup>13</sup> C <sub>12</sub> -2,4,4'-TrCB (PCB-28)	2
<sup>13</sup> C <sub>12</sub> -2,3,3',5,5'-PeCB (PCB-111)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',5,5',6-HpCB (PCB-178)	2

COMPOUND	INJECTION STANDARDS AMOUNT SPIKED NG
<sup>13</sup> C <sub>11</sub> -2,5-DiCB (PCB-9)	2
<sup>13</sup> C <sub>11</sub> -2,2',5,5'-TeCB (PCB-52)	2
<sup>13</sup> C <sub>11</sub> -2,2',4,5,5'-PeCB (PCB-101)	2
<sup>13</sup> C <sub>11</sub> -2,2',3,4,4',5'-HxCB (PCB-138)	2
<sup>13</sup> C <sub>11</sub> -2,2',3,3',4,4',5,5'-OcCB (PCB-194)	2

Amounts spiked are twice  
as shown except for JS

<sup>13</sup>C<sub>12</sub>-PCB-153, -170 & -180 (NOAA)  
also included @ same levels

### COMPOUND

EXTRACTION  
STANDARDS  
AMOUNT SPIKED  
NG

<sup>13</sup> C <sub>12</sub> -2-MoCB (PCB-1)	2
<sup>13</sup> C <sub>12</sub> -4-MoCB (PCB-3)	2
<sup>13</sup> C <sub>12</sub> -2,2'-DiCB (PCB-4)	2
<sup>13</sup> C <sub>12</sub> -4,4'-DiCB (PCB-15)	2
<sup>13</sup> C <sub>12</sub> -2,2',6-TrCB (PCB-19)	2
<sup>13</sup> C <sub>12</sub> -3,4,4'-TrCB (PCB-37)	2
<sup>13</sup> C <sub>12</sub> -2,2',6,6'-TeCB (PCB-54)	2
<sup>13</sup> C <sub>12</sub> -3,4,4',5-TeCB (PCB-81)	2
<sup>13</sup> C <sub>12</sub> -3,3',4,4'-TeCB (PCB-77)	2
<sup>13</sup> C <sub>12</sub> -2,2',4,6,6'-PeCB (PCB-104)	2
<sup>13</sup> C <sub>12</sub> -2',3,4,4',5-PeCB (PCB-123)	2
<sup>13</sup> C <sub>12</sub> -2,3',4,4',5-PeCB (PCB-118)	2
<sup>13</sup> C <sub>12</sub> -2,3,4,4',5-PeCB (PCB-114)	2
<sup>13</sup> C <sub>12</sub> -2,3,3',4,4'-PeCB (PCB-105)	2
<sup>13</sup> C <sub>12</sub> -3,3',4,4',5-PeCB (PCB-126)	2
<sup>13</sup> C <sub>12</sub> -2,2',4,4',6,6'-HxCB (PCB-155)	2
<sup>13</sup> C <sub>12</sub> -2,3',4,4',5,5'-HxCB (PCB-167)	2
<sup>13</sup> C <sub>12</sub> -2,3,3',4,4',5,5'-HxCB(PCB-156/157)	4
<sup>13</sup> C <sub>12</sub> -3,3',4,4',5,5'-HxCB (PCB-169)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,4',5,6,6'-HpCB (PCB-188)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,4,4',5,5'-HpCB (PCB-180)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',4,4',5-HpCB (PCB-170)	2
<sup>13</sup> C <sub>12</sub> -2,3,3',4,4',5,5'-HpCB (PCB-189)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',5,5',6-OcCB (PCB-202)	2
<sup>13</sup> C <sub>12</sub> -2,3,3',4,4',5,5',6-OcCB (PCB-205)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',4,5,5',6,6'-NoCB (PCB-208)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',4,4',5,5',6-NoCB (PCB-206)	2
<sup>13</sup> C <sub>12</sub> -2,2',3,3',4,4',5,5',6,6'-DeCB (PCB-209)	2



## 8290B/23 ICAL (pg/μL)

ANALYTICAL PERSPECTIVES	8290B/23 ICAL (pg/μL)					
	CS0	CS1	CS2	CS3	CS4	CS5
<b>Unlabeled Analytes</b>						
2,3,7,8-TCDD	0.25	0.5	2	10	40	500
2,3,7,8-TCDF	0.25	0.5	2	10	40	500
1,2,3,7,8-PeCDD	1.25	2.5	10	50	200	1000
1,2,3,7,8-PeCDF	1.25	2.5	10	50	200	1000
2,3,4,7,8-PeCDF	1.25	2.5	10	50	200	1000
1,2,3,4,7,8-HxCDD	1.25	2.5	10	50	200	1000
1,2,3,4,7,8-HxCDF	1.25	2.5	10	50	200	1000
1,2,3,7,8,9-HxCDD	1.25	2.5	10	50	200	1000
1,2,3,7,8,9-HxCDF	1.25	2.5	10	50	200	1000
1,2,3,4,7,8,9-HxCDF	1.25	2.5	10	50	200	1000
1,2,3,7,8,9-HxCDF	1.25	2.5	10	50	200	1000
2,3,4,6,7,8-HxCDF	1.25	2.5	10	50	200	1000
1,2,3,4,6,7,8-HpCDD	1.25	2.5	10	50	200	1000
1,2,3,4,6,7,8-HpCDF	1.25	2.5	10	50	200	1000
1,2,3,4,7,8,9-HpCDF	1.25	2.5	10	50	200	1000
OCDD	2.5	5	20	100	400	2000
OCDF	2.5	5	20	100	400	2000
<b>Extraction Standards</b>						
<sup>13</sup> C <sub>12</sub> -2,3,7,8-TCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -2,3,7,8-TCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8-PeCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8-PeCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -2,3,4,7,8-PeCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8-HxCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,6,7,8-HxCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8,9-HxCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8-HxCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,6,7,8-HxCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -2,3,4,6,7,8-HxCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,7,8,9-HxCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7,8-HpCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7,8-HpCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7,8,9-HpCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -OCDD	200	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> -OCDF	200	200	200	200	200	200
<b>Cleanup Standards</b>						
<sup>37</sup> Cl <sub>4</sub> -2,3,7,8-TCDD	-	0.5	2	10	40	200
<sup>13</sup> C <sub>12</sub> -1,2,3,4,7-PeCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6-PeCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,9-HxCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,9-HpCDF	100	100	100	100	100	100
<b>Alternate Standards</b>						
<sup>13</sup> C <sub>12</sub> -1,3,6,8-TCDO				100		
<sup>13</sup> C <sub>12</sub> -1,3,6,8-TCDF				100		
<b>Injection Standards</b>						
<sup>13</sup> C <sub>12</sub> -1,2,3,4-TCDD	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4-TCDF	100	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -1,2,3,4,6,7-HxCDD	50	50	50	50	50	50

# ANALYTICAL (NO. 19)

units: pg /  $\mu$ L

Individual Standard IUPAC	CS-0	CS-1	CS-2	CS-3	CS-4	CS-5
				VER		
1	0.5	1	5	50	400	2000
3	0.5	1	5	50	400	2000
4	0.5	1	5	50	400	2000
15	0.5	1	5	50	400	2000
19	0.5	1	5	50	400	2000
37	0.5	1	5	50	400	2000
54	0.5	1	5	50	400	2000
77	0.5	1	5	50	400	2000
81	0.5	1	5	50	400	2000
104	0.5	1	5	50	400	2000
105	0.5	1	5	50	400	2000
114	0.5	1	5	50	400	2000
118	0.5	1	5	50	400	2000
123	0.5	1	5	50	400	2000
126	0.5	1	5	50	400	2000
153 (BCS <sub>3</sub> )	0.5	1	5	50	400	2000
155	0.5	1	5	50	400	2000
156	0.5	1	5	50	400	2000
157	0.5	1	5	50	400	2000
167	0.5	1	5	50	400	2000
169	0.5	1	5	50	400	2000
170 (BCS <sub>3</sub> )				50		
180 (BCS <sub>3</sub> )	0.5	1	5	50	400	2000
188	0.5	1	5	50	400	2000
189	0.5	1	5	50	400	2000
202	0.5	1	5	50	400	2000
205	0.5	1	5	50	400	2000
206 L				50		
208 L	0.5	1	5	50	400	2000
209 L	0.5	1	5	50	400	2000
205	0.5	1	5	50	400	2000
206	0.5	1	5	50	400	2000
208	0.5	1	5	50	400	2000
209	0.5	1	5	50	400	2000

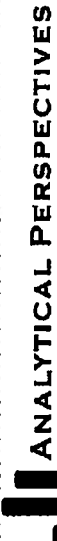
## Extraction Standards

	CS-0	CS-1	CS-2	CS-3	CS-4	CS-5
1 L	100	100	100	100	100	100
3 L	100	100	100	100	100	100
4 L	100	100	100	100	100	100
15 L	100	100	100	100	100	100
19 L	100	100	100	100	100	100
37 L	100	100	100	100	100	100
54 L	100	100	100	100	100	100
77 L	100	100	100	100	100	100
81 L	100	100	100	100	100	100
104 L	100	100	100	100	100	100
105 L	100	100	100	100	100	100
114 L	100	100	100	100	100	100
118 L	100	100	100	100	100	100
123 L	100	100	100	100	100	100
126 L	100	100	100	100	100	100
153 L (BCS <sub>3</sub> )				100		
155 L	100	100	100	100	100	100
156 L	100	100	100	100	100	100
157 L	100	100	100	100	100	100
167 L	100	100	100	100	100	100
169 L	100	100	100	100	100	100
170 L (BCS <sub>3</sub> )				100		
180 L (BCS <sub>3</sub> )				100		
188 L	100	100	100	100	100	100
189 L	100	100	100	100	100	100
202 L	100	100	100	100	100	100
205 L	100	100	100	100	100	100
206 L	100	100	100	100	100	100
208 L	100	100	100	100	100	100
209 L	100	100	100	100	100	100
Cleanup/Sampling Standards						
28 L	100	100	100	100	100	100
111 L	100	100	100	100	100	100
178 L	100	100	100	100	100	100
Injection Standards						
9 L	100	100	100	100	100	100
52 L	100	100	100	100	100	100
101 L	100	100	100	100	100	100
138 L	100	100	100	100	100	100
194 L	100	100	100	100	100	100

# PAH ICAL

## PG/ $\mu$ L

Analytes	CS.1	CS.2	CS.3	CS.4	CS.5
Naphthalene	10	50	100	500	1000
2-Methylnaphthalene	10	50	100	500	1000
Acenaphthylene	10	50	100	500	1000
Acenaphthene	10	50	100	500	1000
Fluorene	10	50	100	500	1000
Phenanthrene	10	50	100	500	1000
Anthracene	10	50	100	500	1000
Fluoranthene	10	50	100	500	1000
Pyrene	10	50	100	500	1000
Benzo(a)Anthracene	10	50	100	500	1000
Chrysene	10	50	100	500	1000
Benzo(b)Fluoranthene	10	50	100	500	1000
Benzo(k)Fluoranthene	10	50	100	500	1000
Benzo(e)Pyrene	10	50	100	500	1000
Benzo(a)Pyrene	10	50	100	500	1000
Perylene	10	50	100	500	1000
Indeno(123-cd)Pyrene	10	50	100	500	1000
Dibenzo(a,h)Anthracene	10	50	100	500	1000
Benzo(ghi)Perylene	10	50	100	500	1000
<b>Extraction Standards</b>					
<sup>13</sup> C <sub>12</sub> - Naphthalene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -2-Methylnaphthalene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Acenaphthylene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -Acenaphthene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -Fluorene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Phenanthrene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -Anthracene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Fluoranthene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> -Pyrene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Benzo(a)Anthracene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Chrysene	100	100	100	100	100
<sup>13</sup> C <sub>12</sub> - Benzo(b)Fluoranthene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Benzo(k)Fluoranthene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Benzo(e)Pyrene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Benzo(a)Pyrene	200	200	200	200	200
d <sub>12</sub> - Perylene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Indeno(123-cd)Pyrene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Dibenzo(a,h)Anthracene	200	200	200	200	200
<sup>13</sup> C <sub>12</sub> - Benzo(ghi)Perylene	200	200	200	200	200
<b>Sampling Standards</b>					
d <sub>10</sub> -Fluorene	100	100	100	100	100
d <sub>11</sub> -Terphenyl	100	100	100	100	100
<b>Alternate Standard</b>					
d <sub>10</sub> -Anthracene	100	100	100	100	100
<b>Injection Standards</b>					
d <sub>10</sub> -2-Methylnaphthalene	100	100	100	100	100
d <sub>10</sub> -Acenaphthene	100	100	100	100	100
d <sub>10</sub> -Pyrene	100	100	100	100	100
d <sub>12</sub> -Benzo(a)Pyrene	100	100	100	100	100



ANALYTICAL PERSPECTIVES

## SAMPLE PATH

### M429 PAH SPIKE PROFILE

ANALYTE	SAMPLING STANDARDS AMOUNT SPIKED (NG)
d <sub>10</sub> -Fluorene	40
d <sub>14</sub> -Terphenyl	40

COMPOUND	INJECTION STANDARDS AMOUNT SPIKED NG
d <sub>10</sub> -2-Methylnaphthalene	10
d <sub>10</sub> -Acenaphthene	10
d <sub>10</sub> -Pyrene	10
d <sub>12</sub> -Benzo(a)Pyrene	10

COMPOUND	ALTERNATE STANDARD AMOUNT SPIKED NG
d <sub>10</sub> -Anthracene	10

COMPOUND	EXTRACTION STANDARDS AMOUNT SPIKED NG
<sup>13</sup> C <sub>6</sub> - Naphthalene	40
<sup>13</sup> C <sub>6</sub> -2-Methylnaphthalene	40
<sup>13</sup> C <sub>6</sub> - Acenaphthylene	40
<sup>13</sup> C <sub>6</sub> -Acenaphthene	40
<sup>13</sup> C <sub>6</sub> -Fluorene	40
<sup>13</sup> C <sub>6</sub> - Phenanthrene	40
<sup>13</sup> C <sub>6</sub> -Anthracene	40
<sup>13</sup> C <sub>6</sub> - Fluoranthene	40
<sup>13</sup> C <sub>3</sub> -Pyrene	40
<sup>13</sup> C <sub>6</sub> - Benzo(a)Anthracene	40
<sup>13</sup> C <sub>6</sub> - Benzo(b)Fluoranthene	80
<sup>13</sup> C <sub>6</sub> - Benzo(k)Fluoranthene	80
<sup>13</sup> C <sub>4</sub> -Benzo(e)Pyrene	80
<sup>13</sup> C <sub>4</sub> - Benzo(a)Pyrene	80
d <sub>12</sub> - Perylene	80
<sup>13</sup> C <sub>6</sub> - Indeno(123-cd)Pyrene	80
<sup>13</sup> C <sub>6</sub> - - Dibenz(a,h)Anthracene	80
<sup>13</sup> C <sub>12</sub> - Benzo(ghi)Perylene	80

# ANALYTICAL PERSPECTIVES Sample Inventory Report: MMS Sampling Train

Project No.: P1977 Date Rec.: 21-Jan-10 Project Name: CRBG 00107

Lab. Sample ID	Collection Date	Client Sample ID	Component ID
001	20-Jan-09	SSI #1-Blank	Ace/MeCl2
	20-Jan-09		T0492-004
	20-Jan-09		Toluene
	20-Jan-09		XAD
002	20-Jan-09	SSI #1-R-1	Ace/MeCl2
	20-Jan-09		Filter
	20-Jan-09		T0492-002
	20-Jan-09		Toluene
003	20-Jan-09	SSI #1-R-2	XAD
	20-Jan-09		Ace/MeCl2
	20-Jan-09		Filter
	20-Jan-09		T0492-003
004	20-Jan-09	SSI #1-R-3	Toluene
	20-Jan-09		XAD
	20-Jan-09		Ace/MeCl2
	20-Jan-09		Filter
	20-Jan-09		T0492-005
	20-Jan-09		Toluene
	20-Jan-09		XAD

OK HS 21 Jan 08/10  
eeH3dJan10

Page: 1 of 7

Project #: C06600109

GEL Quote #: \_\_\_\_\_

COC Number <sup>(1)</sup>: \_\_\_\_\_

PO Number: \_\_\_\_\_

GEL Work Order Number: \_\_\_\_\_

GEL Laboratories, LLC  
2040 Savage Road  
Charleston, SC 29407  
Phone: (843) 556-8171  
Fax: (843) 766-1178

7/19/12

Client Name: C277 of Greenville Phone #: \_\_\_\_\_

Project/Site Name: \_\_\_\_\_ Fax #: \_\_\_\_\_

Address: \_\_\_\_\_

Collected by: <u>CAM</u>		Send Results To: <u>CRU</u>		<u>MELENZ</u>		Sample ID		Date Collected (mm-dd-yy)	*Time Collected/ (Military) (hhmm)	QC Code (a)	Field Filtered (b)	Sample Matrix (d)	Radioactive	TSCA Regulated	Total number of				Comments	
* For composites - indicate start and stop date/time																			Note: extra sample is required for sample specific QC	
SSZ #1-R1- FH Toluene								1/20/10	14	NA	NA	NA	NA	1		1				
SSZ #1-R1- FH AC/MC															1				ANALYZE SAMPLES	
SSZ #1-R1- F2Lton															1				FOR	
SSZ #1-R1- XAD															1				DIF, PAH, & PCBs	
SSZ #1-R2- FH Toluene															1				USE METHOD 23.	
SSZ #1-R2- FH AC/MC															1					
SSZ #1- <del>EA</del> R2- F2Lton															1					
SSZ #1- R2- XAD															1					
SSZ #1- R3- FH Toluene															1					
SSZ #1- R3- FH AC/MC															1					

TAT Requested: Normal: ☒ Rush: \_\_\_\_\_ (Subject to Surcharge) Fax Results: Yes / No

Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Sample Collection Time Zone: Eastern Pacific Mountain

Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<u>[Signature]</u>	1/21/10	1350	<u>[Signature]</u>	1/21/10	1:58 PM
2			2		
3			3		

GEL PM: CRAZL MEXLEN22

Method of Shipment: Container Date Shipped: 1/21/10

Airbill #: Company Container

Airbill #:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite

3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.

4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).

6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank

For Lab Receiving Use Only

Custody Seal Intact? YES NO

Cooler Temp: 19 C

WHITE = LABORATORY YELLOW = FILE PINK = CLIENT



CLIENT SAMPLE ID	SSI # 1 - Blank	SSI # 1 - R-1	SSI # 1 - R-2	SSI # 1 - R-3
LAB SAMPLE #	P1977-001	-002	-003	-004
DATE SAMPLED	1/20/10	1/20/10	1/20/10	1/20/10
OBSERVATIONS				
COMPONENTS	QUANTITY	QUANTITY	QUANTITY	QUANTITY
FILTER		1	1	1
XAD	1	1	1	1
TRAP PREP#	To492-004	To492-002	To492-003	To492-005
ACETONE / CH <sub>2</sub> Cl <sub>2</sub> FH/BH RINSE	1	1	1	1
TOLUENE FH/BH RINSE	1	1	1	1
OTHER (IMPING ERS, ETC...)				
TRAP SOURCE	<input checked="" type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input checked="" type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input checked="" type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input checked="" type="checkbox"/> AP <input type="checkbox"/> CLIENT
CLIENT SAMPLE ID				
LAB SAMPLE #				
DATE SAMPLED				
OBSERVATIONS				
COMPONENTS	QUANTITY	QUANTITY	QUANTITY	QUANTITY
FILTER				
XAD				
TRAP PREP#				
ACETONE / CH <sub>2</sub> Cl <sub>2</sub> FH/BH RINSE				
TOLUENE FH/BH RINSE				
OTHER (IMPINGERS, ETC...)				
TRAP SOURCE	<input type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input type="checkbox"/> AP <input type="checkbox"/> CLIENT	<input type="checkbox"/> AP <input type="checkbox"/> CLIENT
UNUSED TRAPS:	To492-001			

METHOD 23  
PCDD/PCDFs



# FILE

## CLIENT INFORMATION

Company/Org.: GEL  
Contact: Craig McKenzie  
Client Project ID:  
Client PO #: P1977 1/2

Date of Request: 14 JAN 2010

Arrival Date: 18 JAN 2010

### Ship To:

General Engineering Labs  
Attn. Craig McKenzie  
2040 Savage Road  
Charleston, SC 29407

Ph.: 843-769-7378

Email: cam2@gel.com

ALL PROJECTS ARE SHIPPED  
PRIORITY OVERNIGHT  
VIA FEDEX

## ADDITIONAL NOTES

D/Fs ONLY

Airway Bill #: 7931 8543 5427

Date Shipped: 15 Jan 10

AP Invoice # 114101

AP Rental Traps: (Y) 10 Qty: 4  
\*Not enough in stock as 1/15/10

## Sampling Module Request Form

AP Project #:  
T0492

Following sample recovery,  
please return this form with  
the field samples to:

2714 Exchange Drive  
Wilmington, NC 28405  
Ph.: 910-794-1613  
Fax: 910-794-3919

Please be aware of your trap batch #  
QC begins when we prep your traps.

The Method Blank and a BCS<sub>3</sub> are prepared  
simultaneously with the trap and are properly  
stored until the trap batch returns for analysis.

We recommend keeping trap batches together  
and if a set of traps is to be split into multiple  
projects, please let us know so we can prepare  
extra Method Blanks/BCS<sub>3</sub>

Thank you.

### Initial Below

Prep By: *EL*

Spike By: *JK*

Witness: *EL*

Date: 1/15/10

## Type & Quantity of Sampling Modules

Qty. XAD: 5

Resin Batch No.: 12

Qty. PUF: N/A

PUF Batch No.: —

Filter Size: 82.6mm

Qty Filters: 7

Filter Batch#: 1104 2004

Qty. Petri Dishes: ALL IN ONE

Jars and/or Bottles: N/A

## Client Specific Instructions

\*USE AP RENTALS IF NEEDED\*

## Spike Profile

\* # 0F MB / BCS<sub>3</sub> NEEDED: 1 OF EACH\*

Vol. PCDD/F: 40 µL

Solution ID: 07020074 CS/LL; 1.6-4 ng

Vial ID: JLC 7233 Expiration: 07/19/10

Vol. HR\_PAH: 80 µL (40 ng)

Solution ID: 10222008J SS; 0.5 ng/µL

Vial ID: JLC 9244 Expiration: 12/11/10

Vol. HR\_PCB: 40 µL (4 ng)

Solution ID: 120804 U-CS/SS; 0.1 ng/µL

Vial ID: JLC 9244 Expiration: 1/7/11

# TRAP BATCH

T0492

INITIAL & DATE BELOW FOR EACH TRAP

## SPIKING TRAPS

ONLY FILL OUT APPLICABLE TABLE

867-23-3

SOLUTION ID: 070120074	
CS/8	
SPIKE VOLUME: 40μL	
TRAP ID	PCDD/Fs
MB-000	Q
BCS3	Q
001	Q
002	Q
003	Q
004	Q
005	Q
006	Q
007	Q

102804 V-09

SOLUTION ID: 5129-84-2	
SPIKE VOLUME: 40μL	
TRAP ID	HRPCBs
MB-000	Q
BCS3	Q
001	Q
002	Q
003	Q
004	Q
005	Q
006	Q
007	Q

1022083

SOLUTION ID: 5129-34-3	
SPIKE VOLUME: 80μL	
TRAP ID	HRPAHs
MB-000	Q
BCS3	Q
001	Q
002	Q
003	Q
004	Q
005	Q
006	Q
007	Q

SOLUTION ID:	
SPIKE VOLUME:	
TRAP ID	OTHER
MB-000	
BCS3	
001	
002	
003	
004	
005	
006	
007	

ANALYTICAL PERSPECTIVES

ANALYTICAL PERSPECTIVES		SAMPLE LOG-IN FORM		Client Project / Job ID: <u>CRBG 00107</u>	
Date Samples Arrived: <u>21 Jan-10</u>		Initials: <u>SEH</u>		PO #:	
Time / Date logged in: <u>1:58 PM 21 Jan-10</u>		Refrigerator: <u>F-6</u>		Initials: <u>SEH</u>	
Samples Arrived By: (circle one) FedEx UPS Airborne Express DHL Emery		Freezer Truck <u>Company Courier</u> Other		AP Project ID: <u>D1977</u>	
Shipping Preservation: Traps & Filters: Ice / Blue Ice / Dry Ice / None		Temp °C <u>19°</u> ✓ / <u>✓</u> / <u>✓</u> / <u>✓</u>		CHAIN OF CUSTODY ANOMALY FORM	
Solvents: Ice / Blue Ice / Dry Ice / None		Temp °C <u>19°</u> ✓ / <u>✓</u> / <u>✓</u> / <u>✓</u>		The following items were omitted from the COC	
Shipping Documentation Present? (circle one)		Shipping Label or Airbill		Project ID and/or PO#:	
# of boxes: <u>0</u>		# of coolers: <u>1</u>		Tracker #s: _____	
Shipping Container(s) intact? <u>YES</u>		If no, describe condition: _____		Relinquished By:	
Container Custody Seals Present & Intact? <u>NO</u>		If not intact, describe condition: _____		Date:	
Sample Custody Seals Present & Intact? <u>NO</u>		If not intact, describe condition: _____		Time:	
# of Seals: <u>0</u>		or Seal #: <u>0</u>		Sample ID:	
Sample Container Intact? <u>YES</u>		If no, indicate sample condition: _____		Sample Date:	
Chain of Custody (COC) / Sample Documentation Present? <u>YES</u>		Exceptions? <u>N/A</u>		Sample Collection Times:	
*If not, complete COC Anomaly Form*				Sample Description:	
Shipping Containers: Coolers: Client or <u>AP</u> ..... Return <u>Retain</u> Dispose				Analysis Requested:	
Boxes: Client or AP ..... Return <u>Retain</u> Dispose				Container Qty:	
Sample Control Log In/Out Completed? <u>YES</u>				Container Type:	
FILL BELOW IF APPLICABLE				Other:	
Have all the samples arrived? <u>YES</u>		If no, complete the following: _____		COMMENTS	
Shipment #: _____		Date of Arrival: _____		Condition: _____	
Temp °C _____		Delivered by: _____		Tracking #s: _____	
COC Present? _____		Acceptable? _____		If no, document on COC Anomaly Form additional shipment comments.	
Container Intact? _____		Samples Intact? _____		If no, describe: _____	
Do we expect another shipment? _____		If yes, start a new log-in sheet. ☺		NOTE: Brought Straight From TESTING SITE.	

## Analytical Perspectives — Injection Log

Created: 03-Feb-2010 09:38			User: MC			SW: AP UltraTrace-Pro V4.12		
Expt: DF_CL4-8A			GC: DB5MS_60M			Project: P1977_7528_DF		
#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time	
2	100202P1-02	16	BCS3_7528_DF_PA	BCS3_7528_DF_PA	MC	2-FEB-2010	10:49:37	
3	100202P1-03	15	SBS	SOLVENT BLANK	MC	2-FEB-2010	11:40:05	
4	100202P1-04	17	MB1_7528_DF_SDS	0_7528_MB001	MC	2-FEB-2010	12:30:32	
5	100202P1-05	18	P1977_7528_001	SSI #1-Blank	MC	2-FEB-2010	13:20:57	
6	100202P1-06	19	P1977_7528_002 *	SSI #1-R-1	MC	2-FEB-2010	14:11:24	
7	100202P1-07	20	P1977_7528_003	SSI #1-R-2	MC	2-FEB-2010	15:01:55	
8	100202P1-08	21	P1977_7528_004	SSI #1-R-3	MC	2-FEB-2010	15:52:21	
9	100202P1-09	16	BCS3_7528_DF_PB	BCS3_7528_DF_PB	MC	2-FEB-2010	16:42:53	
1	100202P3-01	16	BCS3_7528_DF_PC	BCS3_7528_DF_PC	MC	2-FEB-2010	22:05:31	
2	100202P3-02	15	SBS-1	SOLVENT BLANK	MC	2-FEB-2010	22:55:58	
3	100202P3-03	19	P1977_7528_002RJ	SSI #1-R-1	MC	2-FEB-2010	23:46:30	
4	100202P3-04	16	BCS3_7528_DF_PD	BCS3_7528_DF_PD	MC	3-FEB-2010	00:36:57	

**REVIEWED**

*By mchu at 9:38 am, Feb 03, 2010*

**REVIEWED**

*By Heather Steele at 1:31 pm, Feb 17, 2010*

\* Data from the initial injection of sample 002 was rejected due to a mis-injection. As a result, the sample was re-injected and that data used. HS 17 Feb 10

## Analytical Perspectives — Injection Log

Created: 03-Feb-2010 09:38			User: MC		SW: AP UltraTrace-Pro V4.12		
Expt: DF_CL4-8A			GC: DB5MS_60M		Project: P1977_7528_DF		
#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time
2	100202P1-02	16	BCS3_7528_DF_PA	BCS3_7528_DF_PA	MC	2-FEB-2010	10:49:37
3	100202P1-03	15	SBS	SOLVENT BLANK	MC	2-FEB-2010	11:40:05
4	100202P1-04	17	MB1_7528_DF_SDS	0_7528_MB001	MC	2-FEB-2010	12:30:32
5	100202P1-05	18	P1977_7528_001	SSI #1-Blank	MC	2-FEB-2010	13:20:57
6	100202P1-06	19	P1977_7528_002 *	SSI #1-R-1	MC	2-FEB-2010	14:11:24
7	100202P1-07	20	P1977_7528_003	SSI #1-R-2	MC	2-FEB-2010	15:01:55
8	100202P1-08	21	P1977_7528_004	SSI #1-R-3	MC	2-FEB-2010	15:52:21
9	100202P1-09	16	BCS3_7528_DF_PB	BCS3_7528_DF_PB	MC	2-FEB-2010	16:42:53
1	100202P3-01	16	BCS3_7528_DF_PC	BCS3_7528_DF_PC	MC	2-FEB-2010	22:05:31
2	100202P3-02	15	SBS-1	SOLVENT BLANK	MC	2-FEB-2010	22:55:58
3	100202P3-03	19	P1977_7528_002RJ	SSI #1-R-1	MC	2-FEB-2010	23:46:30
4	100202P3-04	16	BCS3_7528_DF_PD	BCS3_7528_DF_PD	MC	3-FEB-2010	00:36:57

**REVIEWED**

*By mchu at 9:38 am, Feb 03, 2010*

**REVIEWED**

*By Heather Steele at 1:32 pm, Feb 17, 2010*

\* Data from the initial injection of sample 002 was rejected due to a mis-injection. As a result, the sample was re-injected and that data used. HS 17 Feb 10

## Analytical Perspectives — Injection Log

Created: 02-Feb-2010 09:45			User: MC		SW: AP UltraTrace-Pro V4.12		
Expt: PAH_DB5			GC: DB5MS_60M_PAH		Project: P1977_7528_PAH		
#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time
1	100201P2-01	76	BCS3_7528_PAH_PA	BCS3_7528_PAH_PA	MC	1-FEB-2010	13:06:28
2	100201P2-02	15	SB	SOLVENT BLANK	MC	1-FEB-2010	13:51:54
3	100201P2-03	77	MB1_7528_PAH_SDS	0_7528_MB001	MC	1-FEB-2010	14:37:23
4	100201P2-04	78	P1977_7528_001	SSI #1-Blank	MC	1-FEB-2010	15:22:53
5	100201P2-05	79	P1977_7528_002	SSI #1-R-1	MC	1-FEB-2010	16:08:28
6	100201P2-06	80	P1977_7528_003	SSI #1-R-2	MC	1-FEB-2010	16:54:08
7	100201P2-07	81	P1977_7528_004	SSI #1-R-3	MC	1-FEB-2010	17:39:37
8	100201P2-08	15	SB-1	SOLVENT BLANK	MC	1-FEB-2010	18:25:04
9	100201P2-09	76	BCS3_7528_PAH_PB	BCS3_7528_PAH_PB	MC	1-FEB-2010	19:10:38

**REVIEWED**

*By mchu at 9:46 am, Feb 02, 2010*

**REVIEWED**

*By Heather Steele at 3:07 pm, Feb 16, 2010*

## Analytical Perspectives — Injection Log

Created: 02-Feb-2010 09:45 User: MC SW: AP UltraTrace-Pro V4.12

Expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Project: P1977\_7528\_PAH

#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time
1	100201P2-01	76	BCS3_7528_PAH_PA	BCS3_7528_PAH_PA	MC	1-FEB-2010	13:06:28
2	100201P2-02	15	SB	SOLVENT BLANK	MC	1-FEB-2010	13:51:54
3	100201P2-03	77	MB1_7528_PAH_SDS	0_7528_MB001	MC	1-FEB-2010	14:37:23
4	100201P2-04	78	P1977_7528_001	SSI #1-Blank	MC	1-FEB-2010	15:22:53
5	100201P2-05	79	P1977_7528_002	SSI #1-R-1	MC	1-FEB-2010	16:08:28
6	100201P2-06	80	P1977_7528_003	SSI #1-R-2	MC	1-FEB-2010	16:54:08
7	100201P2-07	81	P1977_7528_004	SSI #1-R-3	MC	1-FEB-2010	17:39:37
8	100201P2-08	15	SB-1	SOLVENT BLANK	MC	1-FEB-2010	18:25:04
9	100201P2-09	76	BCS3_7528_PAH_PB	BCS3_7528_PAH_PB	MC	1-FEB-2010	19:10:38

**REVIEWED**

*By mchu at 9:46 am, Feb 02, 2010*

**REVIEWED**

*By Heather Steele at 3:22 pm, Feb 16, 2010*

## Analytical Perspectives — Injection Log

Created: 10-Feb-2010 13:09 User: CW SW: AP UltraTrace-Pro V4.12

Expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Project: P1977\_7528\_PCB

#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time
9	100204S09	1	CPSM_100204_PCB_SB	SIL9-83-1	CW	04-Feb-2010	21:51:59
10	100204S10	29	BCS3_7528_PCB_SA	BCS3_7528_PCB_SA	CW	04-Feb-2010	22:48:18
11	100204S11	2	SBS_100204_PCB_SC	SIL9-41-1	CW	04-Feb-2010	23:44:35
12	100204S12	30	MB1_7528_PCB_SDS	MB1_7528_PCB_SDS	CW	05-Feb-2010	00:40:53
13	100204S13	31	P1977_7528_PCB_001	SSI #1-Blank	CW	05-Feb-2010	01:37:11
14	100204S14	32	P1977_7528_PCB_002	SSI #1-R-1	CW	05-Feb-2010	02:33:29
15	100204S15	33	P1977_7528_PCB_003	SSI #1-R-2	CW	05-Feb-2010	03:29:48
16	100204S16	34	P1977_7528_PCB_004	SSI #1-R-3	CW	05-Feb-2010	04:26:06
17	100204S17	2	SBS_100204_PCB_SD	SIL9-41-1	CW	05-Feb-2010	05:22:24
18	100204S18	29	BCS3_7528_PCB_SB	BCS3_7528_PCB_SB	CW	05-Feb-2010	06:18:42

**REVIEWED**

By Chris Wood at 1:11 pm, Feb 10, 2010

**REVIEWED**

By Heather Steele at 9:58 am, Feb 16, 2010



## Analytical Perspectives — Injection Log

Created: 10-Feb-2010 13:09 User: CW SW: AP UltraTrace-Pro V4.12

Expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Project: P1977\_7528\_PCB

#	Datafile	Vial#	Lab ID	Client ID	Analyst	Acq Date	Acq Time
9	100204S09	1	CPSM_100204_PCB_SB	SIL9-83-1	CW	04-Feb-2010	21:51:59
10	100204S10	29	BCS3_7528_PCB_SA	BCS3_7528_PCB_SA	CW	04-Feb-2010	22:48:18
11	100204S11	2	SBS_100204_PCB_SC	SIL9-41-1	CW	04-Feb-2010	23:44:35
12	100204S12	30	MB1_7528_PCB_SDS	MB1_7528_PCB_SDS	CW	05-Feb-2010	00:40:53
13	100204S13	31	P1977_7528_PCB_001	SSI #1-Blank	CW	05-Feb-2010	01:37:11
14	100204S14	32	P1977_7528_PCB_002	SSI #1-R-1	CW	05-Feb-2010	02:33:29
15	100204S15	33	P1977_7528_PCB_003	SSI #1-R-2	CW	05-Feb-2010	03:29:48
16	100204S16	34	P1977_7528_PCB_004	SSI #1-R-3	CW	05-Feb-2010	04:26:06
17	100204S17	2	SBS_100204_PCB_SD	SIL9-41-1	CW	05-Feb-2010	05:22:24
18	100204S18	29	BCS3_7528_PCB_SB	BCS3_7528_PCB_SB	CW	05-Feb-2010	06:18:42

**REVIEWED**

By Chris Wood at 1:11 pm, Feb 10, 2010

**REVIEWED**

By Heather Steele at 11:04 am, Feb 16, 2010

P1977



**ANALYTICAL PERSPECTIVES**

## **PART 3**

# **ANALYTICAL RESULTS**

DOCUMENTATION FOR THE ANALYSIS  
OF

POLYCHLORINATED DIBENZO-P-DIOXINS & DIBENZOFURANS

Lab ID: MB1\_7528\_DF\_SDS  
Client ID: 0\_7528\_MB001  
Datafile: 100202P1-04

Acq'd: 02 Feb 2010 12:30 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 687-527  
Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.06	-	829	2.16
12378-PeCDF	NotEnd		1.0005	-		-	-	-	1.08	-	827	2.36
123478-HxCDD	NotEnd		1.0004	-		-	-	-	1.14	-	1084	3.24
123678-HxCDD	NotEnd		1.0036	-		-	-	-	1.00	-	1084	3.34
123789-HxCDD	NotEnd		1.0121	-		-	-	-	0.98	-	1084	3.72
1234678-HpCDD	NotEnd		1.0003	-		-	-	-	1.00	-	834	3.34
OCDD	NotEnd		1.0004	-		-	-	-	1.09	-	891	5.58
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.11	-	771	1.35
12378-PeCDF	NotEnd		1.0006	-		-	-	-	1.06	-	1217	2.12
23478-PeCDF	NotEnd		1.0005	-		-	-	-	1.10	-	1217	2.15
123478-HxCDF	NotEnd		1.0004	-		-	-	-	1.20	-	870	1.78
123678-HxCDF	NotEnd		1.0005	-		-	-	-	1.20	-	870	1.69
234678-HxCDF	NotEnd		1.0004	-		-	-	-	1.17	-	870	1.73
123789-HxCDF	NotEnd		1.0004	-		-	-	-	1.19	-	870	2.26
1234678-HpCDF	NotEnd		1.0003	-		-	-	-	1.48	-	746	1.5
1234789-HpCDF	NotEnd		1.0002	-		-	-	-	1.42	-	746	2.19
OCDF	NotEnd		1.0003	-		-	-	-	1.03	-	860	4.29

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.64	1.0254	1.0255	+0.2	1.55E+07	0.76	Y	0.96	92.2
ES 12378-PeCDD	33.12	1.2285	1.2286	+0.2	1.21E+07	1.58	Y	0.74	92
ES 123478-HxCDD	37.03	0.9915	0.9916	+0.2	9.96E+06	1.27	Y	0.84	95.1
ES 123678-HxCDD	37.14	0.9946	0.9947	+0.2	1.08E+07	1.30	Y	0.97	89.2
ES 123789-HxCDD	37.46	1.0031	1.0032	+0.2	1.15E+07	1.30	Y	0.95	97.1
ES 1234678-HpCDD	40.63	1.0881	1.0880	-0.2	9.20E+06	1.00	Y	0.78	94.4
ES OCDD	44.33	1.1872	1.1870	-0.4	1.31E+07	0.83	Y	0.63	82.8
ES 2378-TCDF	26.75	1.0560	1.0562	+0.3	2.22E+07	0.80	Y	0.98	94.7
ES 12378-PeCDF	31.66	1.2497	1.2499	+0.3	1.89E+07	1.60	Y	0.85	92.5
ES 23478-PeCDF	32.78	1.2939	1.2942	+0.5	1.80E+07	1.56	Y	0.80	93.8
ES 123478-HxCDF	36.06	0.9656	0.9657	+0.2	1.30E+07	0.55	Y	1.13	91.5
ES 123678-HxCDF	36.20	0.9694	0.9694	0	1.45E+07	0.53	Y	1.23	94.3
ES 234678-HxCDF	36.85	0.9869	0.9869	0	1.39E+07	0.55	Y	1.18	93.9
ES 123789-HxCDF	37.84	1.0134	1.0135	+0.2	1.13E+07	0.54	Y	1.07	84.1
ES 1234678-HpCDF	39.44	1.0563	1.0562	-0.2	1.01E+07	0.46	Y	0.86	94.3
ES 1234789-HpCDF	41.23	1.1043	1.1041	-0.4	8.28E+06	0.44	Y	0.71	93.4
ES OCDF	44.58	1.1938	1.1937	-0.2	1.81E+07	0.88	Y	0.86	84.1

Lab ID: MB1\_7528\_DF\_SDS

Client ID: 0\_7528\_MB001

Datafile: 100202P1-04

Acq'd: 02 Feb 2010 12:30 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:55 MC

Cal: BCS3\_7528\_DF\_PAB

Checkcode: 687-527

Split: 2

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.96		-	-	-	1.76E+07	0.78	Y	-	-
JS 1234-TCDF	25.33		-	-	-	2.40E+07	0.79	Y	-	-
JS 123467-HxCDD	37.34		-	-	-	6.26E+06	1.30	Y	-	-
CS 37C1-2378-TCDD	27.67		1.0262	1.0263	+0.2	6.39E+06	n/a	-	1.01	89.5
CS 12347-PeCDD	32.61		1.2096	1.2097	+0.2	1.08E+07	1.59	Y	0.70	87.9
CS 12346-PeCDF	31.11		1.2281	1.2283	+0.3	1.84E+07	1.57	Y	0.86	89.5
CS 123469-HxCDF	36.50		0.9773	0.9774	+0.2	1.28E+07	0.56	Y	1.06	96.1
CS 1234689-HpCDF	39.94		1.0695	1.0695	0	8.55E+06	0.46	Y	0.75	91.6
SS 37C1-2378-TCDD	27.67		1.0262	1.0263	+0.2	6.39E+06	n/a	-	1.06	97.1
SS 12347-PeCDD	32.61		1.2096	1.2097	+0.2	1.08E+07	1.59	Y	0.93	95.5
SS 12346-PeCDF	31.11		1.2281	1.2283	+0.3	1.84E+07	1.57	Y	1.01	96.7
SS 123469-HxCDF	36.50		0.9773	0.9774	+0.2	1.28E+07	0.56	Y	0.86	102
SS 1234689-HpCDF	39.94		1.0695	1.0695	0	8.55E+06	0.46	Y	0.87	97.1
AS 1368-TCDD	23.82		0.8836	0.8835	-0.2	1.72E+07	0.74	Y	1.01	97.1
AS 1368-TCDF	21.60		0.8527	0.8527	0	2.80E+07	0.78	Y	1.23	95.3
FS 1278-TCDD	NotFnd		1.0120							
FS 12478-PeCDD	NotFnd		0.9628							
FS 123468-HxCDD	NotFnd		0.9717							
FS 1234679-HpCDD	NotFnd		0.9784							
TS 1378-TCDD	NotFnd		0.9391							
<b>Totals</b>										
Total TCDD		0				EMPC				
Total PeCDD		0				0				
Total HxCDD		0				0				
Total HpCDD		0				0				
Total Tetra-Octa Dioxins		0				0				
Total TCDF		0				0				
Total PeCDF		0				0				
Total HxCDF		0				0				
Total HpCDF		0				0				
Total Tetra-Octa Furans		0				0				
Total Tetra-Octa Dioxins & Furans		0				0				

Analytical Perspectives

RT/QC Sheet 2 of 5

Lab ID: MB1_7528_DF_SDS			Acq'd: 02 Feb 2010 12:30 MC		Wt/Vol: 1		Cal: BCS3_7528_DF_PAB					
Client ID: 0_7528_MB001			UTP: 03-Feb-2010 08:54 MC		J-level: 10 pg		Checkcode: 687-527					
Datafile: 100202P1-04			Report: 03 Feb 2010 08:55 MC		ES spike: 4000 pg		Split: 2					
Name	QC	Act RT	Pred. RRT	Act RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD		NotEnd	0.8628						1.06		829	2.16
1379-TCDD		NotEnd	0.8792						1.06		829	2.16
1369-TCDD		NotEnd	0.8950						1.06		829	2.16
1469-TCDD		NotEnd	0.9239						1.06		829	2.16
1247/1246/1248/1249-TCDD		NotEnd	0.9326						1.06		829	2.16
1378-TCDD		NotEnd	0.9400						1.06		829	2.16
1268-TCDD		NotEnd	0.9472						1.06		829	2.16
1478-TCDD		NotEnd	0.9564						1.06		829	2.16
1279-TCDD		NotEnd	0.9628						1.06		829	2.16
1234/1269-TCDD		NotEnd	0.9758						1.06		829	2.16
1236-TCDD		NotEnd	0.9807						1.06		829	2.16
1237/1238-TCDD		NotEnd	0.9899						1.06		829	2.16
1239-TCDD		NotEnd	0.9949						1.06		829	2.16
2378-TCDD		NotEnd	1.0008						1.06		829	2.16
1278-TCDD		NotEnd	1.0129						1.06		829	2.16
1267-TCDD		NotEnd	1.0176						1.06		829	2.16
1289-TCDD		NotEnd	1.0371						1.06		829	2.16
12479/12468-PeCDD		NotEnd	0.9239						1.08		827	2.36
12469-PeCDD		NotEnd	0.9408						1.08		827	2.36
12368-PeCDD		NotEnd	0.9576						1.08		827	2.36
12478-PeCDD		NotEnd	0.9633						1.08		827	2.36
12379-PeCDD		NotEnd	0.9665						1.08		827	2.36
12369/12467/12489-PeCDD		NotEnd	0.9742						1.08		827	2.36
12346/12347-PeCDD		NotEnd	0.9854						1.08		827	2.36
12378-PeCDD		NotEnd	1.0005						1.08		827	2.36
12367-PeCDD		NotEnd	1.0032						1.08		827	2.36
12389-PeCDD		NotEnd	1.0140						1.08		827	2.36
124679/124689-HxCDD		NotEnd	0.9544						1.04		1084	3.42
123468-HxCDD		NotEnd	0.9721						1.04		1084	3.42
123679/123689-HxCDD		NotEnd	0.9798						1.04		1084	3.42
123469-HxCDD		NotEnd	0.9833						1.04		1084	3.42
123478-HxCDD		NotEnd	1.0004						1.14		1084	3.24
123678-HxCDD		NotEnd	1.0036						1.00		1084	3.34
123467-HxCDD		NotEnd	1.0089						1.04		1084	3.42
123789-HxCDD		NotEnd	1.0121						0.98		1084	3.72

Lab ID: MB1_7528_DF_SDS			Acq'd: 02 Feb 2010 12:30 MC			WtVol: 1			Cal: BCS3_7528_DF_PA			
Client ID: 0_7528_MB001			UTP: 03-Feb-2010 08:54 MC			J-level: 10 pg			Checksum: 687-527			
Datafile: 100202P1-04			Report: 03 Feb 2010 08:55 MC			ES spike: 4000 pg			Split: 2			
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotEnd		0.9789						1.00		834	3.34
1234678-HpCDD	NotEnd		1.0003						1.00		834	3.34
OCDD	NotEnd		1.0004						1.09		891	5.58
OCDD-a	NotEnd		1.0004						0.06		989	106
1368-TCDF	NotEnd		0.8086						1.11		771	1.35
1468-TCDF	NotEnd		0.8345						1.11		771	1.35
2468-TCDF	NotEnd		0.8560						1.11		771	1.35
1346/1246-TCDF	NotEnd		0.8731						1.11		771	1.35
1347/1378/1247-TCDF	NotEnd		0.8791						1.11		771	1.35
1348-TCDF	NotEnd		0.8894						1.11		771	1.35
1248/1367/1379-TCDF	NotEnd		0.8943						1.11		771	1.35
1268-TCDF	NotEnd		0.9092						1.11		771	1.35
1467-TCDF	NotEnd		0.9142						1.11		771	1.35
1478-TCDF	NotEnd		0.9207						1.11		771	1.35
1369/1237-TCDF	NotEnd		0.9349						1.11		771	1.35
2467-TCDF	NotEnd		0.9398						1.11		771	1.35
2368-TCDF	NotEnd		0.9454						1.11		771	1.35
1238/1234/1678/1469/1236-TCDF	NotEnd		0.9481						1.11		771	1.35
1278-TCDF	NotEnd		0.9669						1.11		771	1.35
1349-TCDF	NotEnd		0.9708						1.11		771	1.35
1267-TCDF	NotEnd		0.9772						1.11		771	1.35
2346/1249-TCDF	NotEnd		0.9845						1.11		771	1.35
2347/1279-TCDF	NotEnd		0.9925						1.11		771	1.35
2348-TCDF	NotEnd		0.9964						1.11		771	1.35
2378-TCDF	NotEnd		1.0008						1.11		771	1.35
2367/3467-TCDF	NotEnd		1.0147						1.11		771	1.35
1269-TCDF	NotEnd		1.0237						1.11		771	1.35
1239-TCDF	NotEnd		1.0338						1.11		771	1.35
1289-TCDF	NotEnd		1.0782						1.11		771	1.35
13468/12468-PeCDF	NotEnd		0.9093						1.08		766	1.34
13678/13467/12467-PeCDF	NotEnd		0.9597						1.08		1217	2.14
12368/13478/12478-PeCDF	NotEnd		0.9636						1.08		1217	2.14
14678-PeCDF	NotEnd		0.9678						1.08		1217	2.14
13479-PeCDF	NotEnd		0.9708						1.08		1217	2.14
13469/12479-PeCDF	NotEnd		0.9788						1.08		1217	2.14
12346-PeCDF	NotEnd		0.9834						1.08		1217	2.14

Lab ID: MB1\_7528\_DF\_SDS  
Client ID: 0\_7528\_MB001  
Datafile: 100202P1-04

Acq'd: 02 Feb 2010 12:30 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg

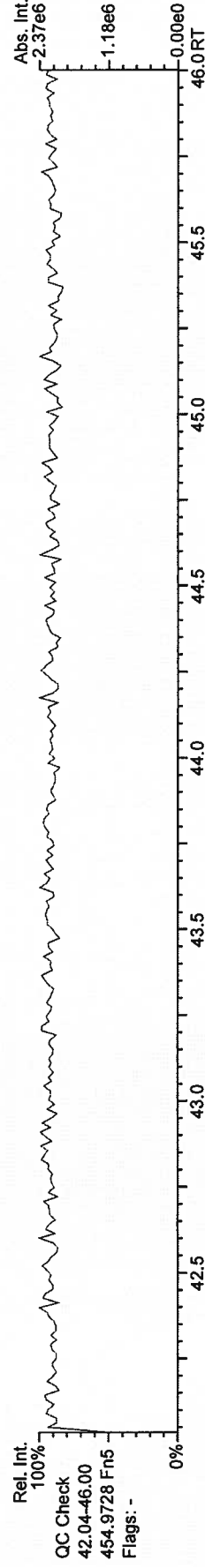
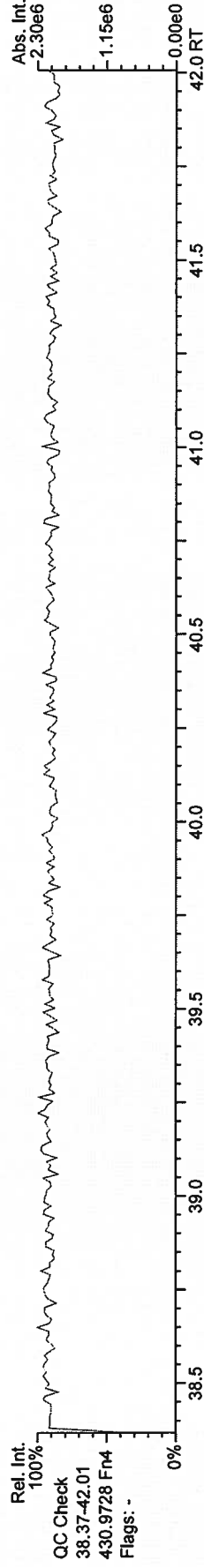
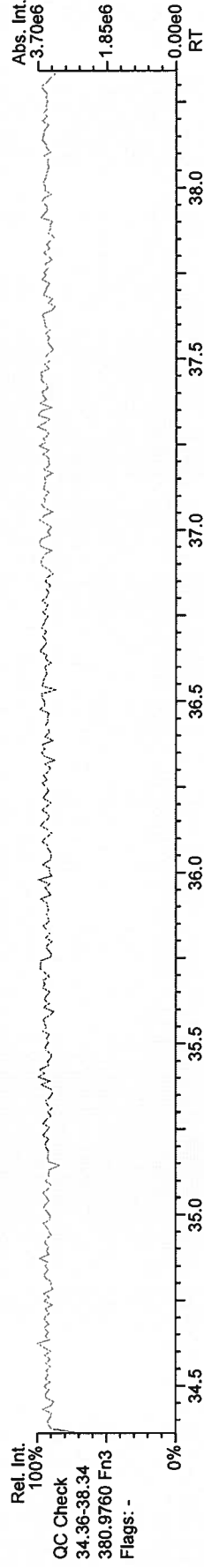
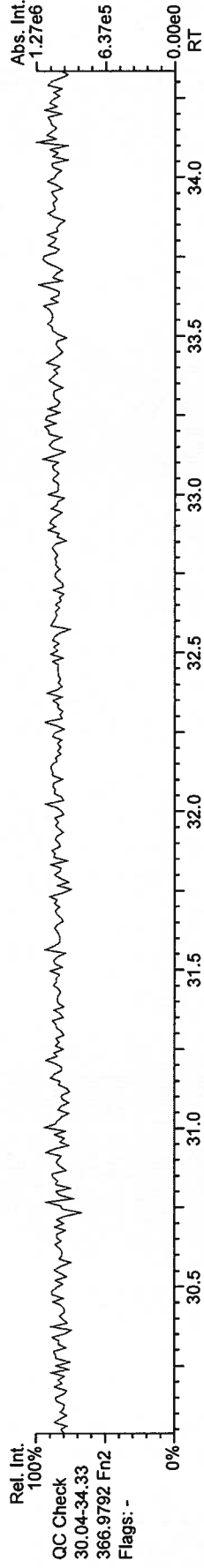
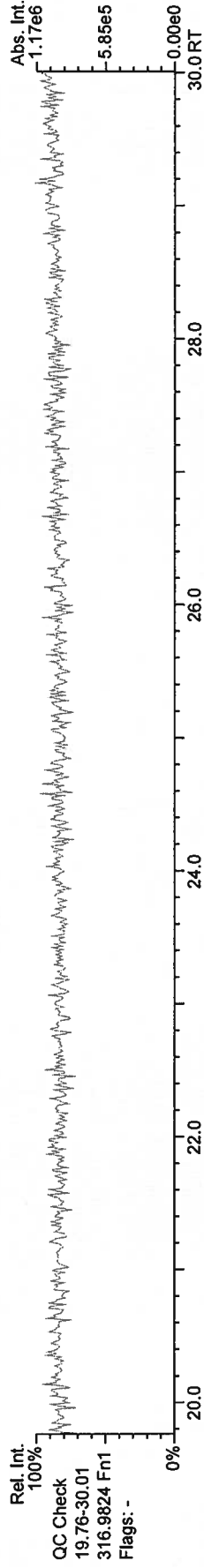
Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 687-527  
Split: 2

Name	QC	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF		NotFnd	0.9862						1.08		1217	2.14
12347-PeCDF		NotFnd	0.9887						1.08		1217	2.14
12348-PeCDF		NotFnd	0.9936						1.08		1217	2.14
12378-PeCDF		NotFnd	1.0006						1.06		1217	2.12
12678/12367-PeCDF		NotFnd	1.0098						1.08		1217	2.14
12379-PeCDF		NotFnd	1.0145						1.08		1217	2.14
12679-PeCDF		NotFnd	0.9927						1.08		1217	2.14
23467/12369-PeCDF		NotFnd	0.9967						1.08		1217	2.14
23478-PeCDF		NotFnd	1.0005						1.10		1217	2.15
23478/12489-PeCDF		NotFnd	1.0006						1.10		1217	2.15
12489-PeCDF		NotFnd	1.0023						1.08		1217	2.14
12349-PeCDF		NotFnd	1.0103						1.08		1217	2.14
12389-PeCDF		NotFnd	1.0336						1.08		1217	2.14
123468-HxCDF		NotFnd	0.9619						1.19		870	1.84
124678/134678-HxCDF		NotFnd	0.9675						1.19		870	1.84
134679-HxCDF		NotFnd	0.9741						1.19		870	1.84
124679-HxCDF		NotFnd	0.9793						1.19		870	1.84
124689-HxCDF		NotFnd	0.9855						1.19		870	1.84
123467-HxCDF		NotFnd	0.9972						1.19		870	1.84
123478-HxCDF		NotFnd	1.0004						1.20		870	1.78
123678-HxCDF		NotFnd	1.0005						1.20		870	1.69
123479-HxCDF		NotFnd	1.0047						1.19		870	1.84
123469-HxCDF		NotFnd	1.0087						1.19		870	1.84
123679-HxCDF		NotFnd	0.9944						1.19		870	1.84
234678-HxCDF		NotFnd	1.0004						1.17		870	1.73
234678/123689-HxCDF		NotFnd	1.0004						1.17		870	1.73
123689-HxCDF		NotFnd	1.0009						1.19		870	1.84
123789-HxCDF		NotFnd	1.0004						1.19		870	2.26
123789/123489-HxCDF		NotFnd	1.0010						1.19		870	2.26
123489-HxCDF		NotFnd	1.0017						1.19		870	1.84
1234678-HpCDF		NotFnd	1.0003						1.48		746	1.5
1234679-HpCDF		NotFnd	1.0085						1.45		746	1.81
1234689-HpCDF		NotFnd	1.0128						1.45		746	1.81
1234789-HpCDF		NotFnd	1.0002						1.42		746	2.19
OCDF		NotFnd	1.0003						1.03		860	4.29
OCDF-a		NotFnd	1.0003						0.06		1006	92.5

AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

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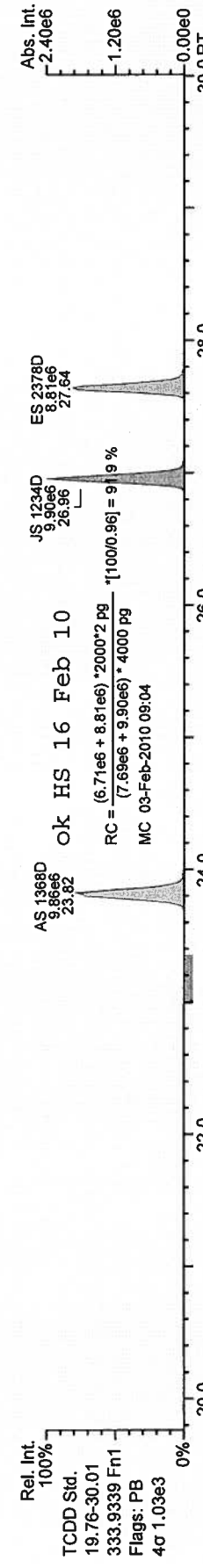
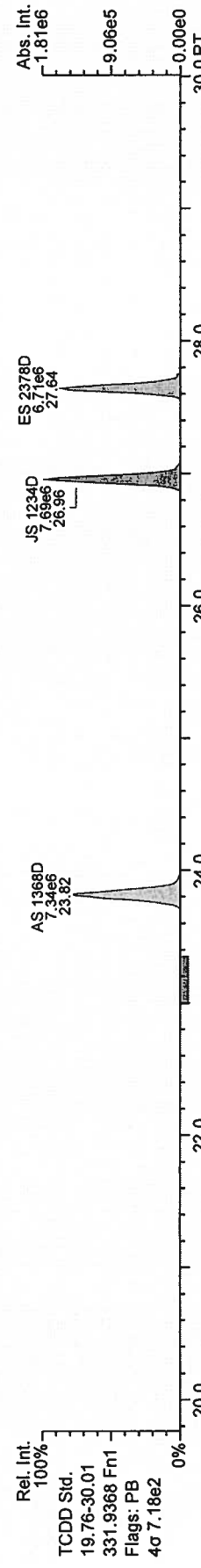
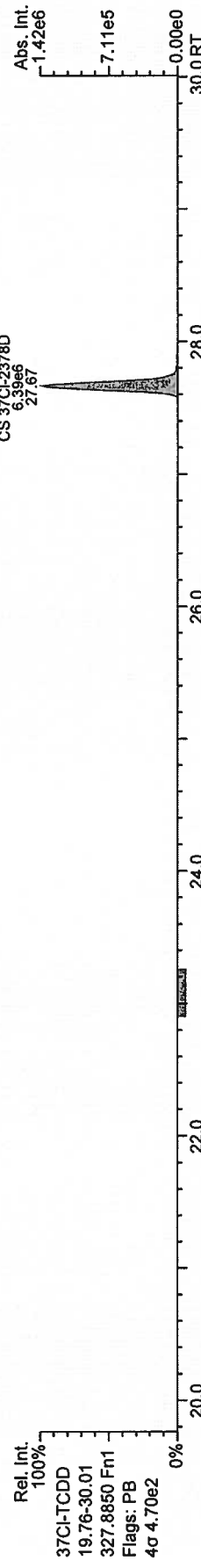
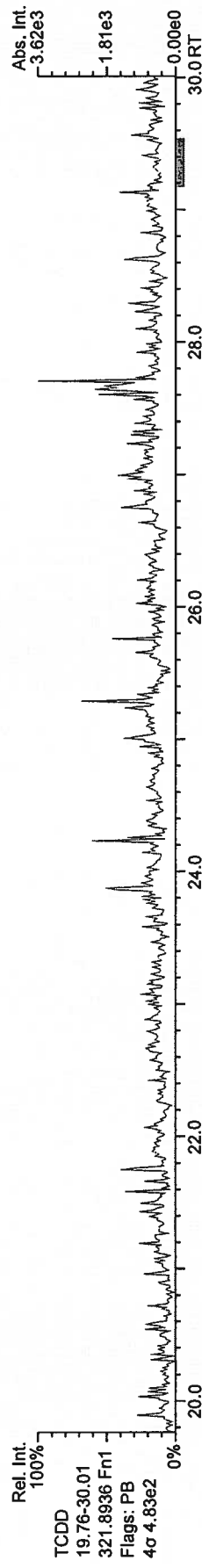
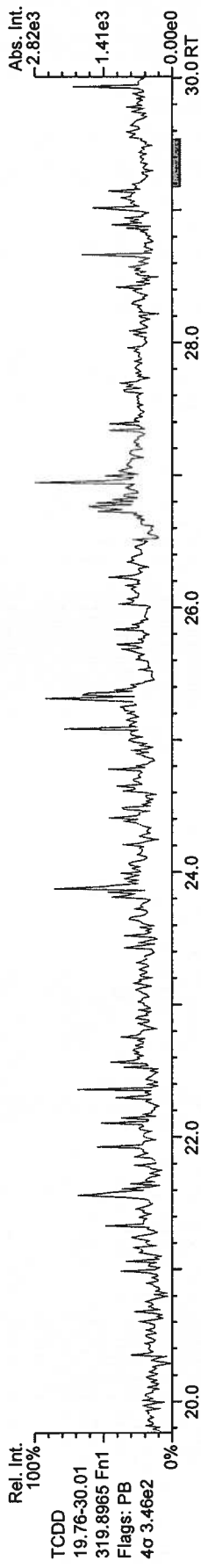




AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

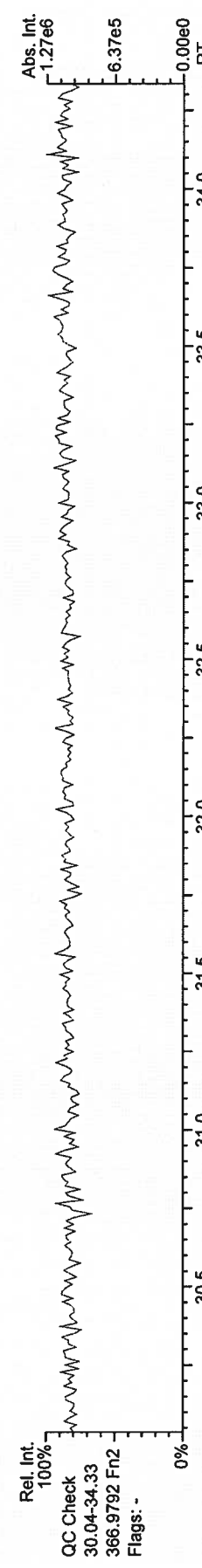
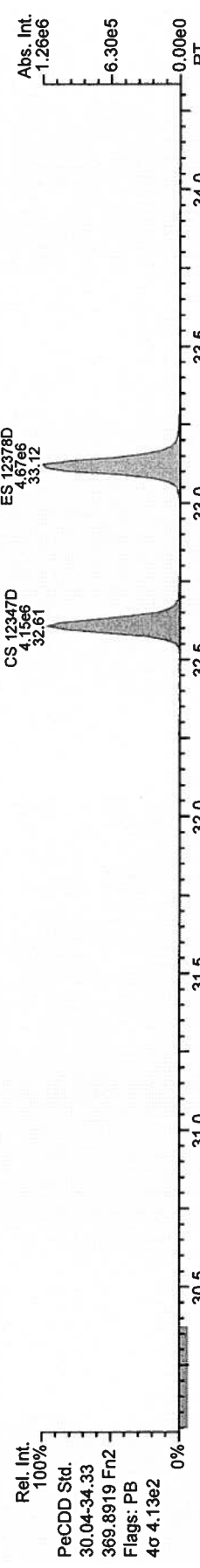
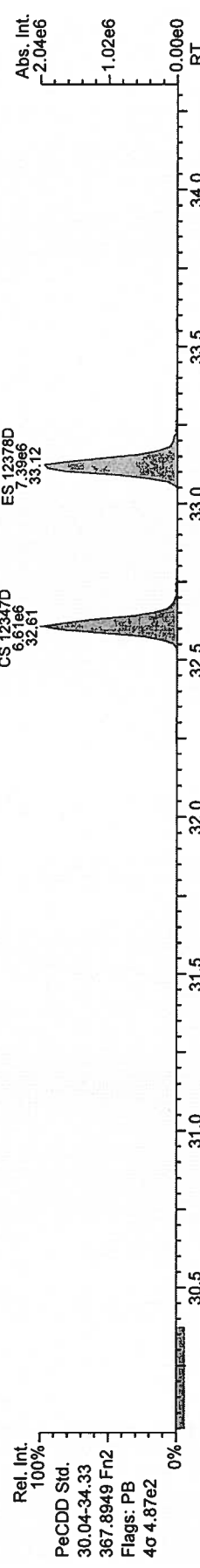
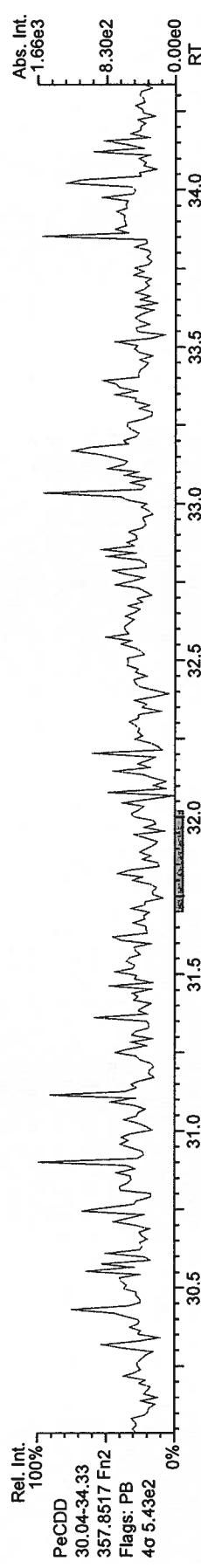
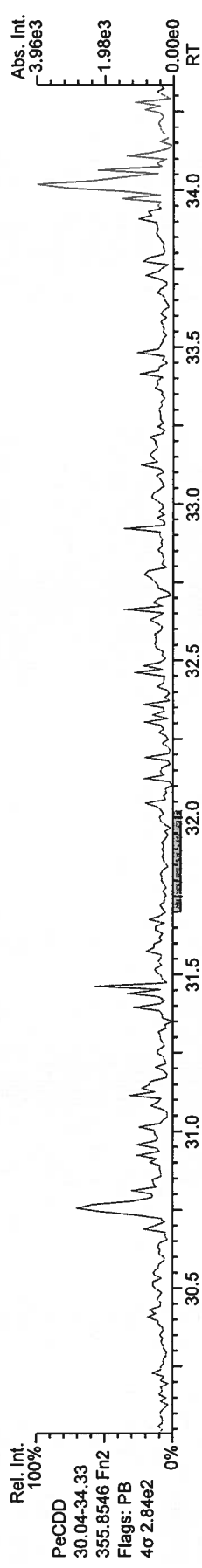


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Peak annotation: Areas, Centroids  
PKD: 02-Feb-2010 13:31:06 Printed: 03-Feb-2010 09:13:12 Page 2 of 12

AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

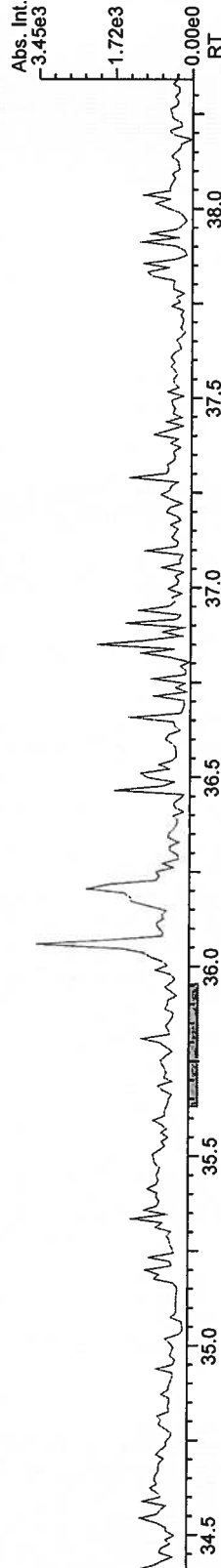


AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

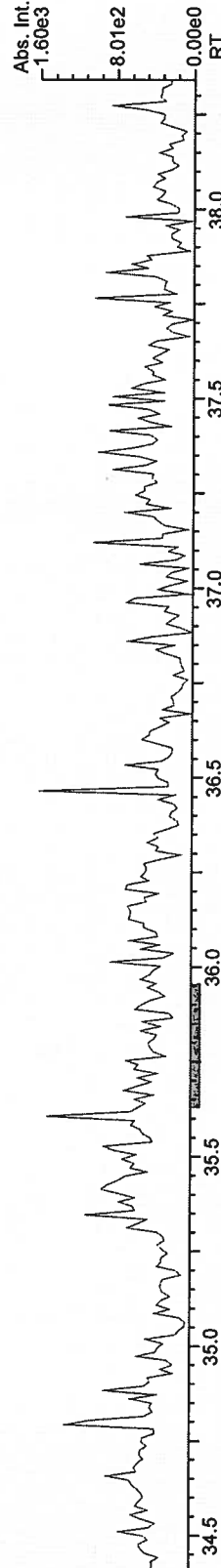
Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

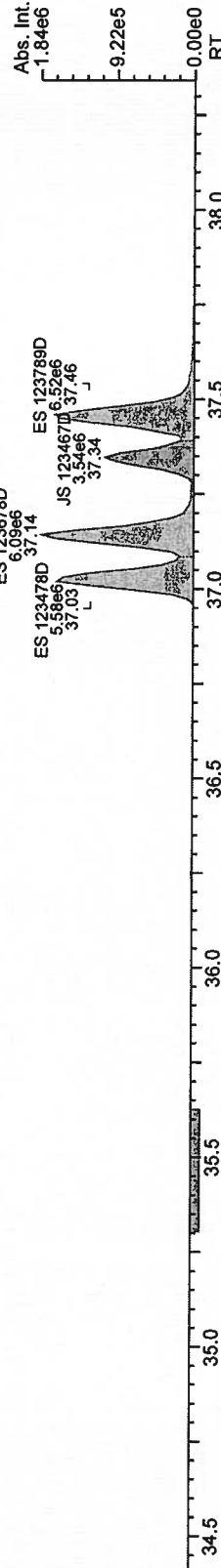
Rel. Int.  
100%  
HxCDD  
34.36-38.34  
389.8156 Fn3  
Flags: PB  
4σ 5.71e2



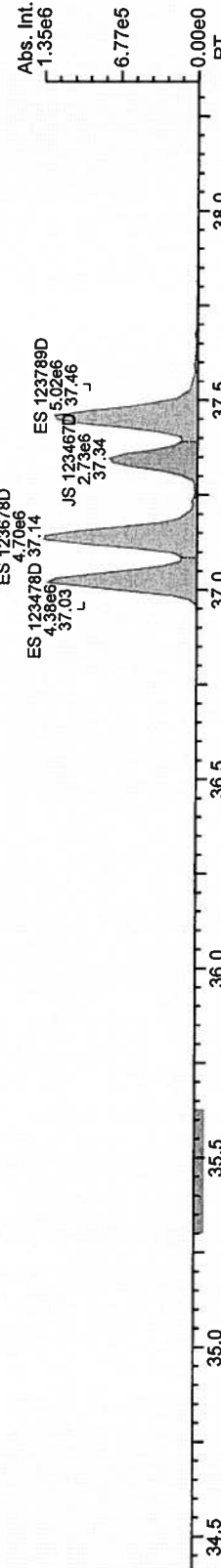
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100%  
HxCDD  
34.36-38.34  
391.8127 Fn3  
Flags: PB  
4σ 5.13e2



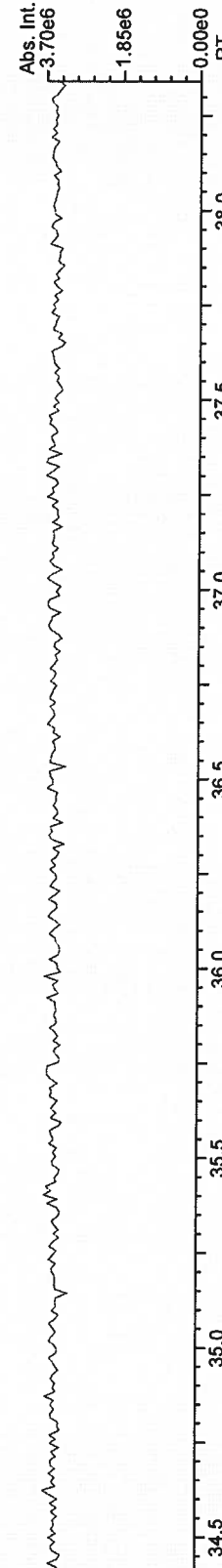
Rel. Int.  
100%  
HxCDD Std.  
34.36-38.34  
401.8559 Fn3  
Flags: PB  
4σ 9.47e2



Rel. Int.  
100%  
HxCDD Std.  
34.36-38.34  
403.8530 Fn3  
Flags: PB  
4σ 6.65e2



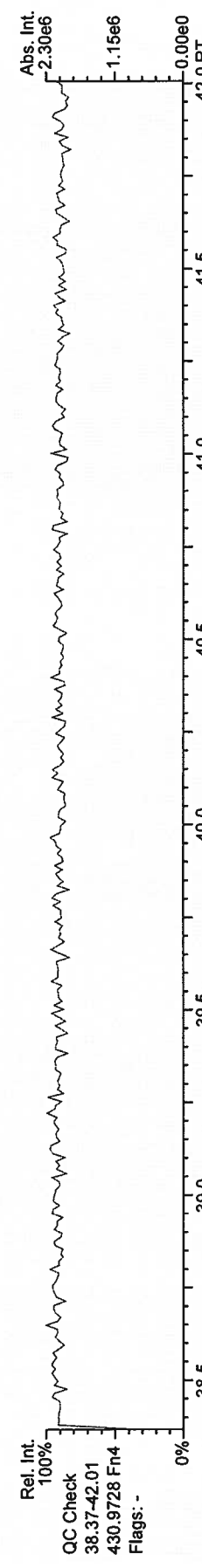
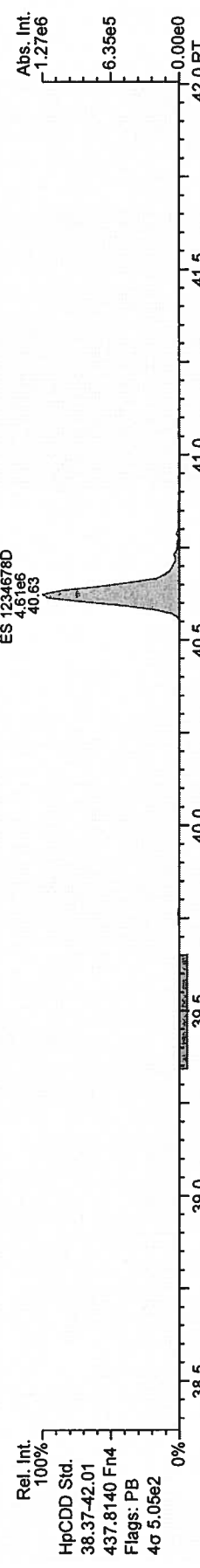
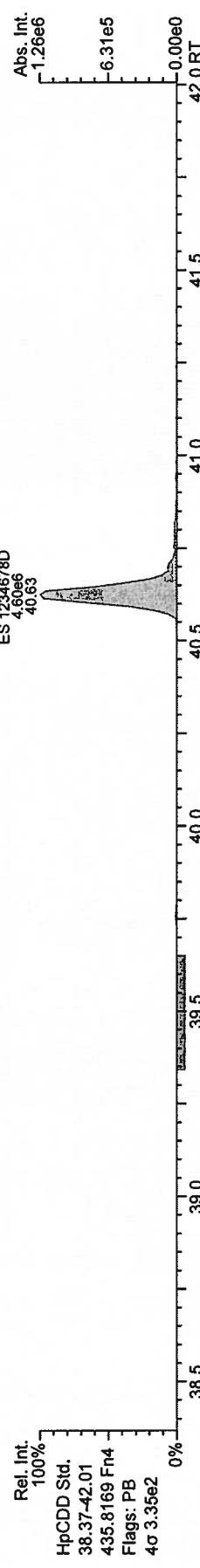
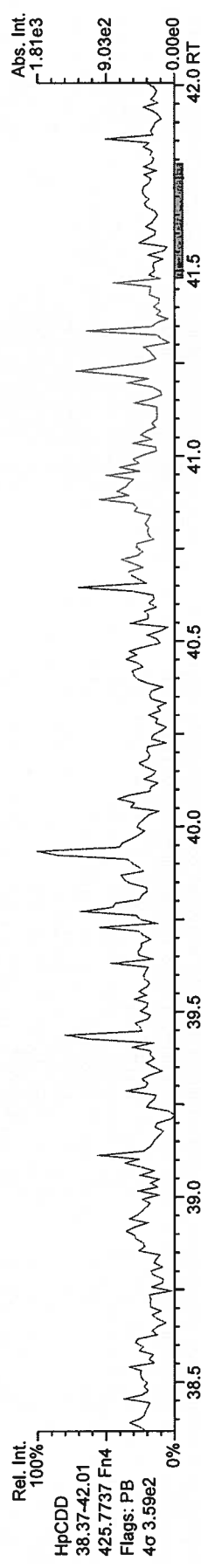
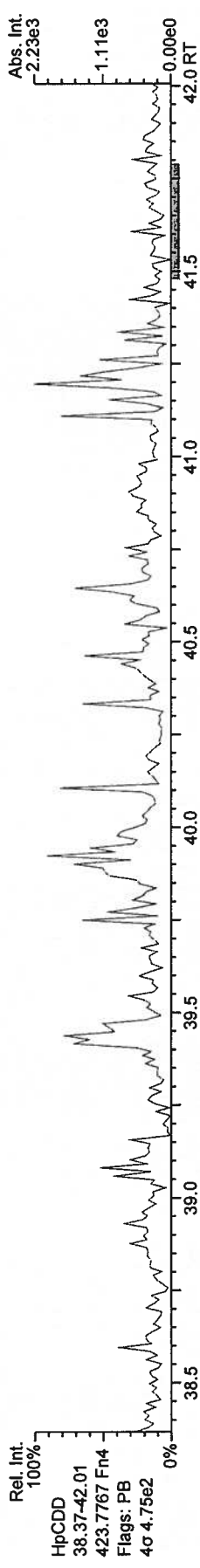
Rel. Int.  
100%  
QC Check  
34.36-38.34  
380.9760 Fn3  
Flags: -



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

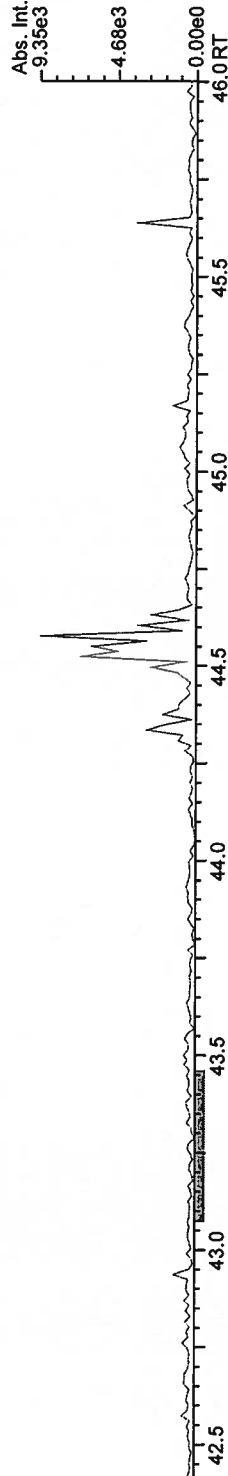


AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

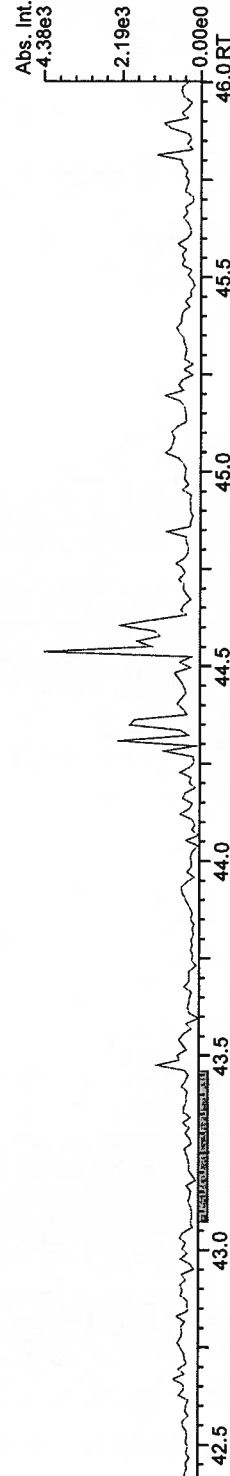
Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

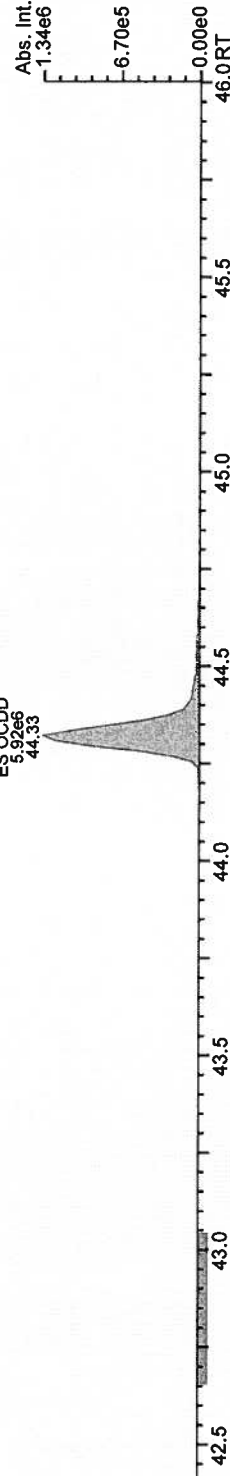
Rel. Int.  
100%  
OCDD  
42.04-46.00  
457.7377 Fn5  
Flags: PB  
4σ 5.18e2



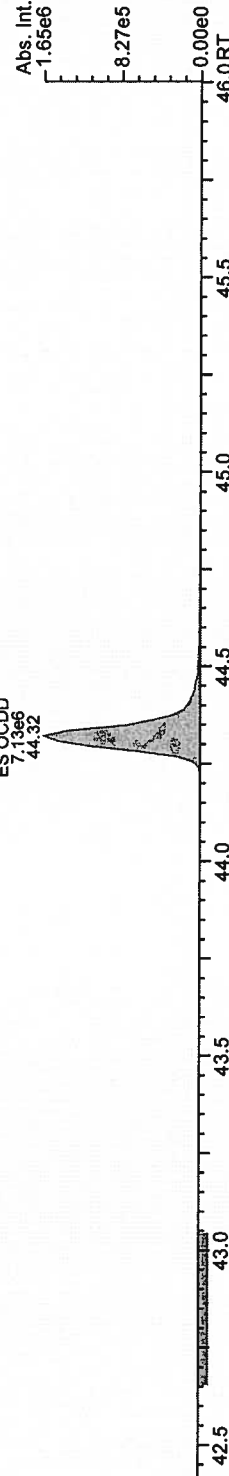
Rel. Int.  
100%  
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Flags: PB  
4σ 3.73e2



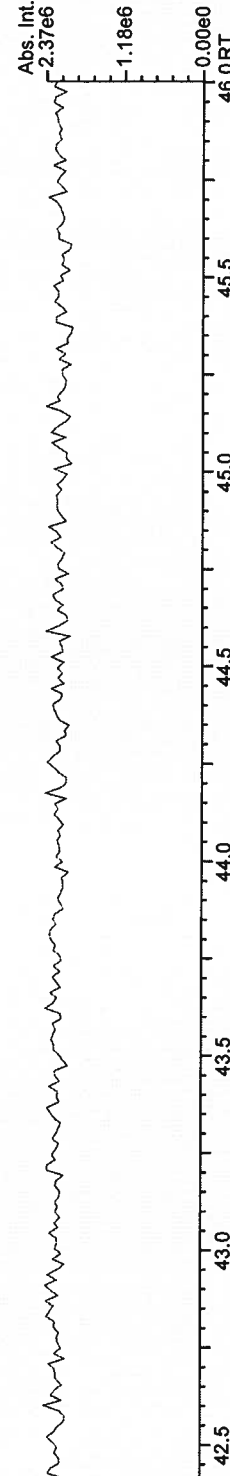
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100%  
OCDD Std.  
42.04-46.00  
469.7780 Fn5  
Flags: PB  
4σ 5.21e2



Rel. Int.  
100%  
OCDD Std.  
42.04-46.00  
471.7750 Fn5  
Flags: PB  
4σ 4.70e2



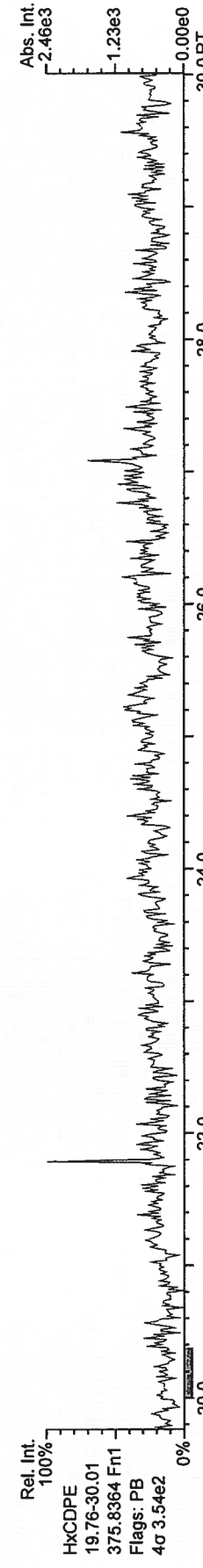
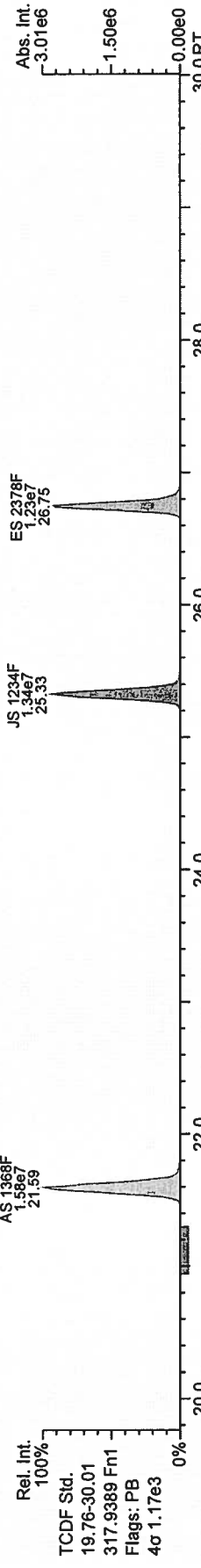
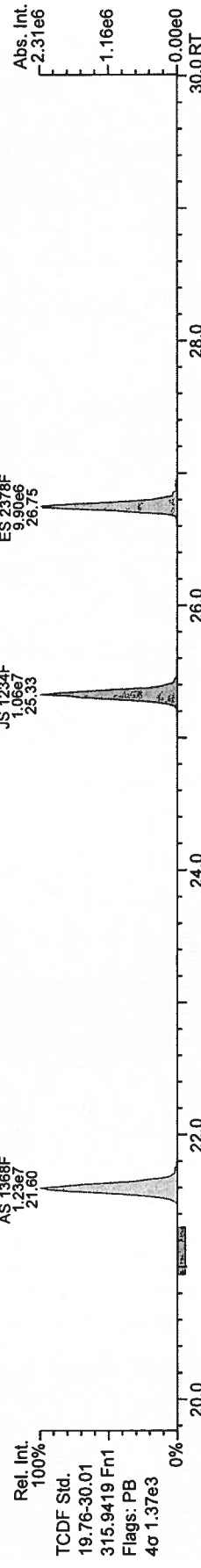
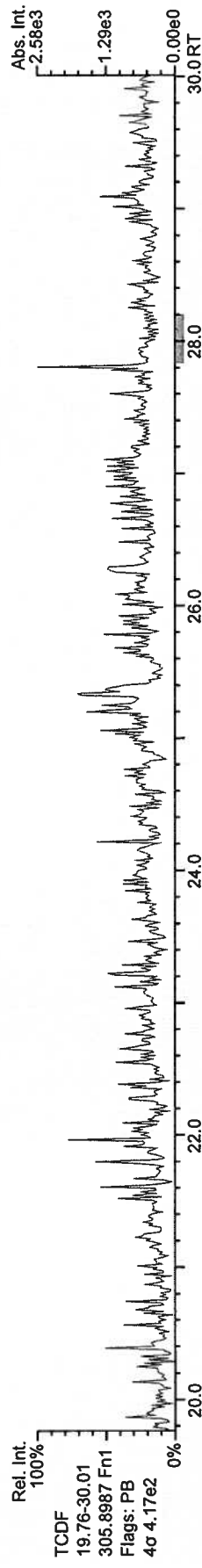
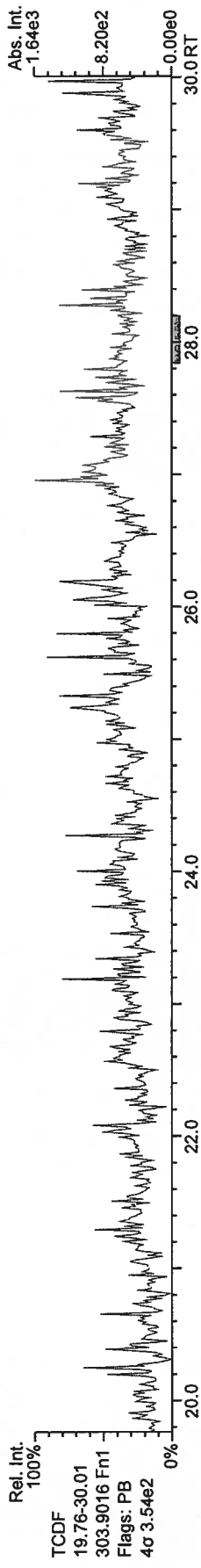
Rel. Int.  
100%  
QC Check  
42.04-46.00  
454.9728 Fn5  
Flags: -



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

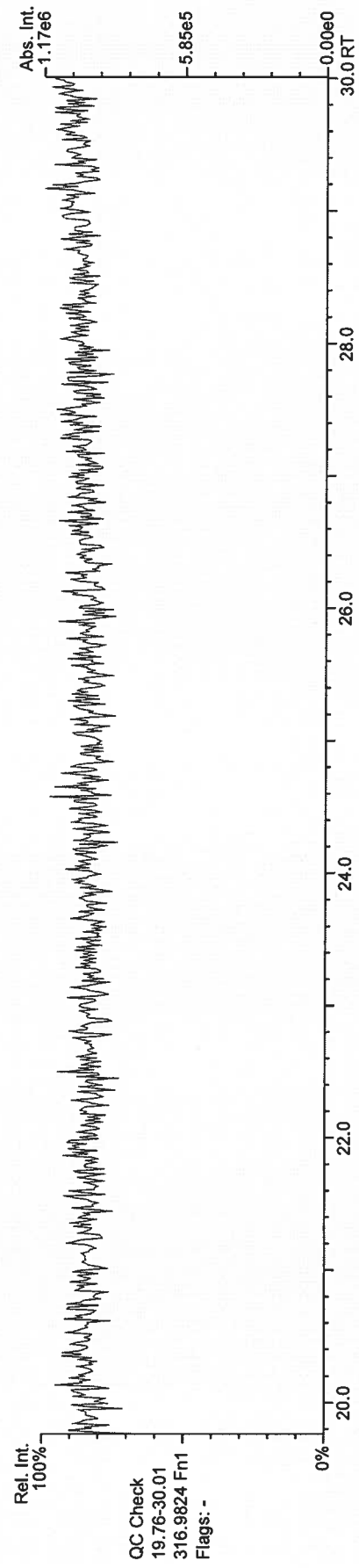
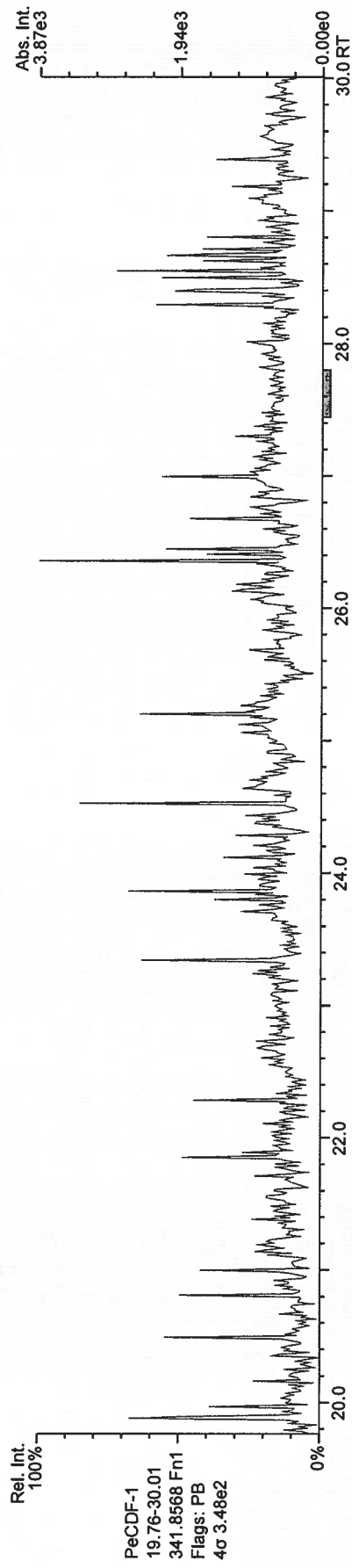
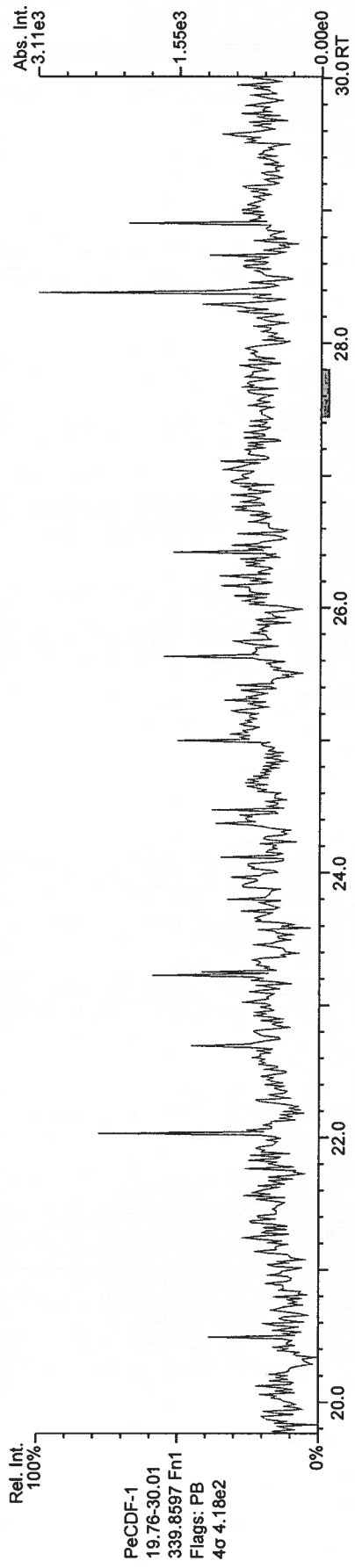
Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

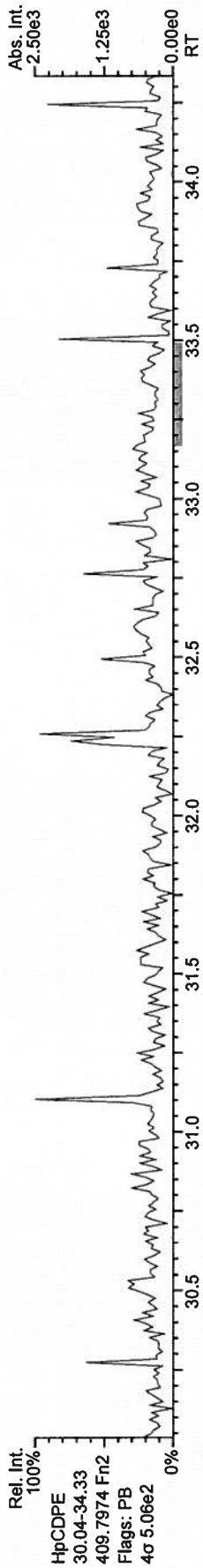
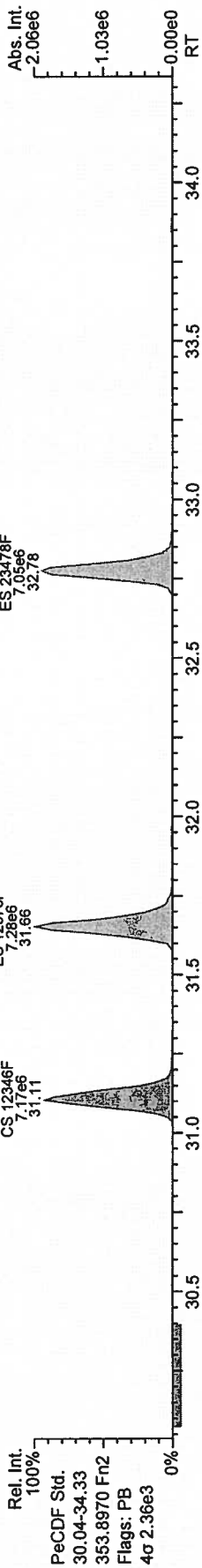
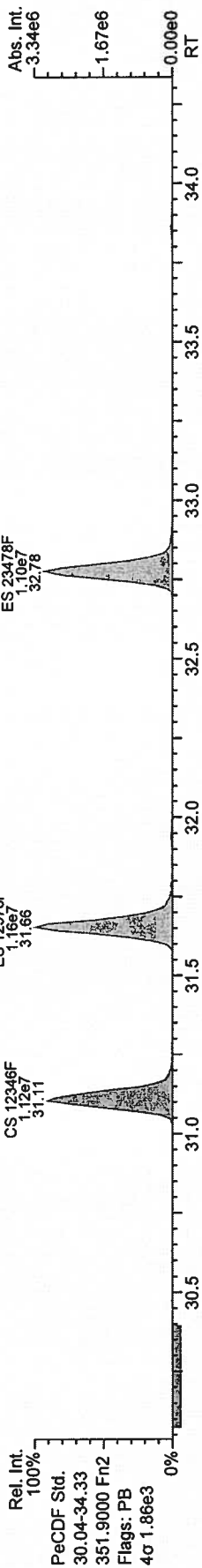
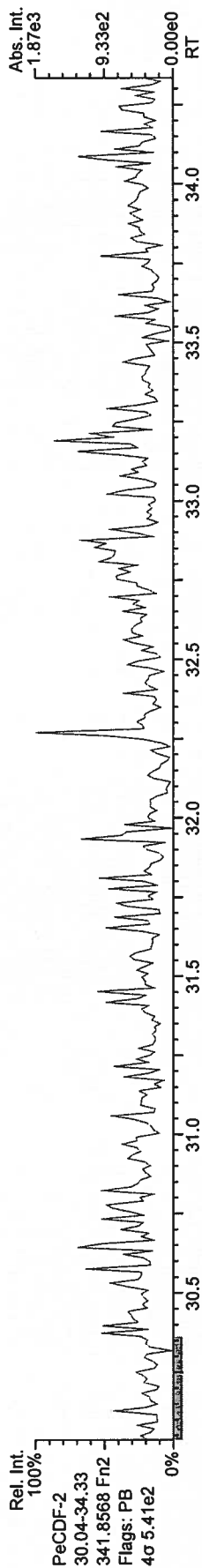
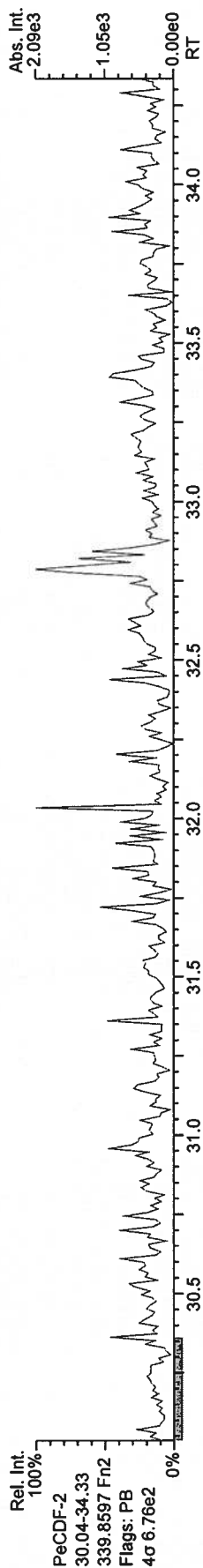
Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04

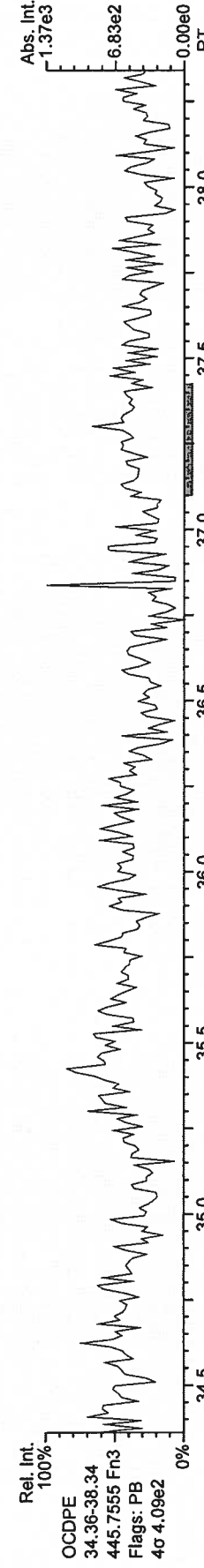
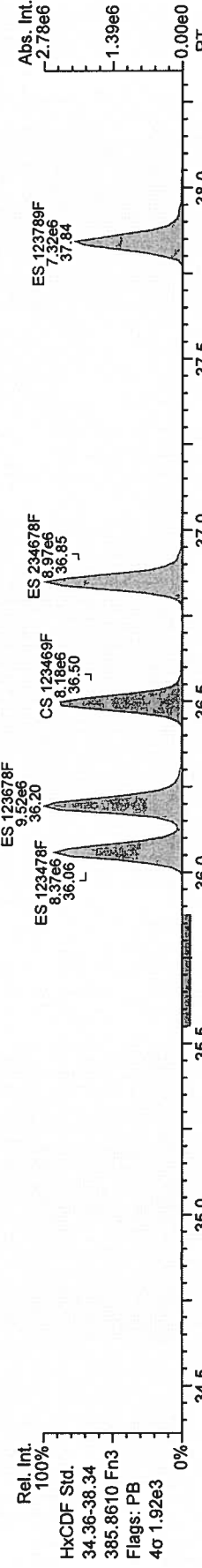
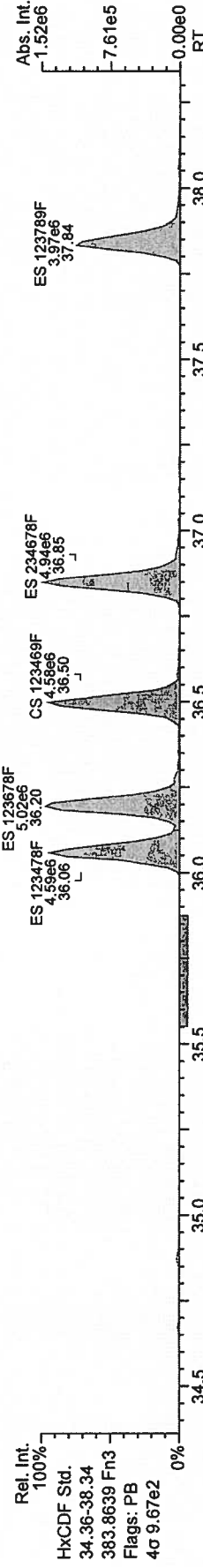
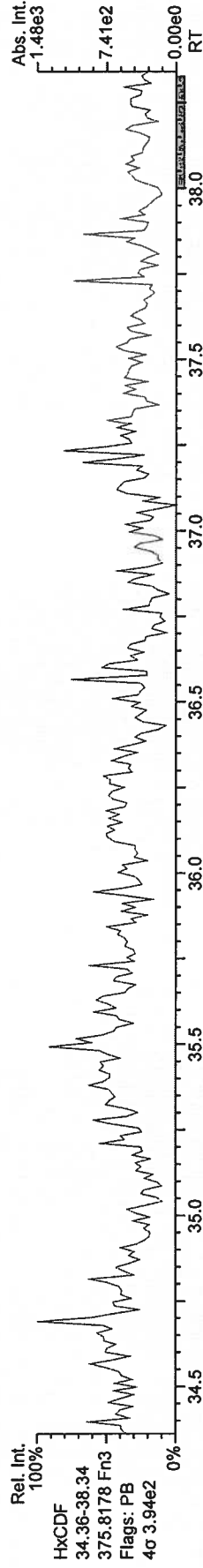
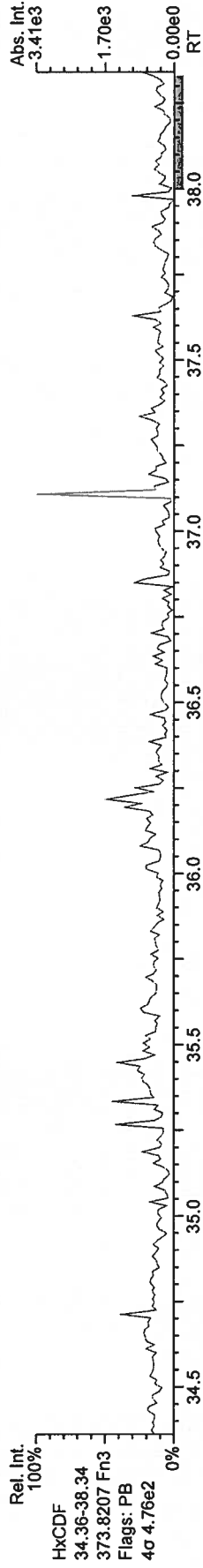




AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

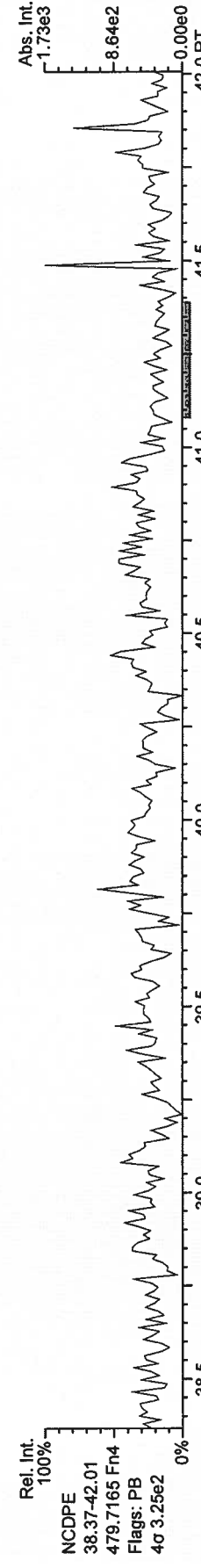
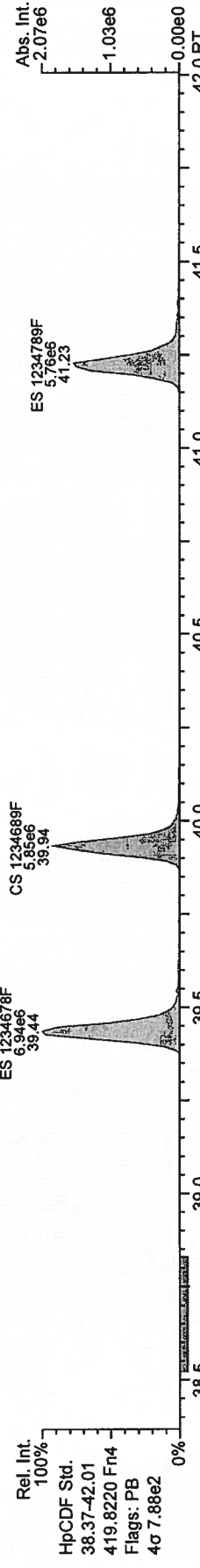
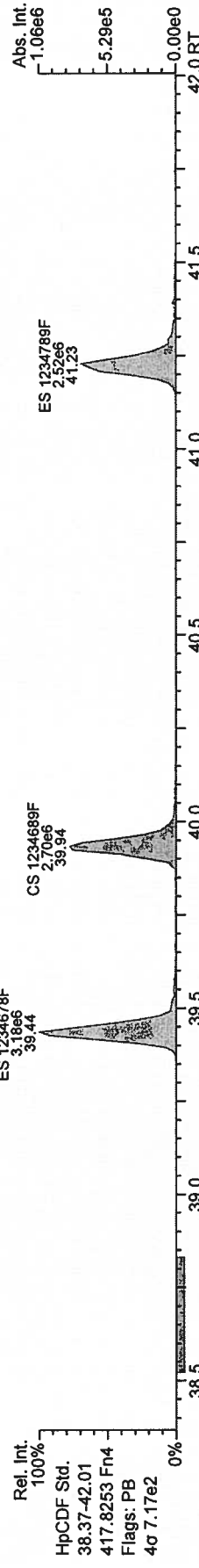
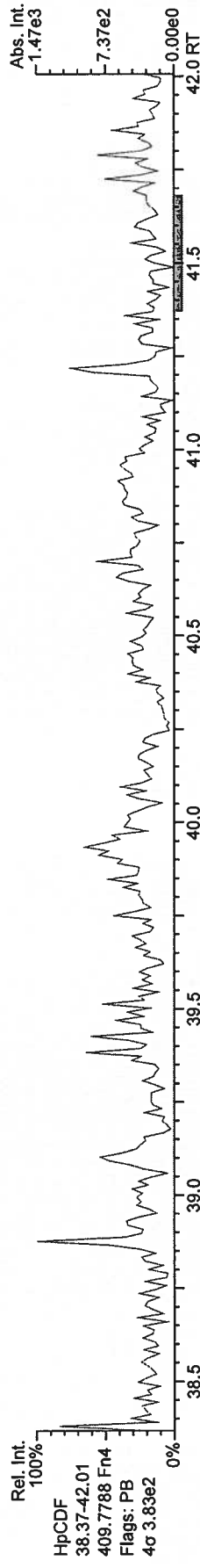
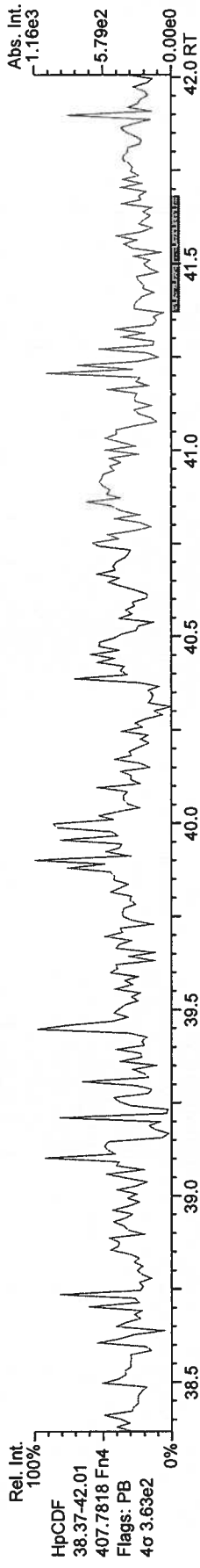
Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

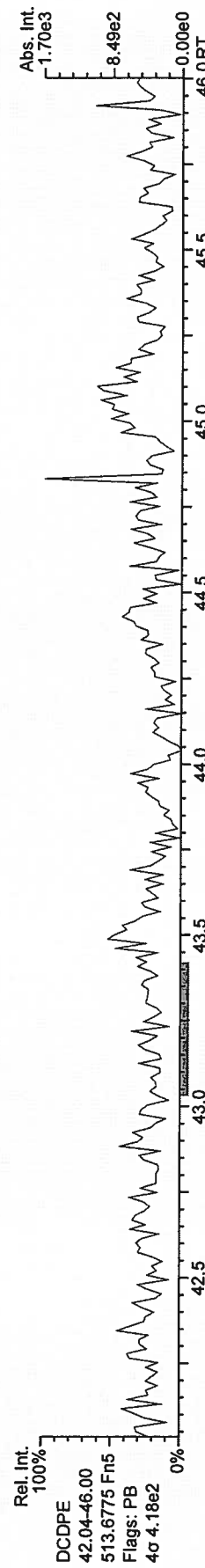
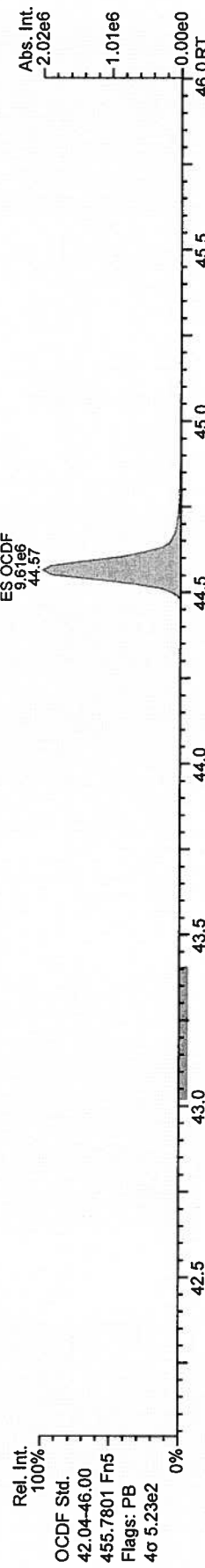
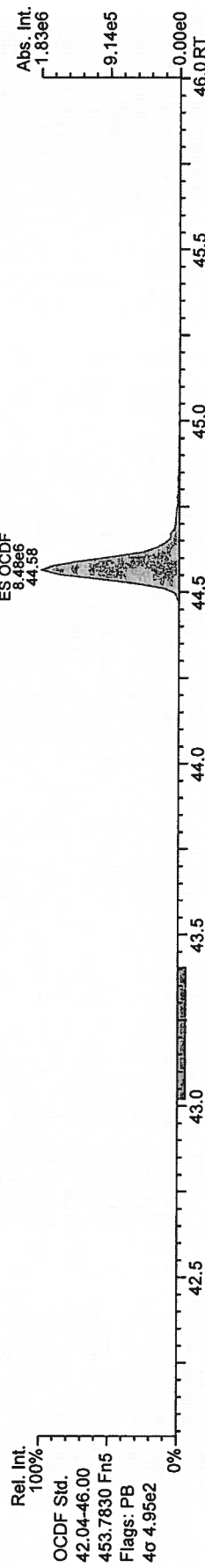
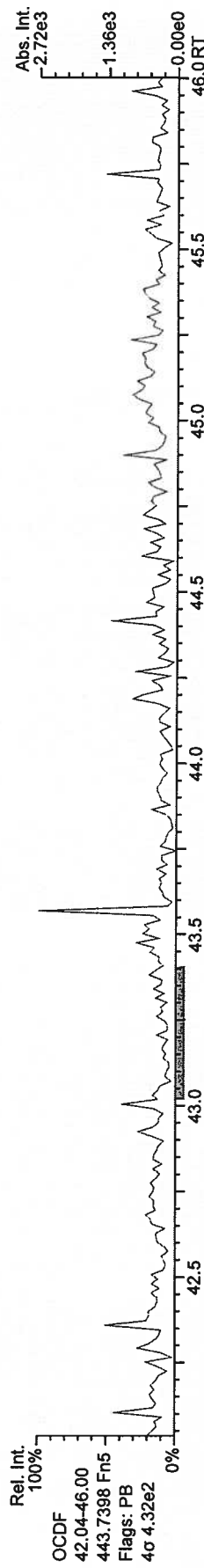
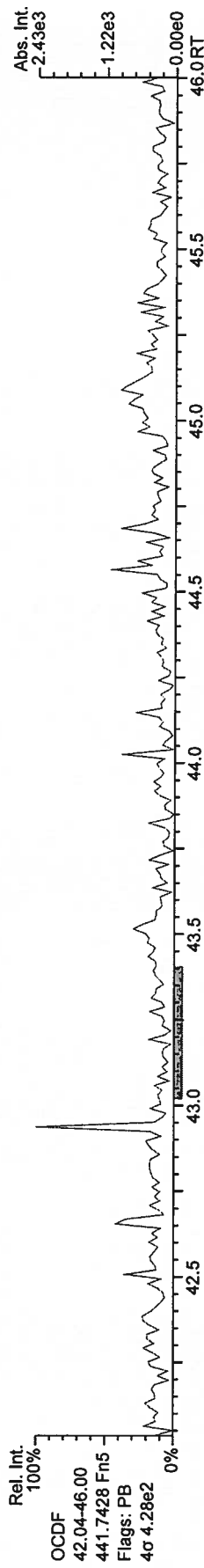
Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04



AP Lab ID: MB1\_7528\_DF\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 17

Acq: 2-FEB-2010 12:30:32  
User: MC Datafile: 100202P1-04



Lab ID: P1977\_7528\_001  
Client ID: SSI #1-Blank  
Datafile: 100202P1-05

Acq'd: 02 Feb 2010 13:20 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg  
Split: 2

Cal: BCS3\_7528\_DF\_PAB

Checkcode: 646-161

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.06	-	936	2.38
12378-PeCDD	NotEnd		1.0005	-		-	-	-	1.08	-	993	2.86
123478-HxCDD	NotEnd		1.0004	-		-	-	-	1.14	-	921	2.59
123678-HxCDD	NotEnd		1.0036	-		-	-	-	1.00	-	921	2.86
123789-HxCDD	NotEnd		1.0121	-		-	-	-	0.98	-	921	3.06
1234678-HpCDD	40.64		1.0003	1.0004	+0.2	1.84E+04	1.14	Y	1.00	8.16	982	3.96
OCDD	44.35		1.0004	1.0004	0	1.96E+04	1.55	N	1.09	11.4	932	5.65
2378-TCDF	26.76		1.0008	1.0006	-0.3	2.81E+05	0.77	Y	1.11	44.3	956	1.75
12378-PeCDF	31.68		1.0006	1.0006	0	2.01E+04	1.81	N	1.06	3.79	1109	1.95
23478-PeCDF	32.79		1.0005	1.0005	0	1.68E+04	1.39	Y	1.10	3.26	1109	1.9
123478-HxCDF	36.09		1.0004	1.0009	+1.1	4.71E+03	3.46	N	1.20	1.18	892	1.75
123678-HxCDF	36.22		1.0005	1.0005	0	6.89E+03	0.67	N	1.20	1.52	892	1.69
234678-HxCDF	NotEnd		1.0004	-		-	-	-	1.17	-	892	1.8
123789-HxCDF	NotEnd		1.0004	-		-	-	-	1.19	-	892	2.29
1234678-HpCDF	39.44		1.0003	1.0002	-0.2	1.53E+04	1.34	N	1.48	4.23	881	1.94
1234789-HpCDF	NotEnd		1.0002	-		-	-	-	1.42	-	881	2.88
OCDF	NotEnd		1.0003	-		-	-	-	1.03	-	992	4.75

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.64	1.0254	1.0256	+0.3	1.60E+07	0.73	Y	0.96	77.8
ES 12378-PeCDD	33.12	1.2285	1.2287	+0.3	1.17E+07	1.61	Y	0.74	72.9
ES 123478-HxCDD	37.02	0.9915	0.9915	0	9.88E+06	1.25	Y	0.84	75.2
ES 123678-HxCDD	37.14	0.9946	0.9946	0	1.14E+07	1.32	Y	0.97	74.8
ES 123789-HxCDD	37.46	1.0031	1.0031	0	1.10E+07	1.24	Y	0.95	73.8
ES 1234678-HpCDD	40.63	1.0881	1.0879	-0.4	9.05E+06	1.08	Y	0.78	74
ES OCDD	44.33	1.1872	1.1871	-0.2	1.27E+07	0.81	Y	0.63	64.3
ES 2378-TCDF	26.75	1.0560	1.0562	+0.3	2.28E+07	0.77	Y	0.98	79.7
ES 12378-PeCDF	31.66	1.2497	1.2501	+0.6	2.00E+07	1.51	Y	0.85	80.4
ES 23478-PeCDF	32.78	1.2939	1.2943	+0.6	1.87E+07	1.60	Y	0.80	80.2
ES 123478-HxCDF	36.06	0.9656	0.9657	+0.2	1.33E+07	0.52	Y	1.13	74.7
ES 123678-HxCDF	36.20	0.9694	0.9694	0	1.51E+07	0.55	Y	1.23	77.9
ES 234678-HxCDF	36.85	0.9869	0.9868	-0.2	1.37E+07	0.52	Y	1.18	73.9
ES 123789-HxCDF	37.84	1.0134	1.0135	+0.2	1.18E+07	0.53	Y	1.07	70.2
ES 1234678-HpCDF	39.44	1.0563	1.0561	-0.4	9.74E+06	0.45	Y	0.86	72.4
ES 1234789-HpCDF	41.23	1.1043	1.1040	-0.7	8.05E+06	0.47	Y	0.71	72.3
ES OCDF	44.57	1.1938	1.1937	-0.2	1.82E+07	0.91	Y	0.86	67.4

Lab ID: P1977\_7528\_001  
Client ID: SSI #1-Blank  
Datafile: 100202P1-05

Acq'd: 02 Feb 2010 13:20 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 646-161  
Split: 2

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Name	Act RT	QC	Pred. RRT	Act RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.95		-	-	-	2.15E+07	0.77	Y	-	-
JS 1234-TCDF	25.32		-	-	-	2.92E+07	0.79	Y	-	-
JS 123467-HxCDD	37.34		-	-	-	7.86E+06	1.28	Y	-	-
CS 37C1-2378-TCDD	27.66		1.0262	1.0264	+0.3	6.64E+06	n/a	-	1.01	76.1
CS 12347-PeCDD	32.61		1.2096	1.2098	+0.3	1.16E+07	1.60	Y	0.70	77.5
CS 12346-PeCDF	31.11		1.2281	1.2285	+0.6	2.04E+07	1.48	Y	0.86	81.3
CS 123469-HxCDF	36.50		0.9773	0.9774	+0.2	1.31E+07	0.54	Y	1.06	78.7
CS 1234689-HpCDF	39.93		1.0695	1.0694	-0.2	8.72E+06	0.46	Y	0.75	74.4
SS 37C1-2378-TCDD	27.66		1.0262	1.0264	+0.3	6.64E+06	n/a	-	1.06	97.8
SS 12347-PeCDD	32.61		1.2096	1.2098	+0.3	1.16E+07	1.60	Y	0.93	106
SS 12346-PeCDF	31.11		1.2281	1.2285	+0.6	2.04E+07	1.48	Y	1.01	101
SS 123469-HxCDF	36.50		0.9773	0.9774	+0.2	1.31E+07	0.54	Y	0.86	101
SS 1234689-HpCDF	39.93		1.0695	1.0694	-0.2	8.72E+06	0.46	Y	0.87	103
AS 1368-TCDD	23.81		0.8836	0.8835	-0.2	1.67E+07	0.74	Y	1.01	77.4
AS 1368-TCDF	21.59		0.8527	0.8526	-0.2	2.89E+07	0.78	Y	1.23	80.7
FS 1278-TCDD	27.91		1.0120	1.0098	-3.6	5.50E+04	0.43	N	1.00	0.687
FS 12478-PeCDD	NotFnd		0.9628							
FS 123468-HxCDD	NotFnd		0.9717							
FS 1234679-HpCDD	NotFnd		0.9784							
TS 1378-TCDD	NotFnd		0.9391							
Totals		Conc		EMPC						
Total TCDD		6.37		6.37						
Total PeCDD		0		0						
Total HxCDD		14.3		14.3						
Total HpCDD		20.5		20.5						
Total Tetra-Octa Dioxins		41.2		52.5						
Total TCDF		105		133						
Total PeCDF		3.26		10.5						
Total HxCDF		6.21		10.9						
Total HpCDF		0		4.23						
Total Tetra-Octa Furans		115		158						
Total Tetra-Octa Dioxins & Furans		156		211						

Analytical Perspectives

Lab ID: P1977\_7528\_001  
Client ID: SSI #1-Blank  
Datafile: 100202P1-05

Acq'd: 02 Feb 2010 13:20 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

WtVol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 646-161  
Split: 2

Name	Act RT	QC	Pred. RRT	Act RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.85		0.8628	0.8628	0	2.69E+04	0.74	Y	1.06	6.37	936	2.38
1379-TCDD	NotFnd		0.8792						1.06		936	2.38
1369-TCDD	NotFnd		0.8950						1.06		936	2.38
1469-TCDD	NotFnd		0.9239						1.06		936	2.38
1247/1246/1248/1249-TCDD	NotFnd		0.9326						1.06		936	2.38
1378-TCDD	NotFnd		0.9400						1.06		936	2.38
1268-TCDD	NotFnd		0.9472						1.06		936	2.38
1478-TCDD	NotFnd		0.9564						1.06		936	2.38
1279-TCDD	NotFnd		0.9628						1.06		936	2.38
1234/1269-TCDD	NotFnd		0.9758						1.06		936	2.38
1236-TCDD	NotFnd		0.9807						1.06		936	2.38
1237/1238-TCDD	NotFnd		0.9899						1.06		936	2.38
1239-TCDD	NotFnd		0.9949						1.06		936	2.38
2378-TCDD	NotFnd		1.0008						1.06		936	2.38
1278-TCDD	NotFnd		1.0129						1.06		936	2.38
1267-TCDD	NotFnd		1.0176						1.06		936	2.38
1289-TCDD	NotFnd		1.0371						1.06		936	2.38
12479/12468-PeCDD	NotFnd		0.9239						1.08		993	2.86
12469-PeCDD	NotFnd		0.9408						1.08		993	2.86
12368-PeCDD	NotFnd		0.9576						1.08		993	2.86
12478-PeCDD	NotFnd		0.9633						1.08		993	2.86
12379-PeCDD	NotFnd		0.9665						1.08		993	2.86
12369/12467/12489-PeCDD	NotFnd		0.9742						1.08		993	2.86
12346/12347-PeCDD	NotFnd		0.9854						1.08		993	2.86
12378-PeCDD	NotFnd		1.0005						1.08		993	2.86
12367-PeCDD	NotFnd		1.0032						1.08		993	2.86
12389-PeCDD	NotFnd		1.0140						1.08		993	2.86
124679/124689-HxCDD	35.34		0.9544	0.9545	+0.2	1.61E+04	1.22	Y	1.04	5.78	921	2.82
123468-HxCDD	35.99		0.9721	0.9720	-0.2	2.38E+04	1.21	Y	1.04	8.55	921	2.82
123679/123689-HxCDD	NotFnd		0.9798						1.04		921	2.82
123469-HxCDD	NotFnd		0.9833						1.04		921	2.82
123478-HxCDD	NotFnd		1.0004						1.14		921	2.59
123678-HxCDD	NotFnd		1.0036						1.00		921	2.86
123467-HxCDD	NotFnd		1.0089						1.04		921	2.82
123789-HxCDD	NotFnd		1.0121						0.98		921	3.06

Lab ID: P1977\_7528\_001

Client ID: SSI #1-Blank

Datafile: 100202P1-05

Acq'd: 02 Feb 2010 13:20 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:55 MC

Wt/Vol: 1

Cal: BCS3\_7528\_DF\_PAB

Checkcode: 646-161

Split: 2

Name	Act RT	QC	Pred. RRT	Act RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.76		0.9789	0.9788	-0.2	2.78E+04	0.92	Y	1.00	12.3	982	3.96
1234678-HpCDD	40.64		1.0003	1.0004	+0.2	1.84E+04	1.14	Y	1.00	8.16	982	3.96
OCDD	44.35		1.0004	1.0004	0	1.96E+04	1.55	N	1.09	11.4	932	5.65
OCDD-a	NotFnd		1.0004						0.06		922	95.7
1368-TCDF	21.61		0.8086	0.8081	-0.8	3.46E+04	0.96	N	1.11	5.46	956	1.75
1468-TCDF	NotFnd		0.8345						1.11		956	1.75
2468-TCDF	NotFnd		0.8560						1.11		956	1.75
1346/1246-TCDF	NotFnd		0.8731						1.11		956	1.75
1347/1378/1247-TCDF	NotFnd		0.8791						1.11		956	1.75
1348-TCDF	23.80		0.8894	0.8898	+0.6	4.74E+04	0.67	Y	1.11	7.48	956	1.75
1248/1367/1379-TCDF	NotFnd		0.8943						1.11		956	1.75
1268-TCDF	NotFnd		0.9092						1.11		956	1.75
1467-TCDF	NotFnd		0.9142						1.11		956	1.75
1478-TCDF	24.58		0.9207	0.9189	-2.9	2.00E+04	1.17	N	1.11	3.15	956	1.75
1369/1237-TCDF	NotFnd		0.9349						1.11		956	1.75
2467-TCDF	NotFnd		0.9398						1.11		956	1.75
2368-TCDF	25.33		0.9454	0.9470	+2.6	4.70E+04	0.46	N	1.11	7.41	956	1.75
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9481						1.11		956	1.75
1278-TCDF	25.84		0.9669	0.9661	-1.3	3.39E+05	0.72	Y	1.11	53.5	956	1.75
1349-TCDF	NotFnd		0.9708						1.11		956	1.75
1267-TCDF	NotFnd		0.9772						1.11		956	1.75
2346/1249-TCDF	NotFnd		0.9845						1.11		956	1.75
2347/1279-TCDF	NotFnd		0.9925						1.11		956	1.75
2348-TCDF	NotFnd		0.9964						1.11		956	1.75
2378-TCDF	26.76		1.0008	1.0006	-0.3	2.81E+05	0.77	Y	1.11	44.3	956	1.75
2367/3467-TCDF	27.14		1.0147	1.0149	+0.3	3.43E+04	1.10	N	1.11	5.41	956	1.75
1269-TCDF	NotFnd		1.0237						1.11		956	1.75
1239-TCDF	NotFnd		1.0338						1.11		956	1.75
1289-TCDF	28.83		1.0782	1.0779	-0.5	3.73E+04	0.48	N	1.11	5.88	956	1.75
13468/12468-PeCDF	NotFnd		0.9093						1.08		1016	1.76
13678/13467/12467-PeCDF	30.39		0.9597	0.9600	+0.6	1.82E+04	2.18	N	1.08	3.47	1109	1.92
12368/13478/12478-PeCDF	NotFnd		0.9636						1.08		1109	1.92
14678-PeCDF	NotFnd		0.9678						1.08		1109	1.92
13479-PeCDF	NotFnd		0.9708						1.08		1109	1.92
13469/12479-PeCDF	NotFnd		0.9788						1.08		1109	1.92
12346-PeCDF	NotFnd		0.9834						1.08		1109	1.92

Lab ID: P1977\_7528\_001  
Client ID: SSI #1-Blank  
Datafile: 100202P1-05

Acq'd: 02 Feb 2010 13:20 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:55 MC

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 646-161  
Split: 2

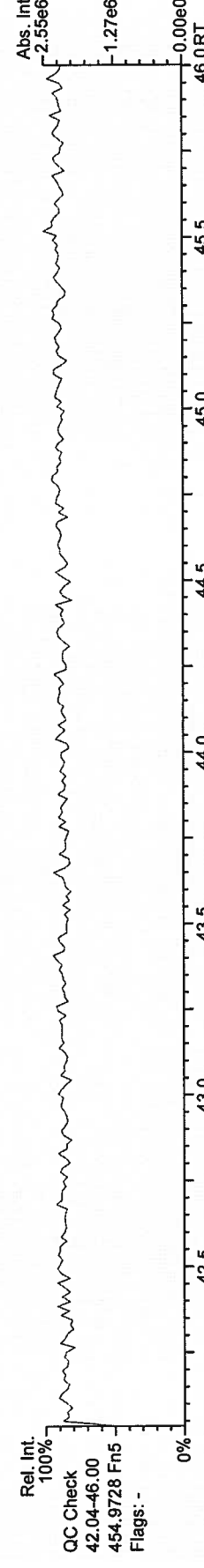
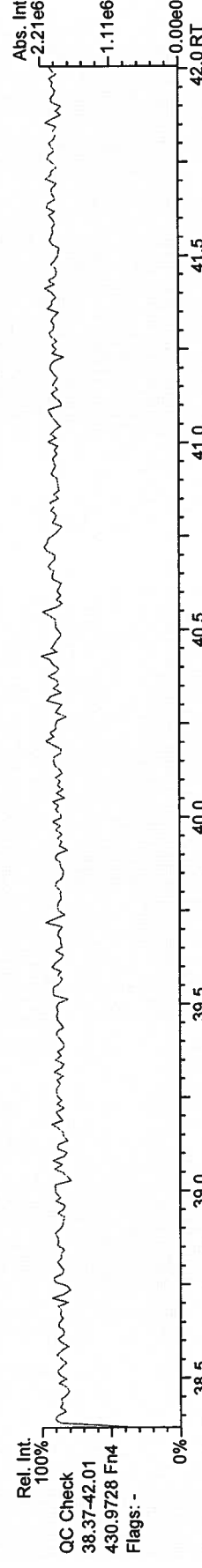
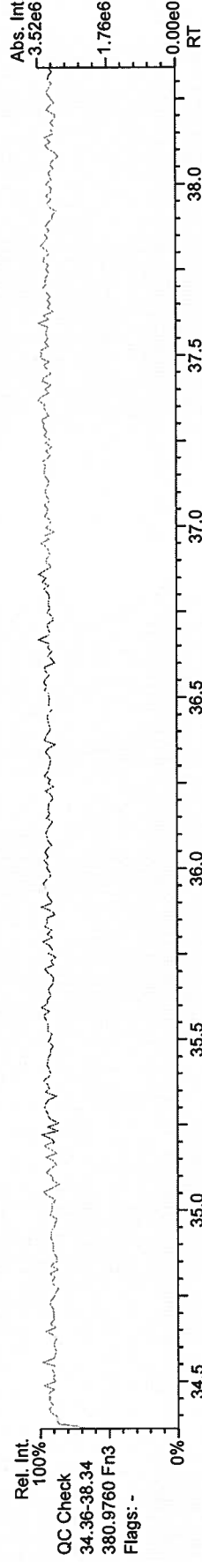
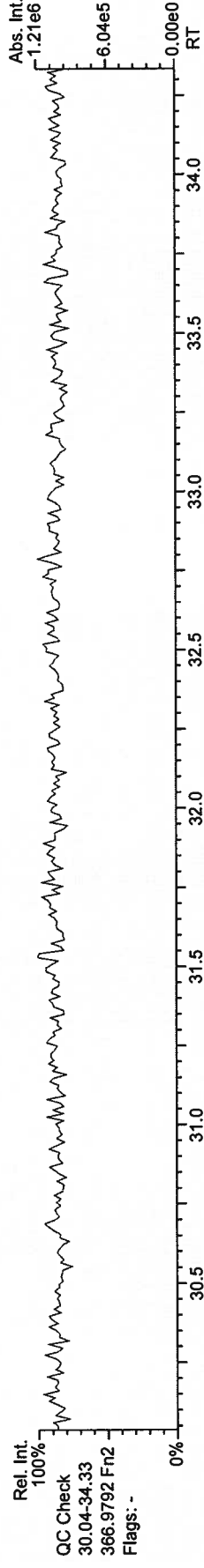
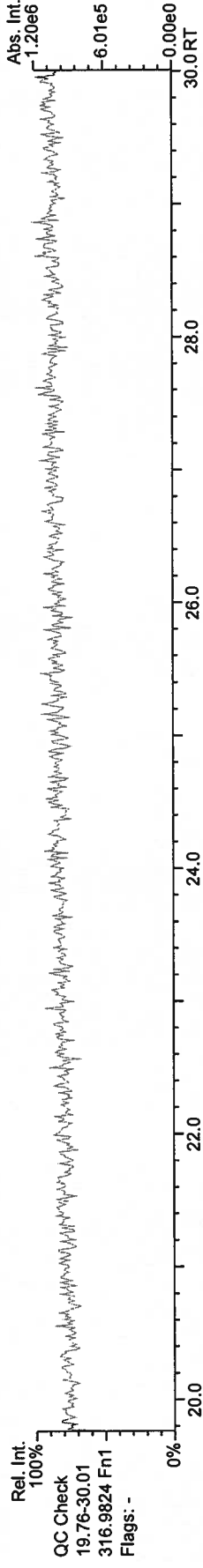
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12347-PeCDF	NotEnd		0.9887						1.08		1109	1.92
12348-PeCDF	NotEnd		0.9936						1.08		1109	1.92
12378-PeCDF	31.68		1.0006	1.0006	0	2.01E+04	1.81	N	1.06	3.79	1109	1.95
12678/12367-PeCDF	NotEnd		1.0098						1.08		1109	1.92
12379-PeCDF	NotEnd		1.0145						1.08		1109	1.92
12679-PeCDF	NotEnd		0.9927						1.08		1109	1.92
23467/12369-PeCDF	NotEnd		0.9967						1.08		1109	1.92
23478-PeCDF	32.79		1.0005	1.0005	0	1.68E+04	1.39	Y	1.10	3.26	1109	1.9
23478/12489-PeCDF	NotEnd		1.0006						1.10		1109	1.9
12489-PeCDF	NotEnd		1.0023						1.08		1109	1.92
12349-PeCDF	NotEnd		1.0103						1.08		1109	1.92
12389-PeCDF	NotEnd		1.0336						1.08		1109	1.92
123468-HxCDF	34.69		0.9619	0.9619	0	8.11E+03	0.98	N	1.19	2.02	892	1.86
124678/134678-HxCDF	34.89		0.9675	0.9677	+0.4	1.41E+04	1.32	Y	1.19	3.5	892	1.86
134679-HxCDF	NotEnd		0.9741						1.19		892	1.86
124679-HxCDF	NotEnd		0.9793						1.19		892	1.86
124689-HxCDF	NotEnd		0.9855						1.19		892	1.86
123467-HxCDF	35.95		0.9972	0.9971	-0.2	1.09E+04	1.12	Y	1.19	2.71	892	1.86
123478-HxCDF	36.09		1.0004	1.0009	+1.1	4.71E+03	3.46	N	1.20	1.18	892	1.75
123678-HxCDF	36.22		1.0005	1.0005	0	6.89E+03	0.67	N	1.20	1.52	892	1.69
123479-HxCDF	NotEnd		1.0047						1.19		892	1.86
123469-HxCDF	NotEnd		1.0087						1.19		892	1.86
123679-HxCDF	NotEnd		0.9944						1.19		892	1.86
234678-HxCDF	NotEnd		1.0004						1.17		892	1.8
234678/123689-HxCDF	NotEnd		1.0004						1.17		892	1.8
123689-HxCDF	NotEnd		1.0009						1.19		892	1.86
123789-HxCDF	NotEnd		1.0004						1.19		892	2.29
123789/123489-HxCDF	NotEnd		1.0010						1.19		892	2.29
123489-HxCDF	NotEnd		1.0017						1.19		892	1.86
1234678-HpCDF	39.44		1.0003	1.0002	-0.2	1.53E+04	1.34	N	1.48	4.23	881	1.94
1234679-HpCDF	NotEnd		1.0085						1.45		881	2.36
1234689-HpCDF	NotEnd		1.0128						1.45		881	2.36
1234789-HpCDF	NotEnd		1.0002						1.42		881	2.88
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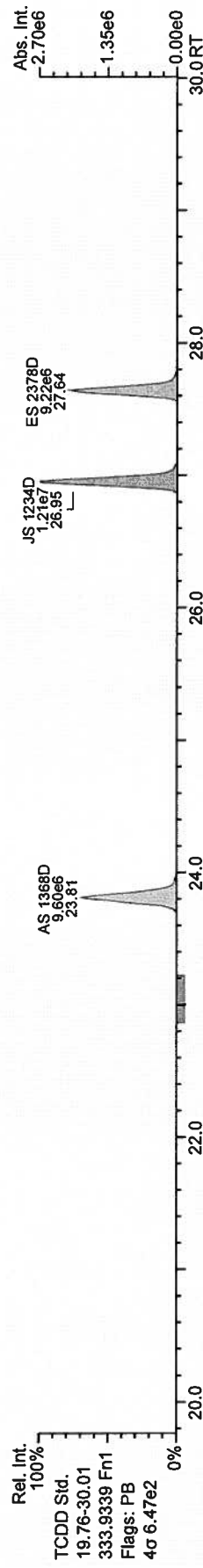
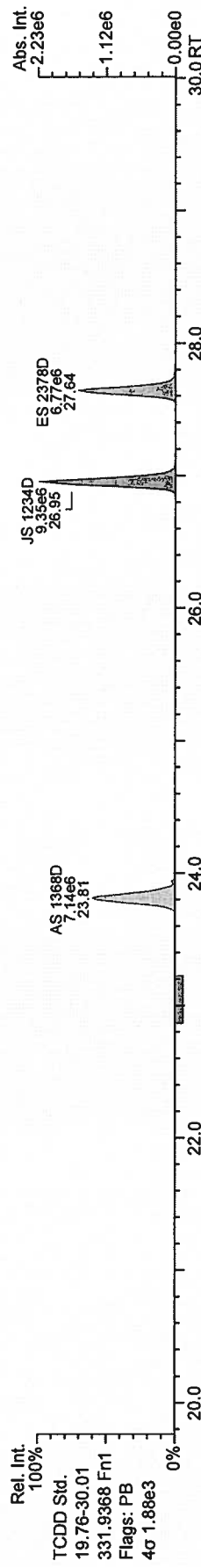
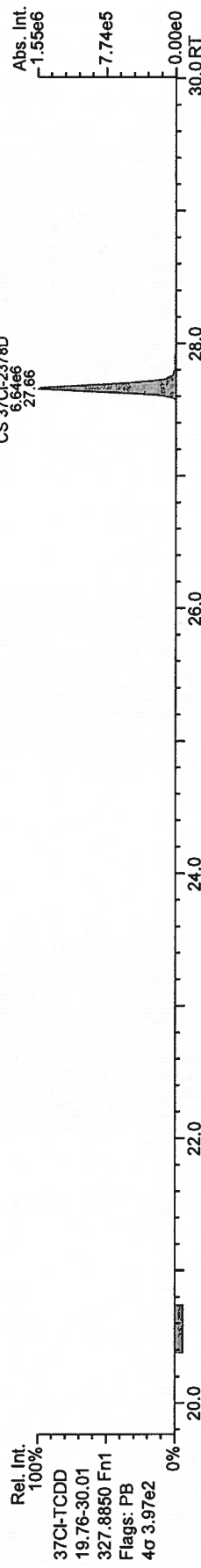
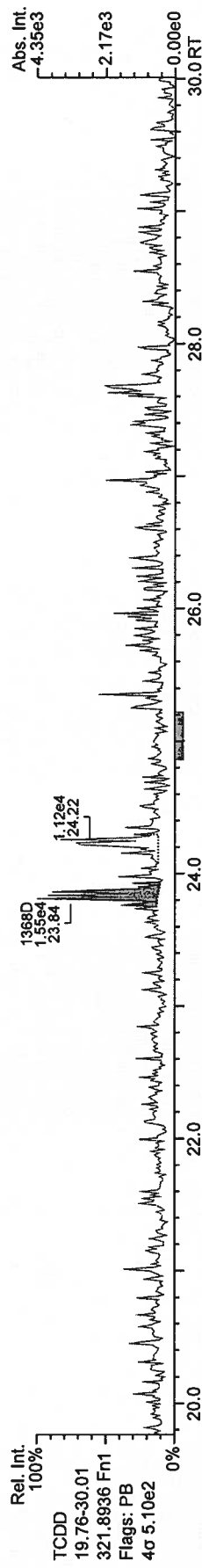
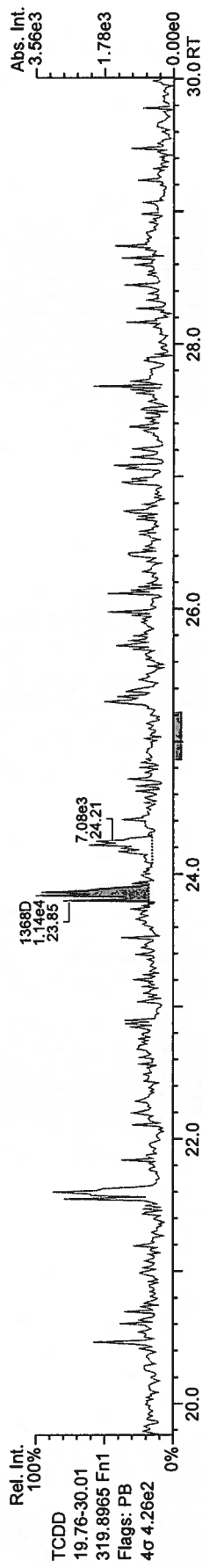


AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05

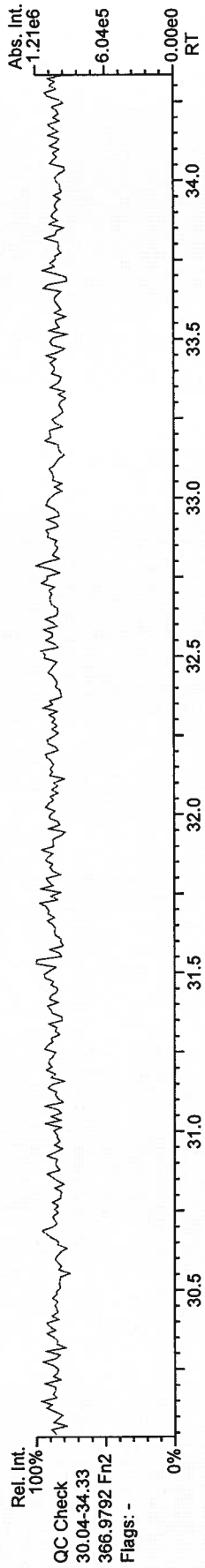
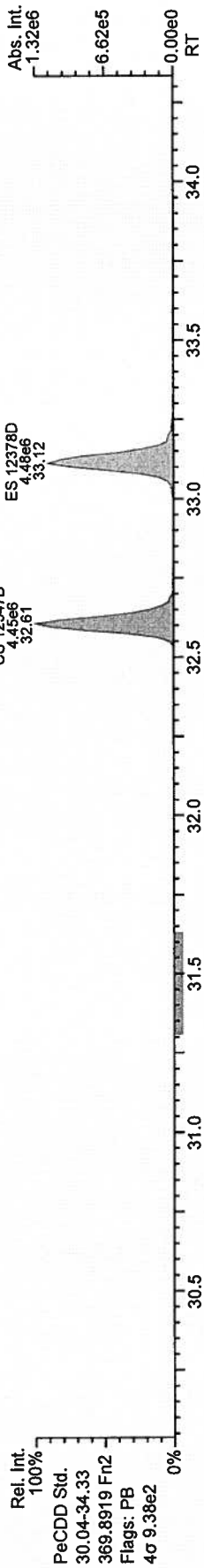
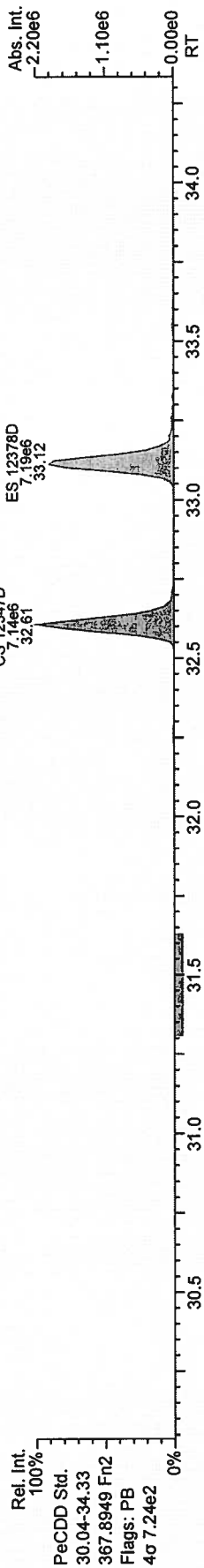
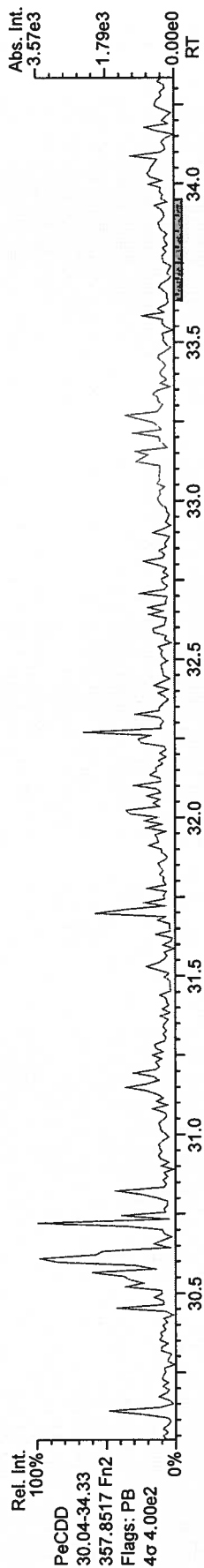
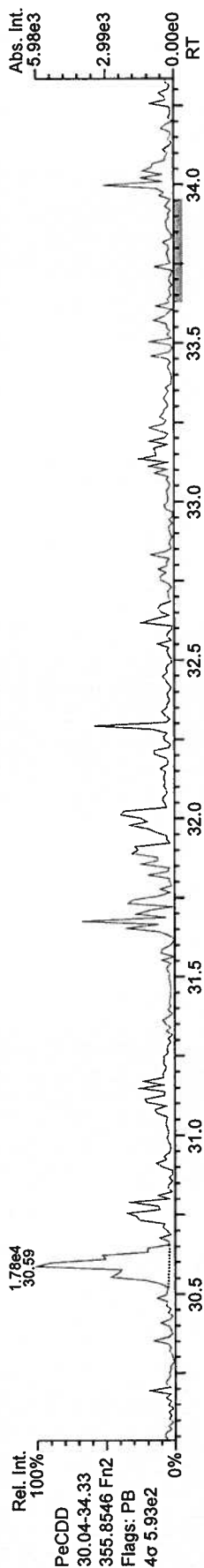




AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

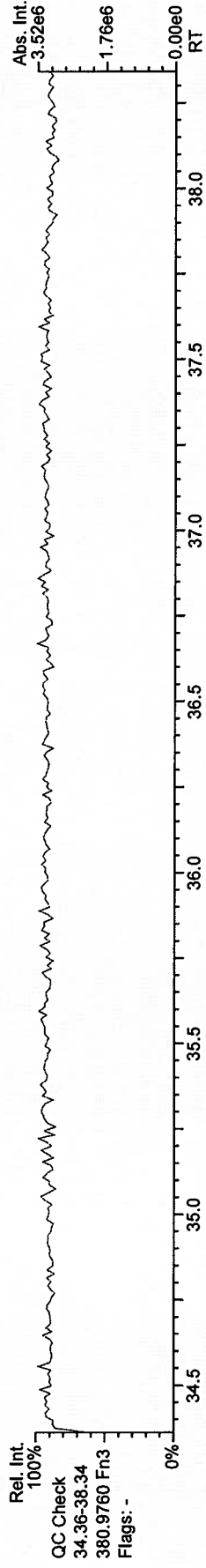
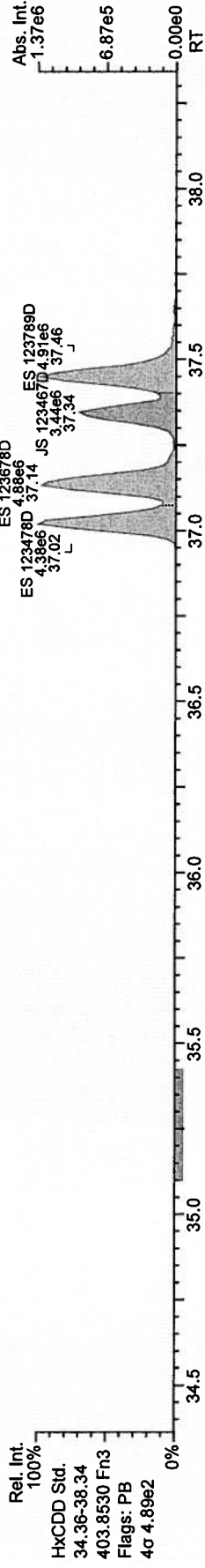
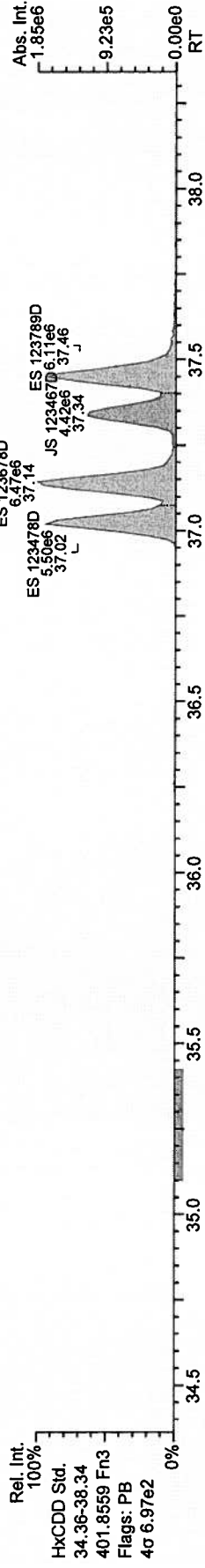
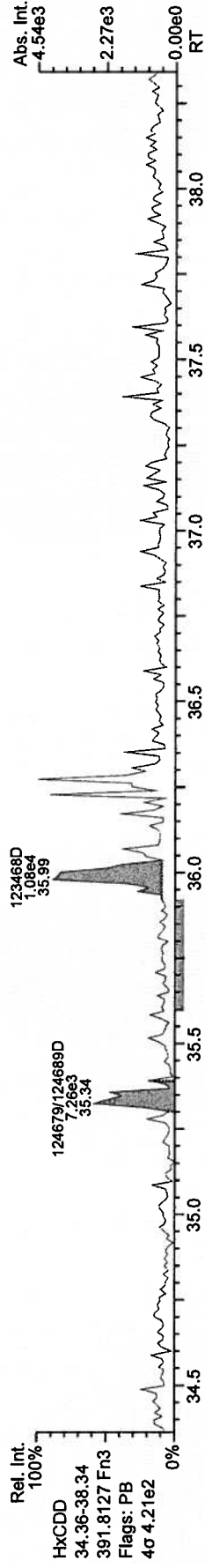
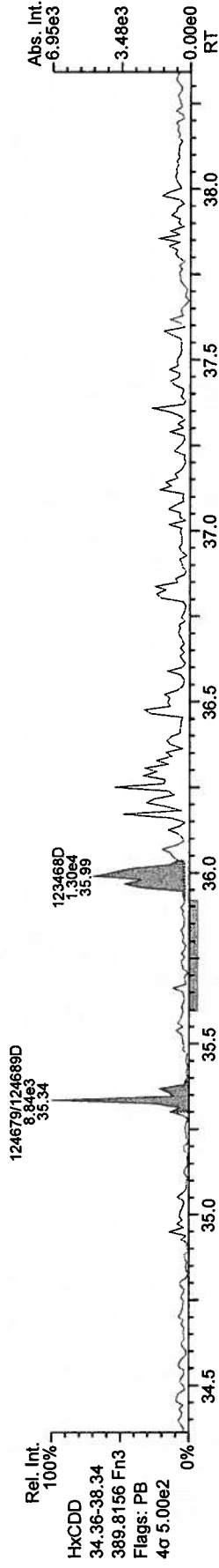
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User: MC Datafile: 100202P1-05

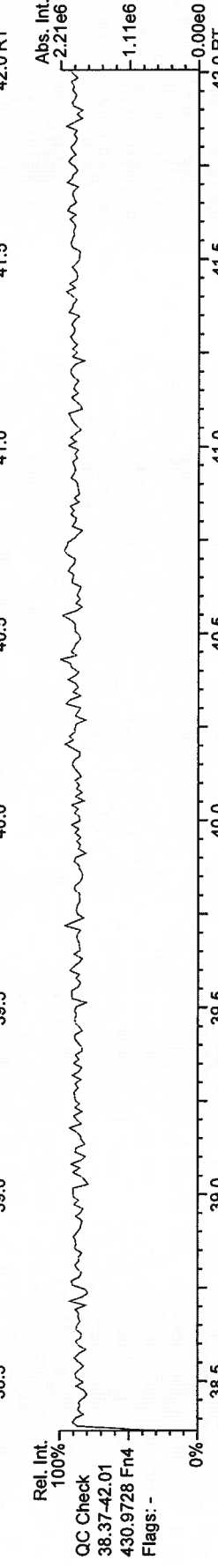
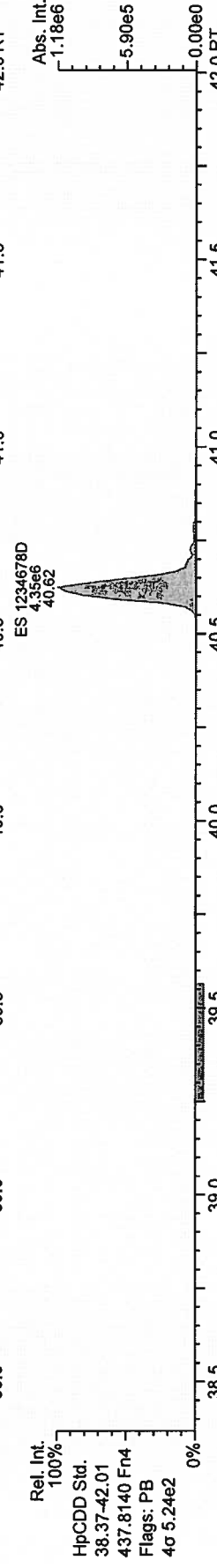
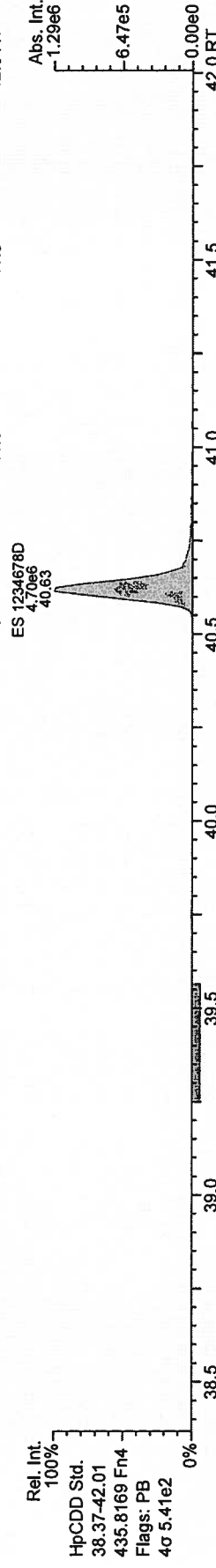
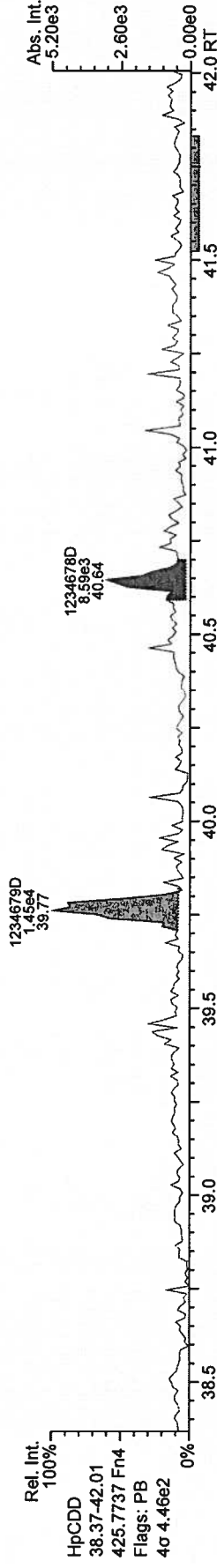
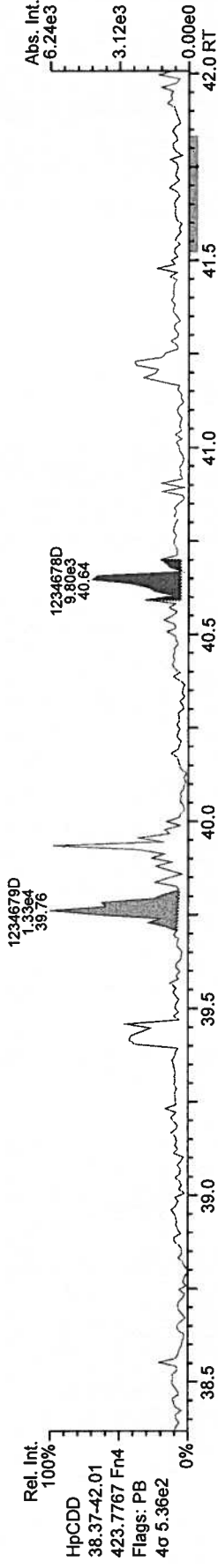


AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05



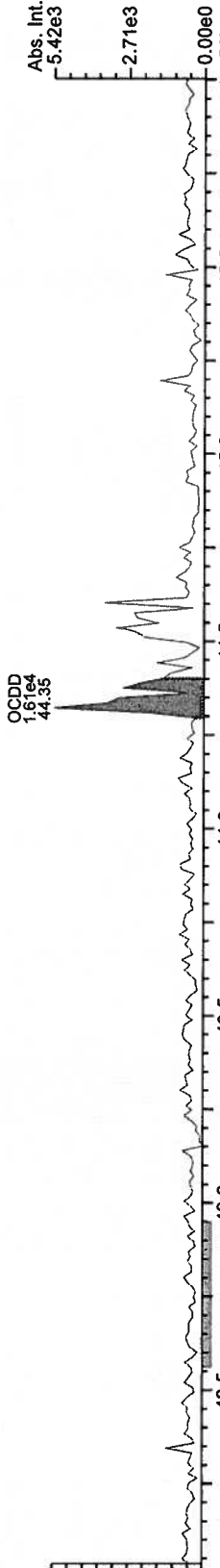


AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

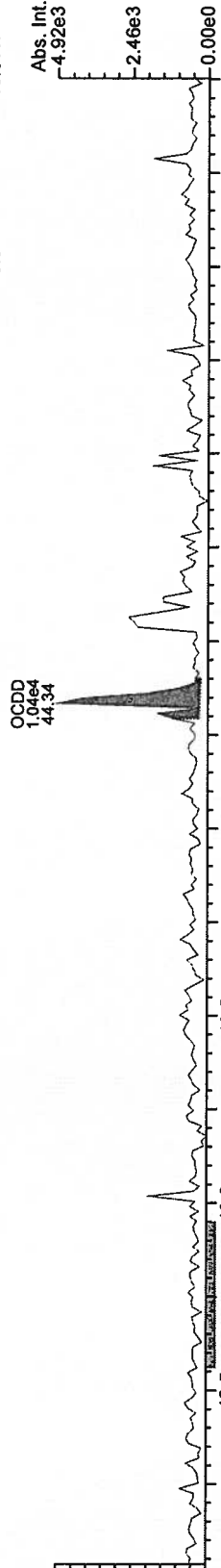
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SIR expt: DF\_CL4-8A GC: DBSMS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05

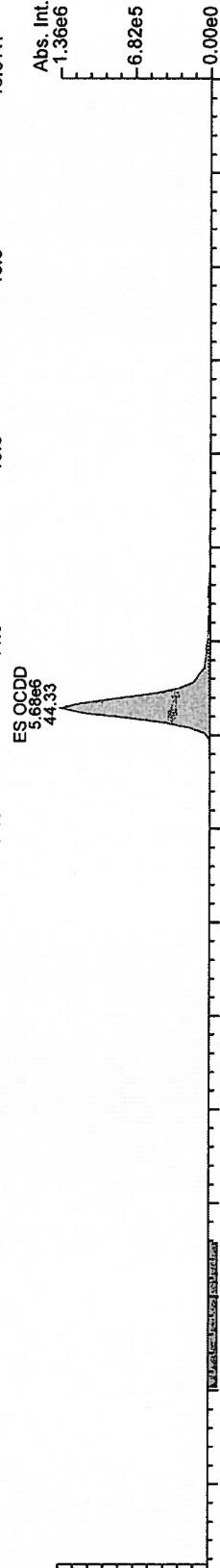
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4σ 4.85e2



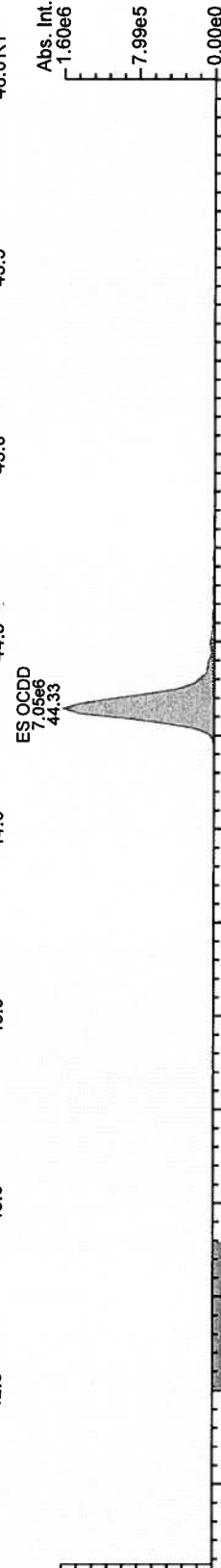
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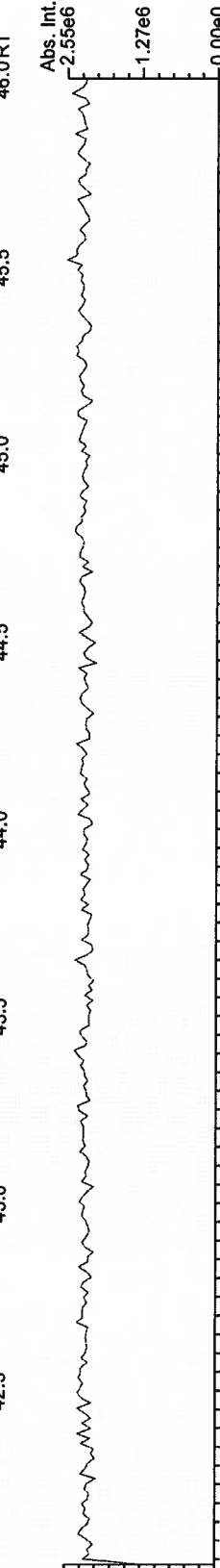
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4σ 4.64e2

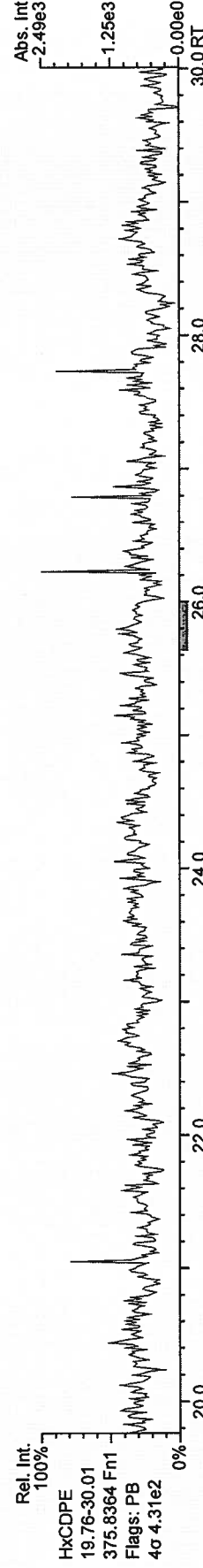
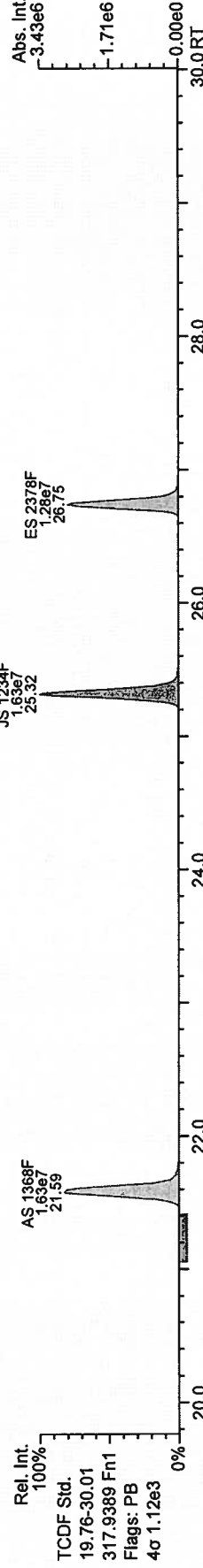
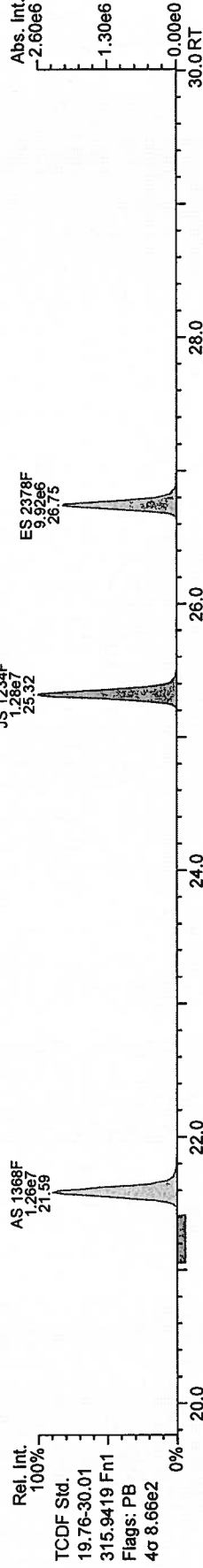
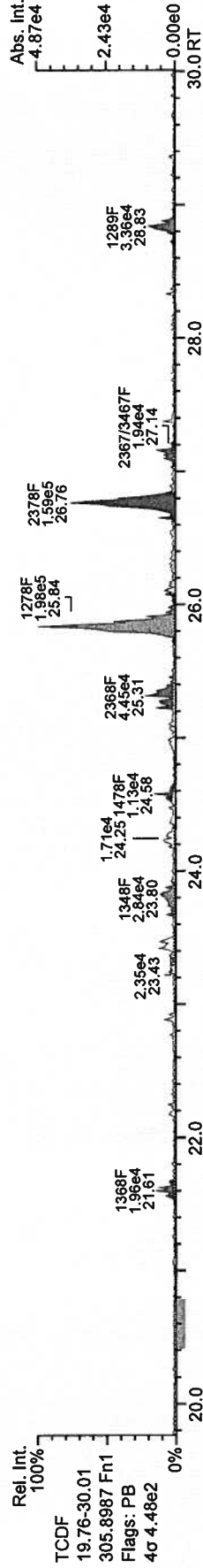
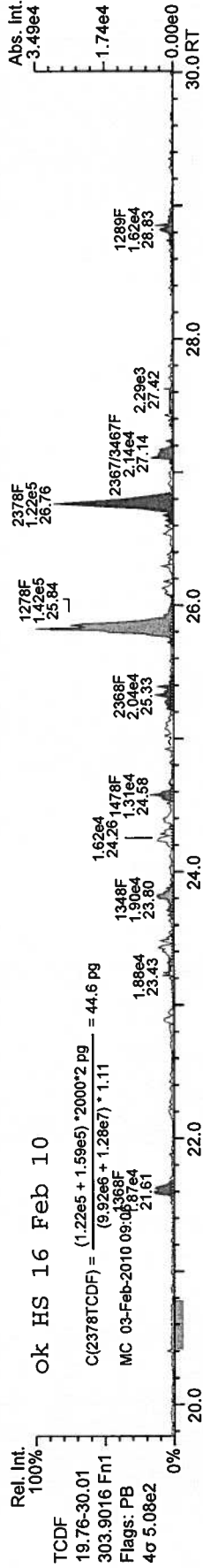


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100%  
OCDD Std.  
42.04-46.00  
471.7750 Fn5  
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4σ 4.73e2



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Flags: -

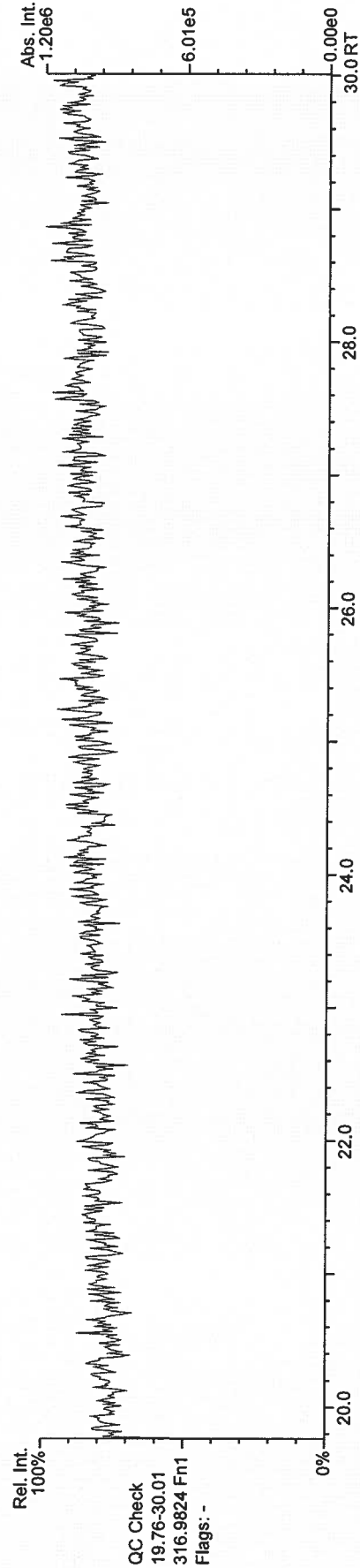
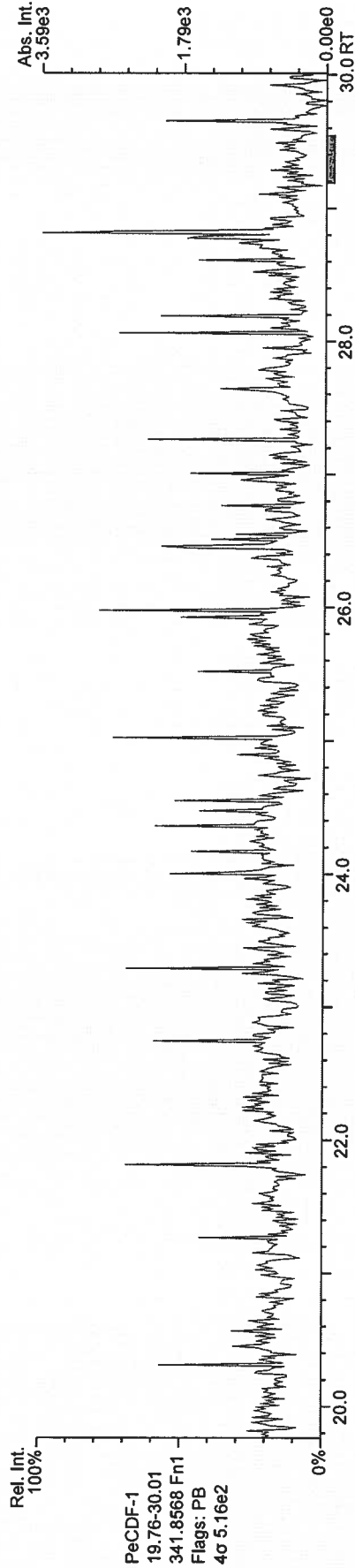
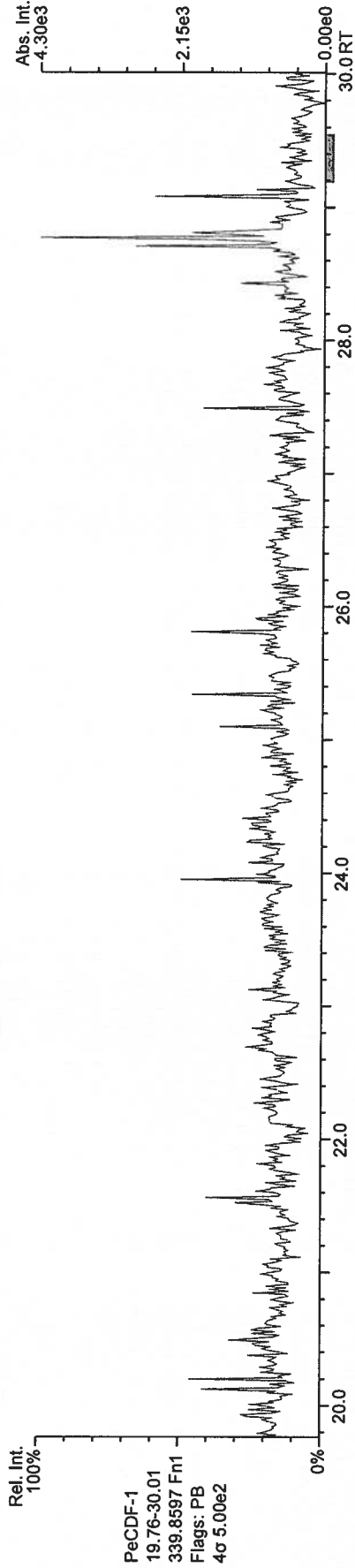




AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05



Results: P:\P1900\_P1999\P1977\P1977\_7528\_DFRResources\P1977\_7528\_001.utp\_res, saved 03-Feb-2010 09:07 (MC)  
AP UltraTrace-Pro V4.12 User/System: MCMCI7-047 cc: 9926 scc: 646-161

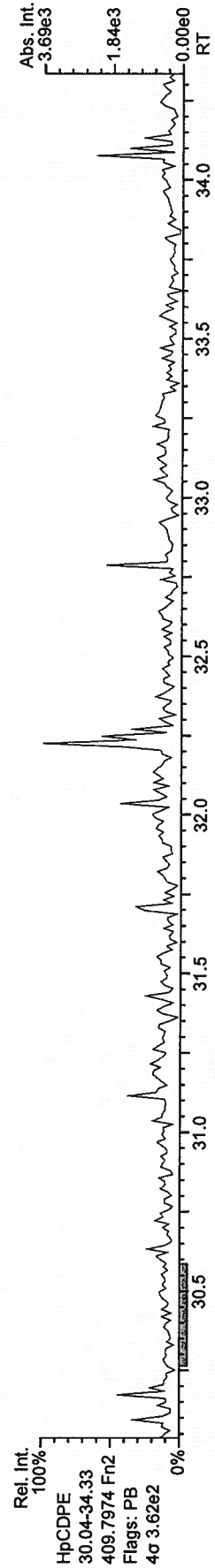
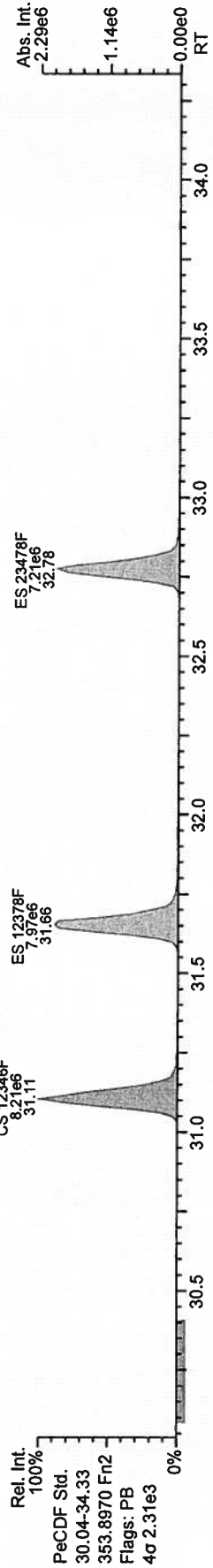
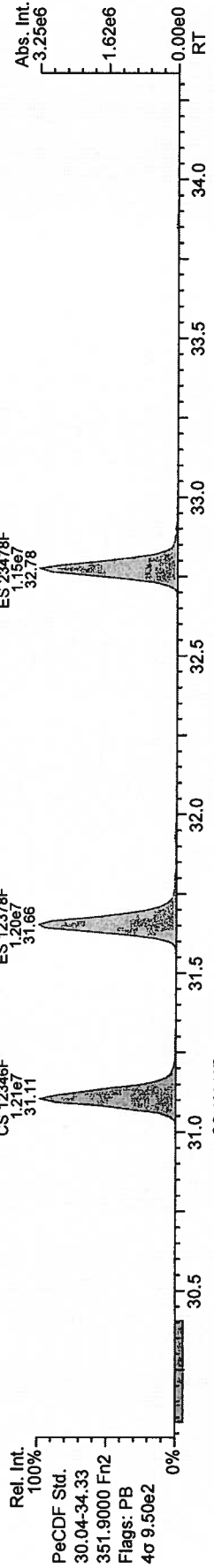
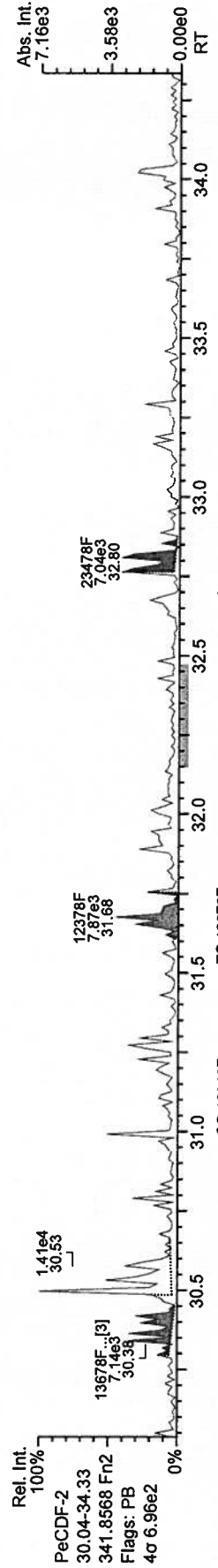
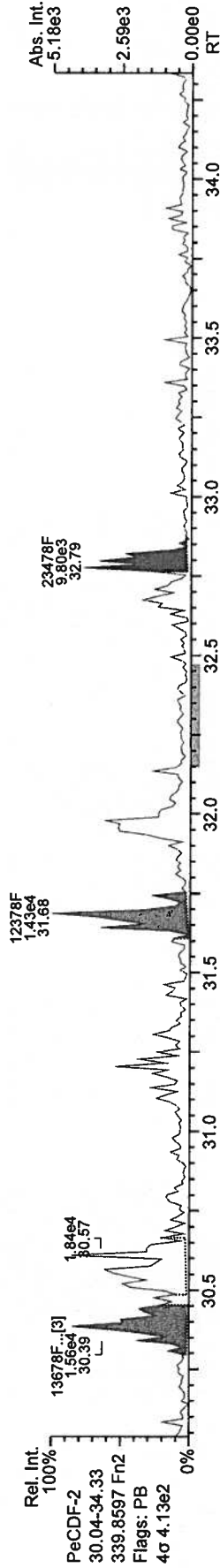
Peak annotation: Areas, Centroids  
PKD: 02-Feb-2010 14:21:18 Printed: 03-Feb-2010 09:15:24 Page 8 of 12



AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR exp: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05



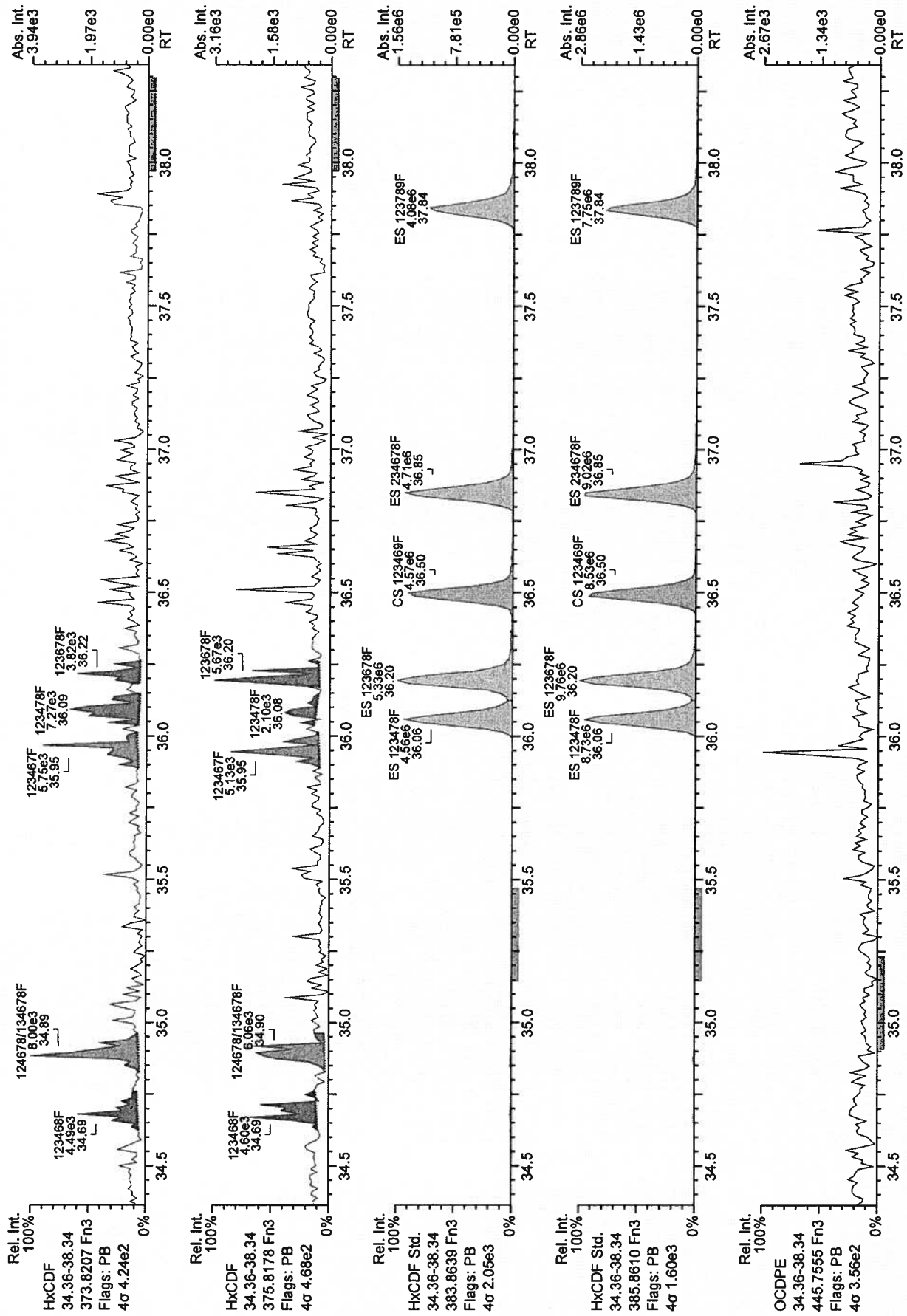
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AP UltraTrace-Pro V4.12 User/System: MCMCI7-047 cc: 0620, 0621, 9477 soc: 646-161

Revised: 02-Feb-2010 14:24:04 (MC) Printed: 03-Feb-2010 09:15:31 Page 9 of 12

AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05

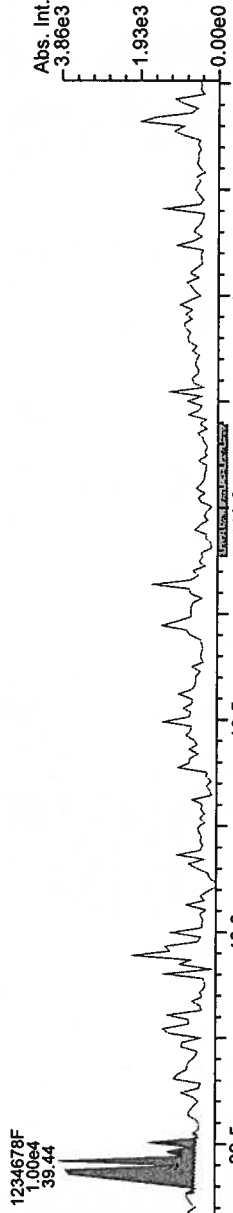


AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

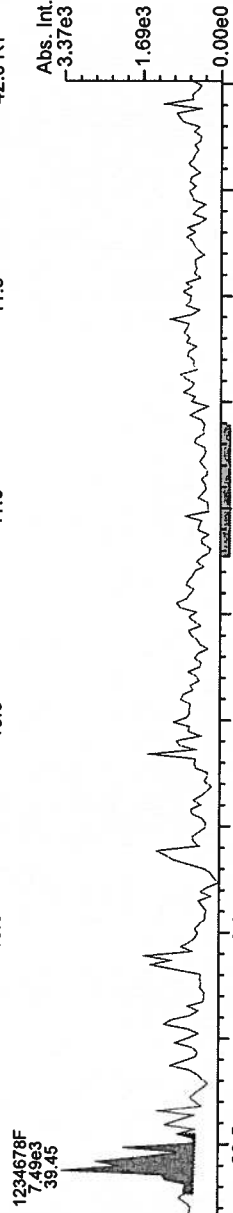
Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05

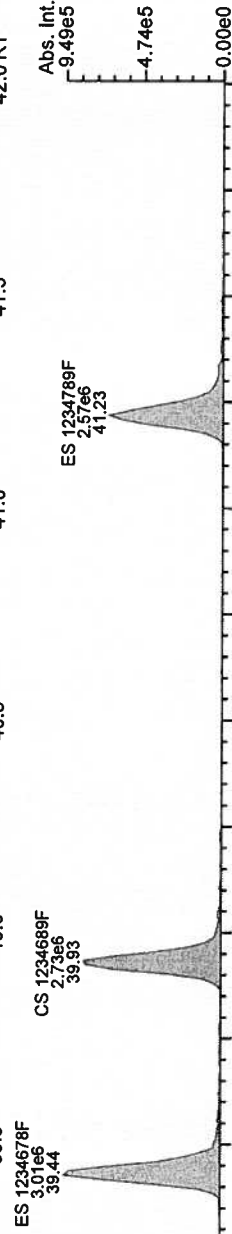
Rel. Int.  
100%  
HpCDF  
38.37-42.01  
407.7818 Fn4  
Flags: PB  
4σ 4.29e2



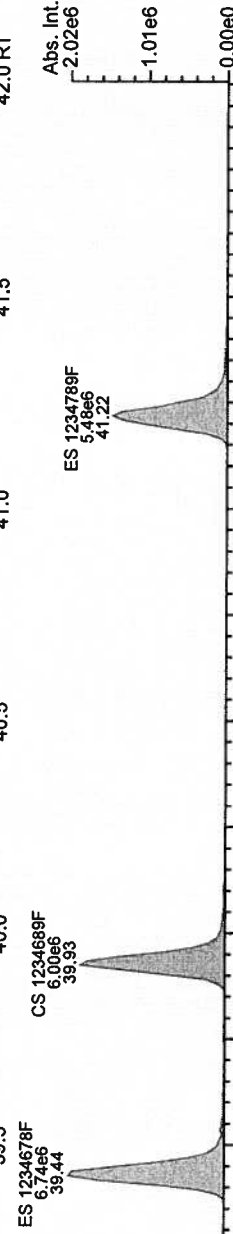
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38.37-42.01  
409.7788 Fn4  
Flags: PB  
4σ 4.52e2



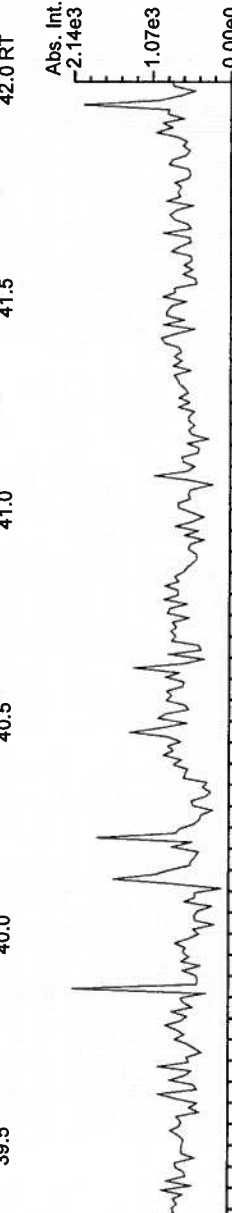
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38.37-42.01  
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4σ 5.52e2



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HpCDF Std.  
38.37-42.01  
419.8220 Fn4  
Flags: PB  
4σ 1.36e3



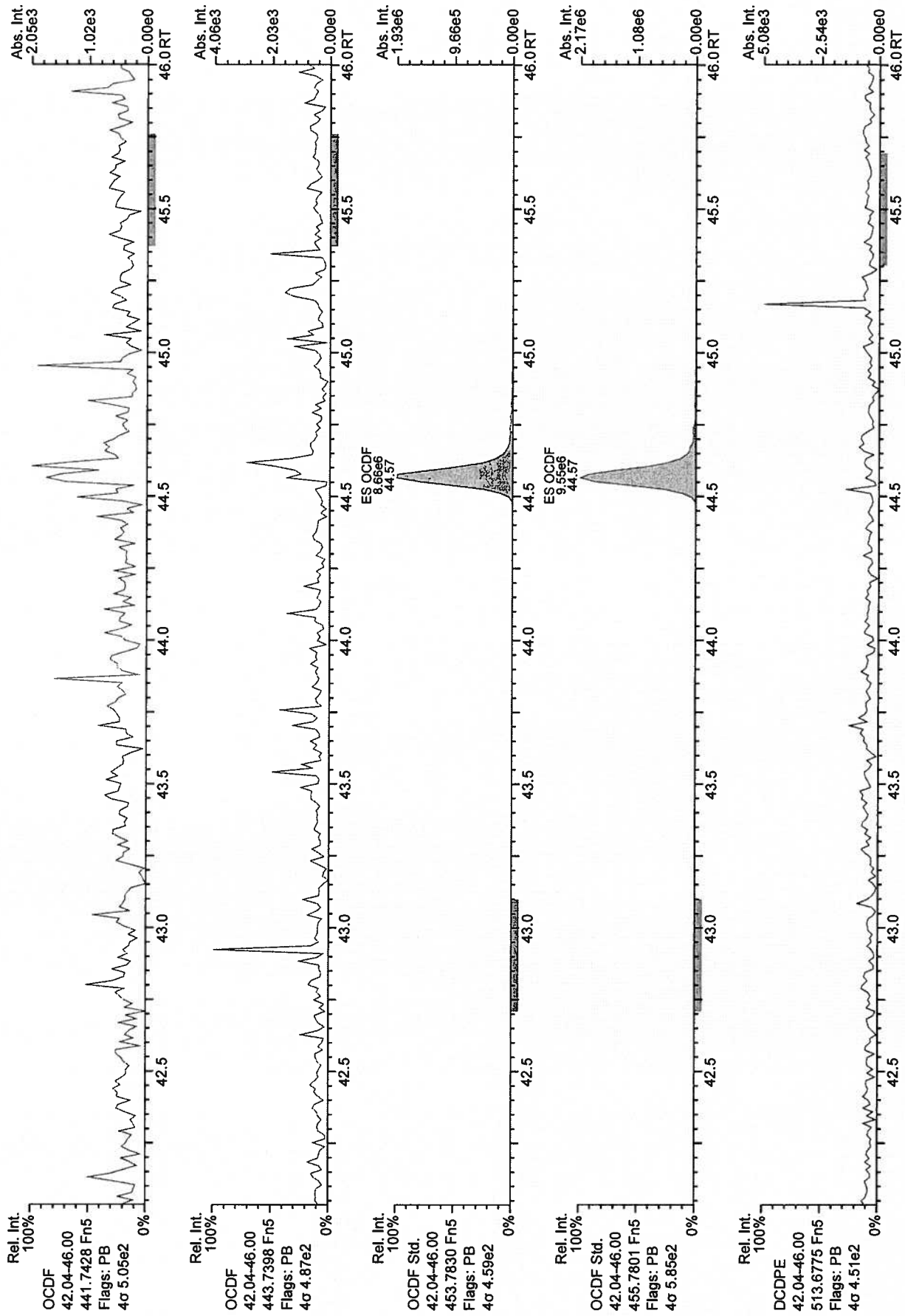
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100%  
NCDPE  
38.37-42.01  
479.7165 Fn4  
Flags: PB  
4σ 4.68e2



AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 18

Acq: 2-FEB-2010 13:20:57  
User: MC Datafile: 100202P1-05



Lab ID: P1977\_7528\_002RJ  
Client ID: SSI #1-R-1  
Datafile: 100202P3-03

Acq'd: 02 Feb 2010 23:46 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:58 MC

Cal: BCS3\_7528\_DF\_PCD  
J-level: 10 pg  
ES spike: 4000 pg  
Checkcode: 326-468  
Split: 2

Wt/Vol: 1

Name	QC	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRT	Conc.	Noise	DL
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.07	-	922	2.19
12378-PeCDD	NotEnd		1.0006	-		-	-	-	1.07	-	1254	3.58
123478-HxCDD	NotEnd		1.0004	-		-	-	-	1.15	-	965	3.37
123678-HxCDD	NotEnd		1.0036	-		-	-	-	0.98	-	965	3.82
123789-HxCDD	NotEnd		1.0121	-		-	-	-	0.96	-	965	4.12
1234678-HpCDD	NotEnd		1.0004	-		-	-	-	1.00	-	1458	6.08
OCDD	44.32		1.0003	1.0004	+0.3	3.11E+04	0.99	Y	1.09	17.3	1410	9.44
2378-TCDF	26.77		1.0008	1.0005	-0.5	1.85E+05	0.67	Y	1.10	28.6	894	1.54
12378-PeCDF	NotEnd		1.0005	-		-	-	-	1.05	-	1017	1.86
23478-PeCDF	NotEnd		1.0005	-		-	-	-	1.12	-	1017	1.74
123478-HxCDF	NotEnd		1.0004	-		-	-	-	1.24	-	1344	3
123678-HxCDF	NotEnd		1.0005	-		-	-	-	1.20	-	1344	3.09
234678-HxCDF	NotEnd		1.0004	-		-	-	-	1.19	-	1344	3.11
123789-HxCDF	NotEnd		1.0004	-		-	-	-	1.17	-	1344	4.48
1234678-HpCDF	NotEnd		1.0003	-		-	-	-	1.44	-	1444	4.09
1234789-HpCDF	NotEnd		1.0003	-		-	-	-	1.40	-	1444	5.46
OCDF	NotEnd		1.0003	-		-	-	-	1.02	-	1790	9.7

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRT	Rec. %
ES 2378-TCDD	27.64	1.0250	1.0251	+0.2	1.62E+07	0.76	Y	0.96	92.3
ES 12378-PeCDD	33.09	1.2273	1.2273	0	1.20E+07	1.61	Y	0.77	85.4
ES 123478-HxCDD	37.00	0.9916	0.9915	-0.2	1.03E+07	1.29	Y	0.85	92.6
ES 123678-HxCDD	37.11	0.9947	0.9945	-0.4	1.08E+07	1.27	Y	0.97	84.5
ES 123789-HxCDD	37.43	1.0032	1.0030	-0.4	1.06E+07	1.28	Y	0.96	83.8
ES 1234678-HpCDD	40.60	1.0883	1.0880	-0.7	9.17E+06	1.06	Y	0.79	88.4
ES OCDD	44.30	1.1876	1.1872	-0.9	1.31E+07	0.80	Y	0.58	85.9
ES 2378-TCDF	26.75	1.0551	1.0552	+0.2	2.35E+07	0.79	Y	0.99	92.8
ES 12378-PeCDF	31.63	1.2473	1.2473	0	1.95E+07	1.52	Y	0.88	87.1
ES 23478-PeCDF	32.74	1.2914	1.2914	0	1.90E+07	1.51	Y	0.82	90.9
ES 123478-HxCDF	36.03	0.9657	0.9656	-0.2	1.41E+07	0.54	Y	1.13	94.7
ES 123678-HxCDF	36.17	0.9695	0.9693	-0.4	1.50E+07	0.52	Y	1.26	90.9
ES 234678-HxCDF	36.82	0.9869	0.9868	-0.2	1.43E+07	0.53	Y	1.20	91
ES 123789-HxCDF	37.82	1.0136	1.0134	-0.4	1.12E+07	0.51	Y	1.08	78.7
ES 1234678-HpCDF	39.42	1.0565	1.0562	-0.7	9.89E+06	0.48	Y	0.88	86.1
ES 1234789-HpCDF	41.20	1.1045	1.1041	-0.9	8.19E+06	0.43	Y	0.73	86
ES OCDF	44.55	1.1942	1.1938	-0.9	1.75E+07	0.88	Y	0.81	81.8

Lab ID: P1977\_7528\_002RJ

Client ID: SSI #1-R-1

Datafile: 100202P3-03

Acq'd: 02 Feb 2010 23:46 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:58 MC

Cal: BCS3\_7528\_DF\_PCD

Checkcode: 326-468

Split: 2

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.96		-	-	-	1.83E+07	0.74	Y	-	-
JS 1234-TCDF	25.36		-	-	-	2.56E+07	0.77	Y	-	-
JS 123467-HxCDD	37.32		-	-	-	6.56E+06	1.27	Y	-	-
CS 37C1-2378-TCDD	27.66		1.0258	1.0259	+0.2	6.58E+06	n/a	-	1.03	87.5
CS 12347-PeCDD	32.58		1.2083	1.2084	+0.2	1.16E+07	1.64	Y	0.70	90.7
CS 12346-PeCDF	31.08		1.2258	1.2257	-0.2	1.94E+07	1.52	Y	0.88	86.4
CS 123469-HxCDF	36.47		0.9774	0.9773	-0.2	1.28E+07	0.53	Y	1.07	91.1
CS 1234689-HpCDF	39.91		1.0697	1.0695	-0.4	8.66E+06	0.44	Y	0.74	88.8
SS 37C1-2378-TCDD	27.66		1.0258	1.0259	+0.2	6.58E+06	n/a	-	1.07	94.8
SS 12347-PeCDD	32.58		1.2083	1.2084	+0.2	1.16E+07	1.64	Y	0.92	106
SS 12346-PeCDF	31.08		1.2258	1.2257	-0.2	1.94E+07	1.52	Y	1.00	99.2
SS 123469-HxCDF	36.47		0.9774	0.9773	-0.2	1.28E+07	0.53	Y	0.85	100
SS 1234689-HpCDF	39.91		1.0697	1.0695	-0.4	8.66E+06	0.44	Y	0.85	103
AS 1368-TCDD	23.86		0.8851	0.8851	0	1.81E+07	0.76	Y	1.05	94.5
AS 1368-TCDF	21.69		0.8552	0.8554	+0.3	3.06E+07	0.77	Y	1.26	95
FS 1278-TCDD	NotEnd		1.0120							
FS 12478-PeCDD	NotEnd		0.9628							
FS 123468-HxCDD	NotEnd		0.9717							
FS 1234679-HpCDD	NotEnd		0.9787							
TS 1378-TCDD	NotEnd		0.9391							

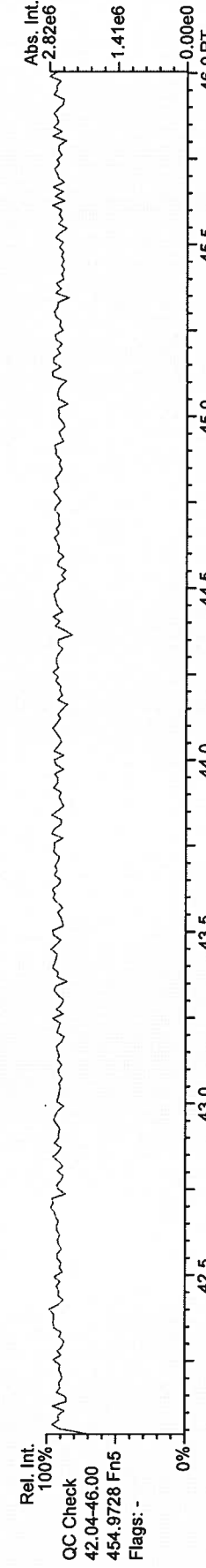
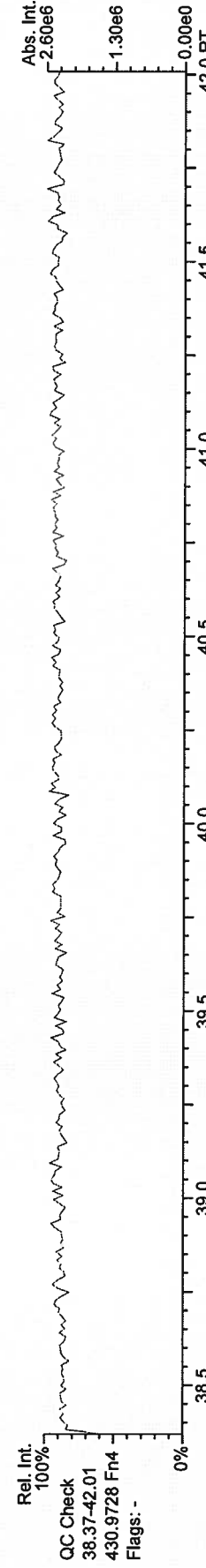
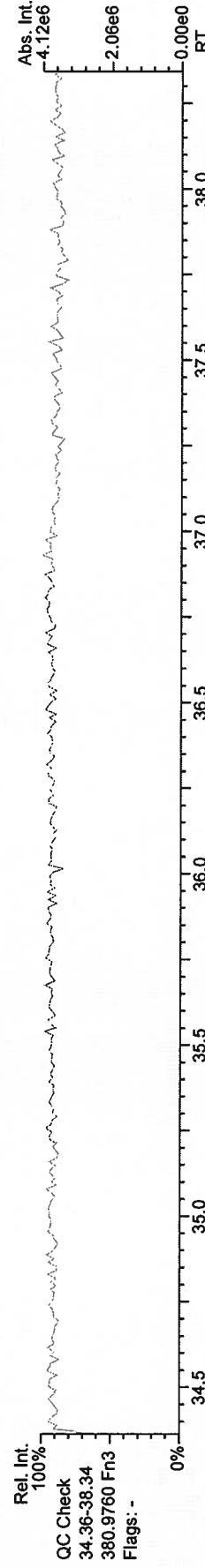
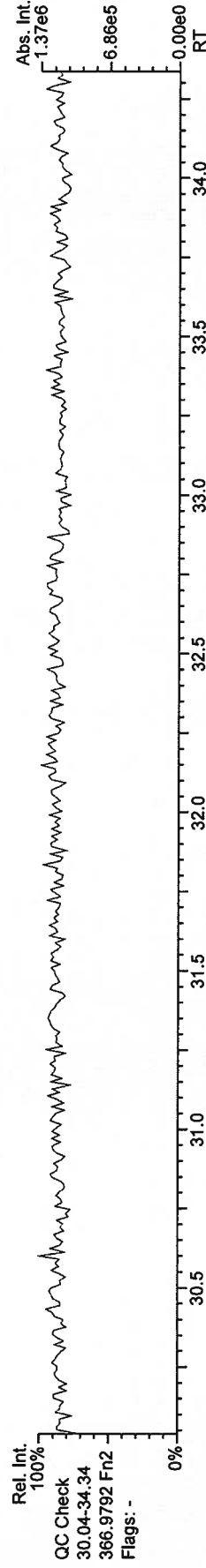
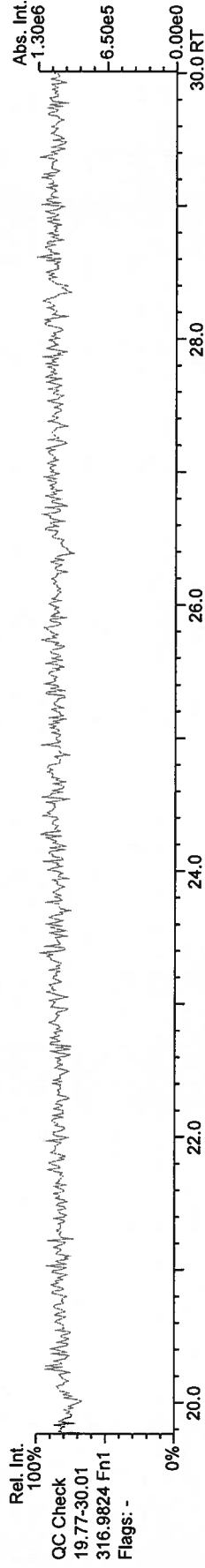
Totals	Conc	EMPC
Total TCDD	6.6	6.6
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	23.9	23.9
Total TCDF	80	104
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	80	104
Total Tetra-Octa Dioxins & Furans	104	128

Lab ID: P1977_7528_002RJ			Acq'd: 02 Feb 2010 23:46 MC			Wt/Vol: 1			Cal: BCS3_7528_DF_PCC			
Client ID: SSI #1-R-1			UTP: 03-Feb-2010 08:54 MC			J-level: 10 pg			Checkcode: 326-468			
Datafile: 100202P3-03			Report: 03 Feb 2010 08:58 MC			ES spike: 4000 pg			Split: 2			
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.91		0.8628	0.8652	+4.0	2.87E+04	0.84	Y	1.07	6.6	922	2.19
1379-TCDD	NotEnd		0.8792						1.07		922	2.19
1369-TCDD	NotEnd		0.8950						1.07		922	2.19
1469-TCDD	NotEnd		0.9239						1.07		922	2.19
1247/1246/1248/1249-TCDD	NotEnd		0.9326						1.07		922	2.19
1378-TCDD	NotEnd		0.9400						1.07		922	2.19
1268-TCDD	NotEnd		0.9472						1.07		922	2.19
1478-TCDD	NotEnd		0.9564						1.07		922	2.19
1279-TCDD	NotEnd		0.9628						1.07		922	2.19
1234/1269-TCDD	NotEnd		0.9758						1.07		922	2.19
1236-TCDD	NotEnd		0.9807						1.07		922	2.19
1237/1238-TCDD	NotEnd		0.9899						1.07		922	2.19
1239-TCDD	NotEnd		0.9951						1.07		922	2.19
2378-TCDD	NotEnd		1.0008						1.07		922	2.19
1278-TCDD	NotEnd		1.0129						1.07		922	2.19
1267-TCDD	NotEnd		1.0176						1.07		922	2.19
1289-TCDD	NotEnd		1.0367						1.07		922	2.19
12479/12468-PeCDD	NotEnd		0.9239						1.07		1254	3.58
12469-PeCDD	NotEnd		0.9408						1.07		1254	3.58
12368-PeCDD	NotEnd		0.9576						1.07		1254	3.58
12478-PeCDD	NotEnd		0.9633						1.07		1254	3.58
12379-PeCDD	NotEnd		0.9665						1.07		1254	3.58
12369/12467/12489-PeCDD	NotEnd		0.9742						1.07		1254	3.58
12346/12347-PeCDD	NotEnd		0.9854						1.07		1254	3.58
12378-PeCDD	NotEnd		1.0006						1.07		1254	3.58
12367-PeCDD	NotEnd		1.0032						1.07		1254	3.58
12389-PeCDD	NotEnd		1.0140						1.07		1254	3.58
124679/124689-HxCDD	NotEnd		0.9544						1.03		965	3.75
123468-HxCDD	NotEnd		0.9721						1.03		965	3.75
123679/123689-HxCDD	NotEnd		0.9794						1.03		965	3.75
123469-HxCDD	NotEnd		0.9833						1.03		965	3.75
123478-HxCDD	NotEnd		1.0004						1.15		965	3.37
123678-HxCDD	NotEnd		1.0036						0.98		965	3.82
123467-HxCDD	NotEnd		1.0089						1.03		965	3.75
123789-HxCDD	NotEnd		1.0121						0.96		965	4.12

Lab ID: P1977_7528_002RJ			Acq'd: 02 Feb 2010 23:46 MC			Wt/Vol: 1			Cal: BCS3_7528_DF_PCC			
Client ID: SSI #1-R-1			UTP: 03-Feb-2010 08:54 MC			J-level: 10 pg			Checkcode: 326-468			
Datafile: 100202P3-03			Report: 03 Feb 2010 08:58 MC			ES spike: 4000 pg			Split: 2			
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotEnd		0.9789						1.00		1458	6.08
1234678-HpCDD	NotEnd		1.0004						1.00		1458	6.08
OCDD	44.32		1.0003	1.0004	+0.3	3.11E+04	0.99	Y	1.09	17.3	1410	9.44
OCDD-a	NotEnd		1.0002						0.06		1416	171
1368-TCDF	21.73		0.8116	0.8122	+1.0	2.74E+04	0.67	Y	1.10	4.23	894	1.54
1468-TCDF	NotEnd		0.8345						1.10		894	1.54
2468-TCDF	NotEnd		0.8560						1.10		894	1.54
1346/1246-TCDF	NotEnd		0.8731						1.10		894	1.54
1347/1378/1247-TCDF	23.53		0.8791	0.8795	+0.6	2.73E+04	0.65	N	1.10	4.22	894	1.54
1348-TCDF	23.88		0.8894	0.8924	+4.8	3.71E+04	0.74	Y	1.10	5.74	894	1.54
1248/1367/1379-TCDF	NotEnd		0.8943						1.10		894	1.54
1268-TCDF	24.29		0.9092	0.9080	-1.9	2.09E+04	0.49	N	1.10	3.23	894	1.54
1467-TCDF	24.45		0.9142	0.9139	-0.5	5.46E+03	1.50	N	1.10	0.844	894	1.54
1478-TCDF	24.61		0.9207	0.9200	-1.1	1.81E+04	1.22	N	1.10	2.8	894	1.54
1369/1237-TCDF	NotEnd		0.9349						1.10		894	1.54
2467-TCDF	25.15		0.9398	0.9401	+0.5	4.35E+03	2.74	N	1.10	0.672	894	1.54
2368-TCDF	NotEnd		0.9454						1.10		894	1.54
1238/1234/1678/1469/1236-TCDF	25.37		0.9481	0.9481	0	3.97E+04	1.17	N	1.10	6.14	894	1.54
1278-TCDF	25.86		0.9668	0.9664	-0.6	2.43E+05	0.77	Y	1.10	37.6	894	1.54
1349-TCDF	NotEnd		0.9708						1.10		894	1.54
1267-TCDF	26.16		0.9772	0.9779	+1.1	1.70E+04	0.61	N	1.10	2.63	894	1.54
2346/1249-TCDF	NotEnd		0.9845						1.10		894	1.54
2347/1279-TCDF	NotEnd		0.9925						1.10		894	1.54
2348-TCDF	NotEnd		0.9965						1.10		894	1.54
2378-TCDF	26.77		1.0008	1.0005	-0.5	1.85E+05	0.67	Y	1.10	28.6	894	1.54
2367/3467-TCDF	27.14		1.0147	1.0144	-0.5	2.49E+04	0.86	Y	1.10	3.85	894	1.54
1269-TCDF	NotEnd		1.0237						1.10		894	1.54
1239-TCDF	NotEnd		1.0338						1.10		894	1.54
1289-TCDF	28.82		1.0774	1.0774	0	2.17E+04	0.64	N	1.10	3.36	894	1.54
13468/12468-PeCDF	NotEnd		0.9095						1.08		922	1.63
13678/13467/12467-PeCDF	NotEnd		0.9597						1.08		1017	1.8
12368/13478/12478-PeCDF	NotEnd		0.9639						1.08		1017	1.8
14678-PeCDF	NotEnd		0.9678						1.08		1017	1.8
13479-PeCDF	NotEnd		0.9708						1.08		1017	1.8
13469/12479-PeCDF	NotEnd		0.9788						1.08		1017	1.8
12346-PeCDF	NotEnd		0.9834						1.08		1017	1.8



Lab ID: P1977_7528_002RJ		Acq'd: 02 Feb 2010 23:46 MC		Wt/Vol: 1		Cal: BCS3_7528_DF_PCD						
Client ID: SSI #1-R-1		UTP: 03-Feb-2010 08:54 MC		J-level: 10 pg		Checksum: 326-468						
Datafile: 100202P3-03		Report: 03 Feb 2010 08:58 MC		ES spike: 4000 pg		Split: 2						
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9862						1.08		1017	1.8
12347-PeCDF	NotFnd		0.9887						1.08		1017	1.8
12348-PeCDF	NotFnd		0.9940						1.08		1017	1.8
12378-PeCDF	NotFnd		1.0005						1.05		1017	1.86
12678/12367-PeCDF	NotFnd		1.0098						1.08		1017	1.8
12379-PeCDF	NotFnd		1.0145						1.08		1017	1.8
12679-PeCDF	NotFnd		0.9927						1.08		1017	1.8
23467/12369-PeCDF	NotFnd		0.9967						1.08		1017	1.8
23478-PeCDF	NotFnd		1.0005						1.12		1017	1.74
23478/12489-PeCDF	NotFnd		1.0006						1.12		1017	1.74
12489-PeCDF	NotFnd		1.0023						1.08		1017	1.8
12349-PeCDF	NotFnd		1.0103						1.08		1017	1.8
12389-PeCDF	NotFnd		1.0337						1.08		1017	1.8
123468-HxCDF	NotFnd		0.9619						1.20		1344	3.35
124678/134678-HxCDF	NotFnd		0.9675						1.20		1344	3.35
134679-HxCDF	NotFnd		0.9741						1.20		1344	3.35
124679-HxCDF	NotFnd		0.9793						1.20		1344	3.35
124689-HxCDF	NotFnd		0.9855						1.20		1344	3.35
123467-HxCDF	NotFnd		0.9972						1.20		1344	3.35
123478-HxCDF	NotFnd		1.0004						1.24		1344	3
123678-HxCDF	NotFnd		1.0005						1.20		1344	3.09
123479-HxCDF	NotFnd		1.0047						1.20		1344	3.35
123469-HxCDF	NotFnd		1.0087						1.20		1344	3.35
123679-HxCDF	NotFnd		0.9944						1.20		1344	3.35
234678-HxCDF	NotFnd		1.0004						1.19		1344	3.11
234678/123689-HxCDF	NotFnd		1.0004						1.19		1344	3.11
123689-HxCDF	NotFnd		1.0009						1.20		1344	3.35
123789-HxCDF	NotFnd		1.0004						1.17		1344	4.48
123789/123489-HxCDF	NotFnd		1.0010						1.17		1344	4.48
123489-HxCDF	NotFnd		1.0017						1.20		1344	3.35
1234678-HpCDF	NotFnd		1.0003						1.44		1444	4.09
1234679-HpCDF	NotFnd		1.0085						1.42		1444	4.71
1234689-HpCDF	NotFnd		1.0128						1.42		1444	4.71
1234789-HpCDF	NotFnd		1.0003						1.40		1444	5.46
OCDF	NotFnd		1.0003						1.02		1790	9.7
OCDF-a	NotFnd		1.0003						0.05		1404	143

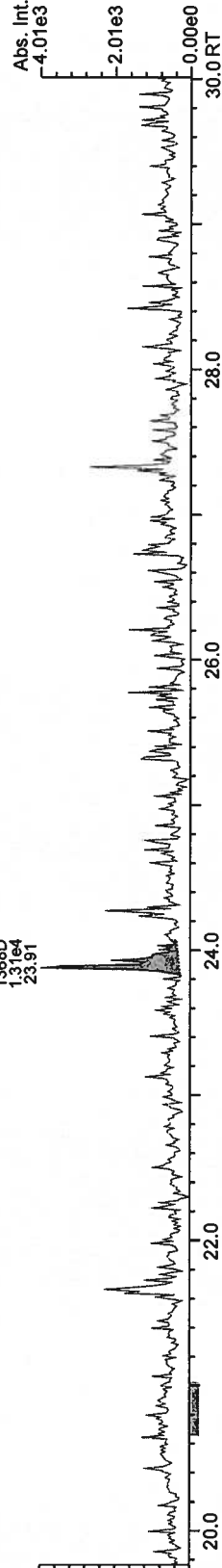


AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

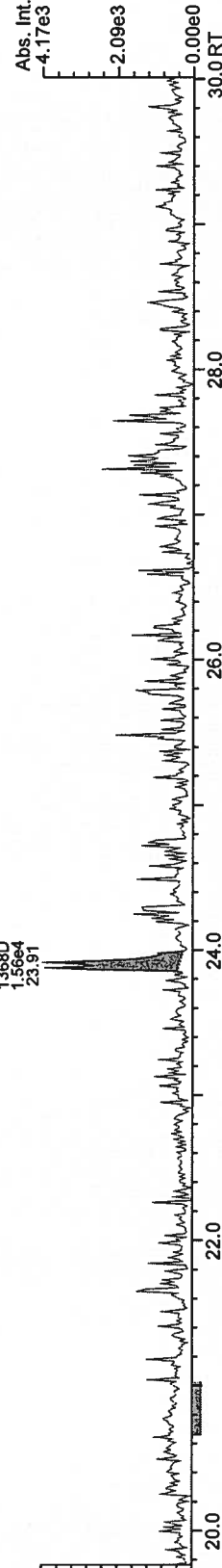
Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03

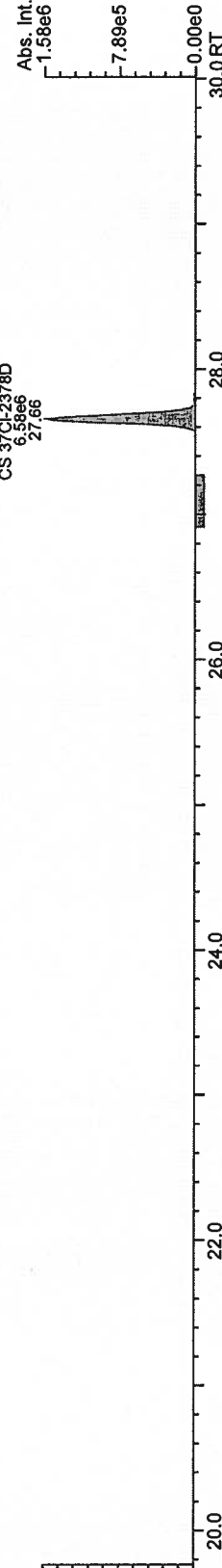
Rel. Int.  
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TCDD  
19.77-30.01  
319.8965 Fn1  
Flags: PB  
4σ 5.23e2



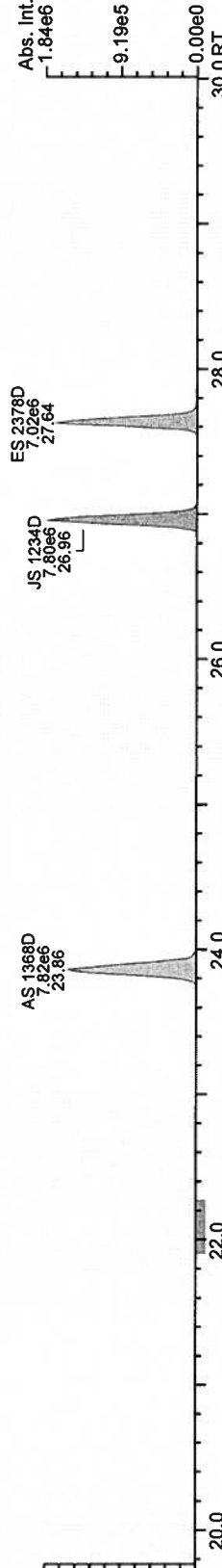
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100%  
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19.77-30.01  
321.8936 Fn1  
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4σ 3.99e2



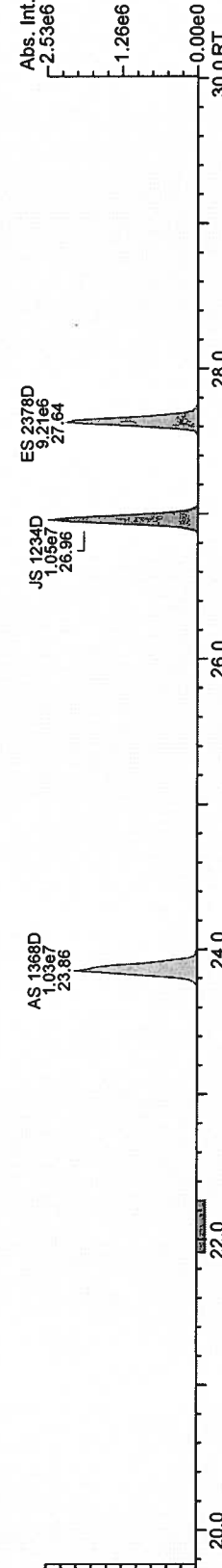
Rel. Int.  
100%  
37Cl-TCDD  
19.77-30.01  
327.8850 Fn1  
Flags: PB  
4σ 4.05e2



Rel. Int.  
100%  
TCDD Std.  
19.77-30.01  
331.9368 Fn1  
Flags: PB  
4σ 2.17e3



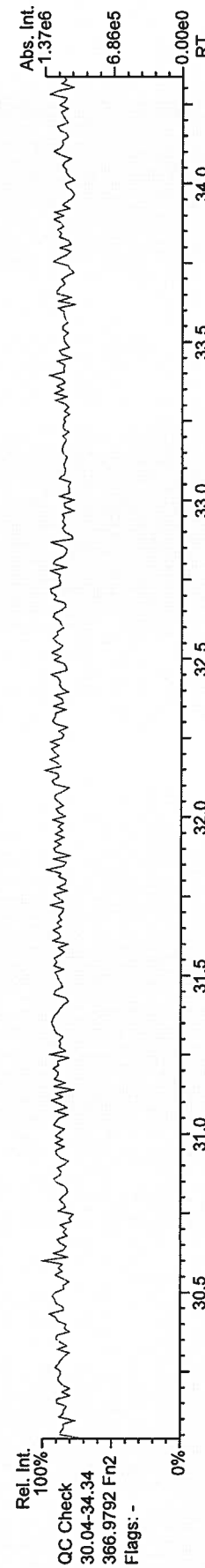
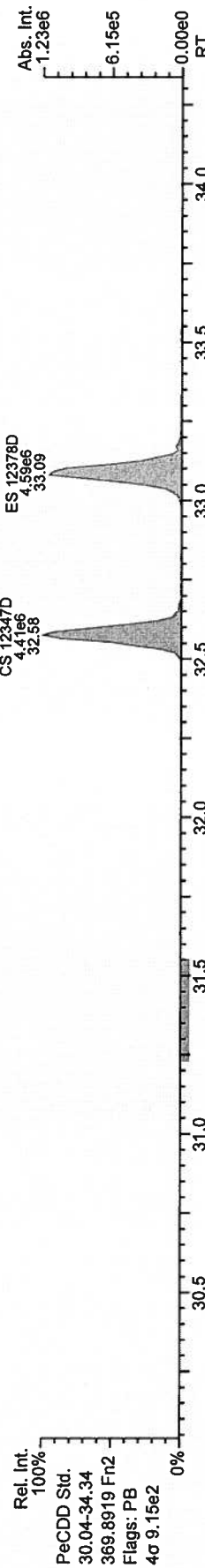
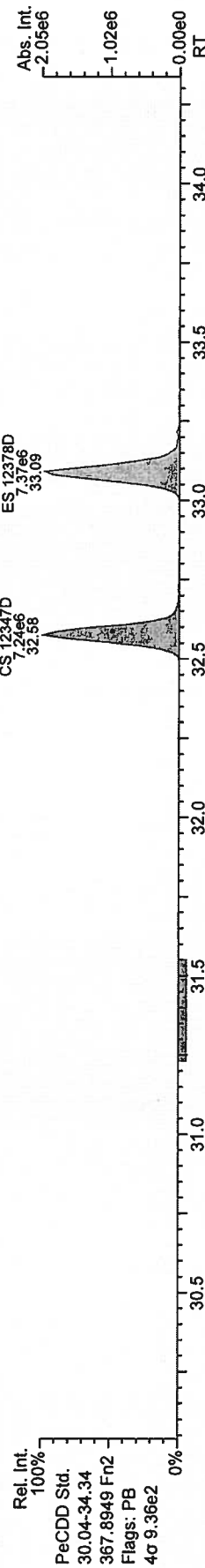
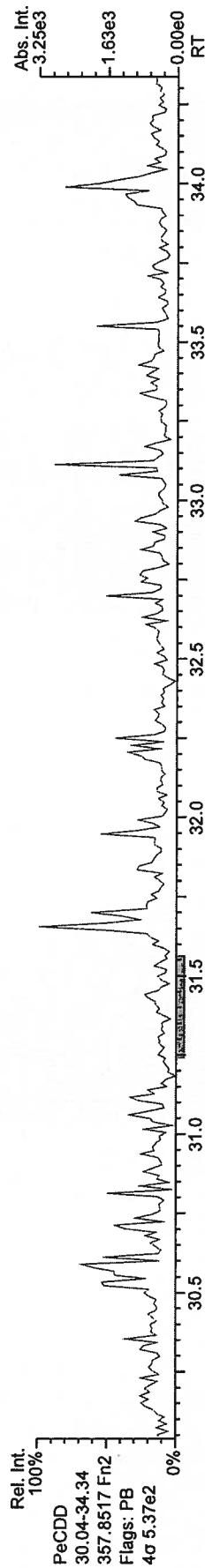
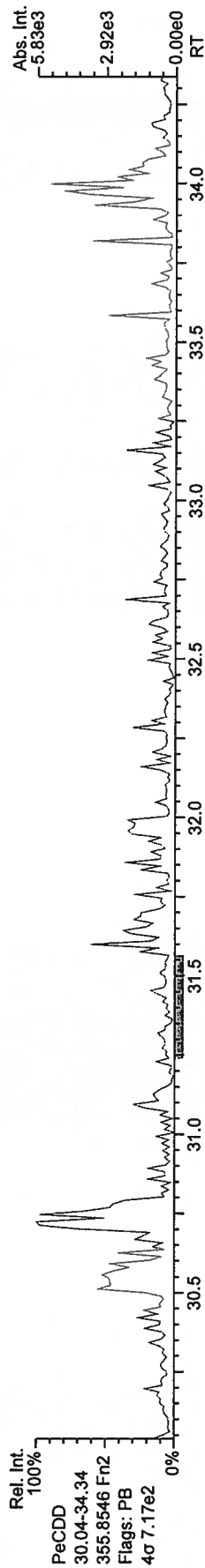
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TCDD Std.  
19.77-30.01  
333.9339 Fn1  
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4σ 7.07e2



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

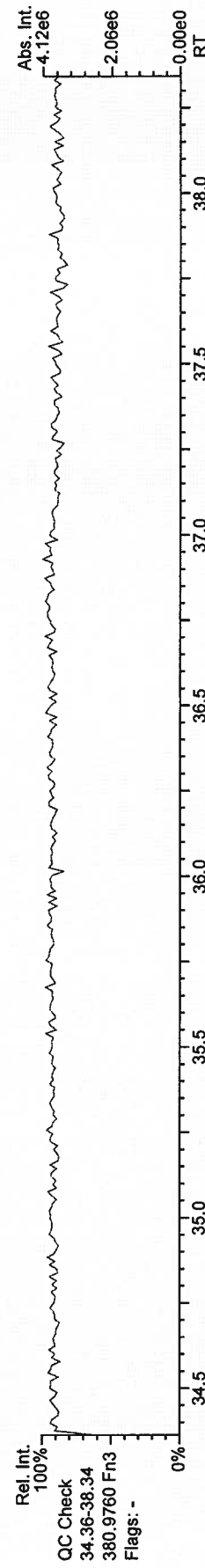
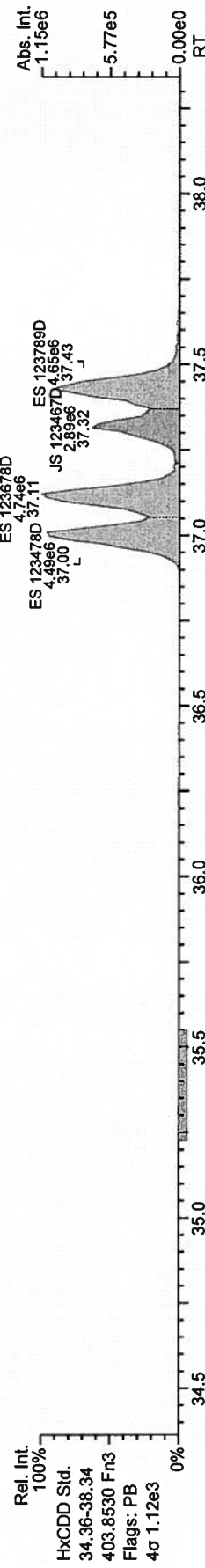
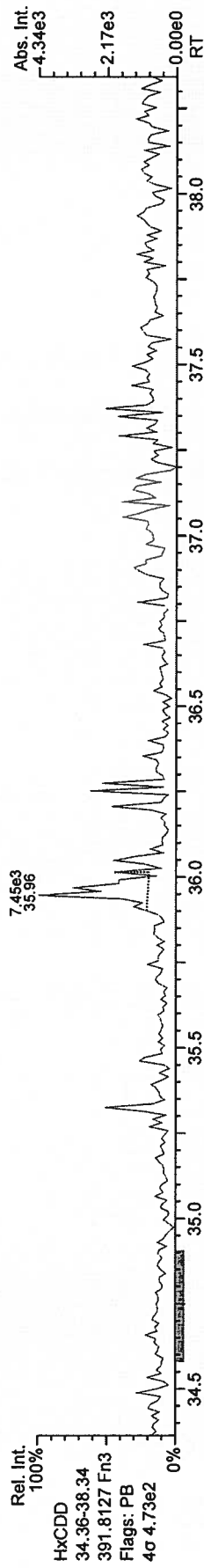
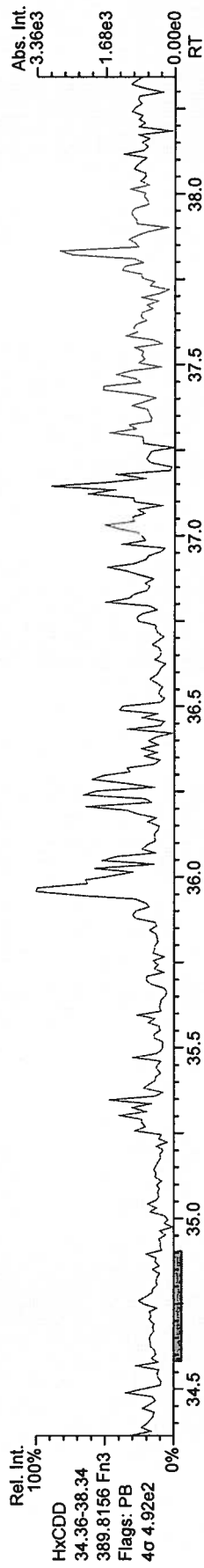
Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03

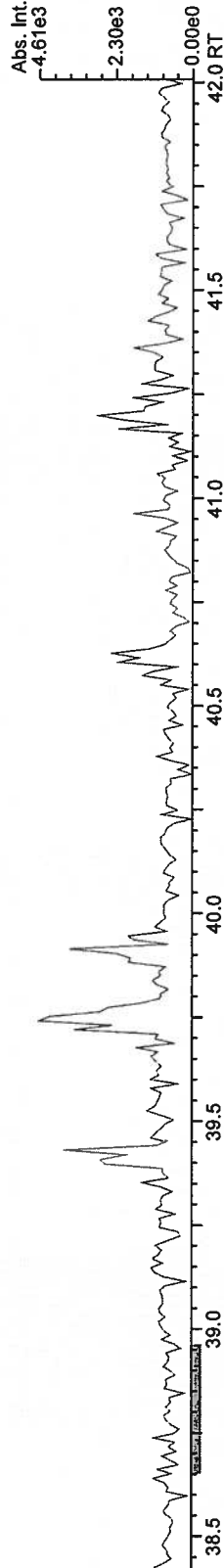


AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

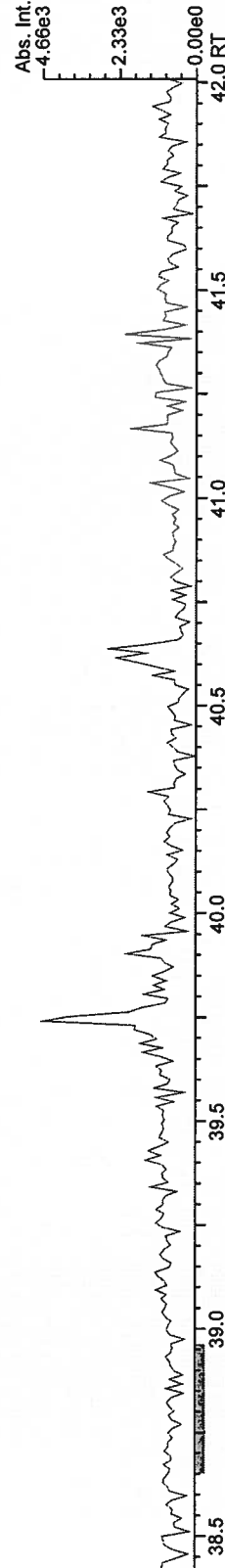
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SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03

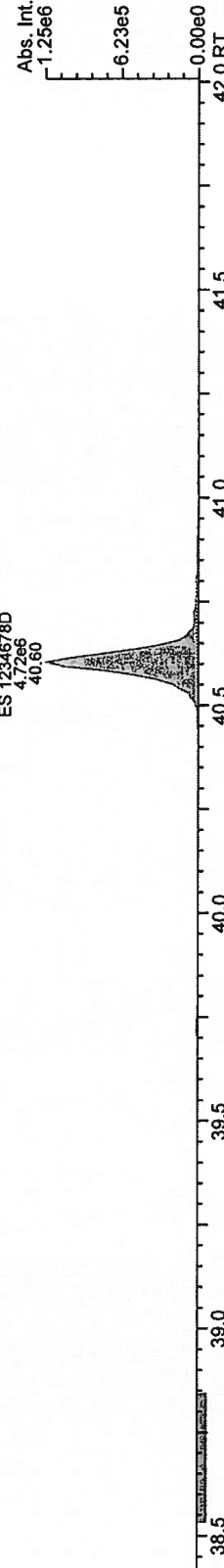
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38.37-42.01  
423.7767 Fn4  
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4σ 8.14e2



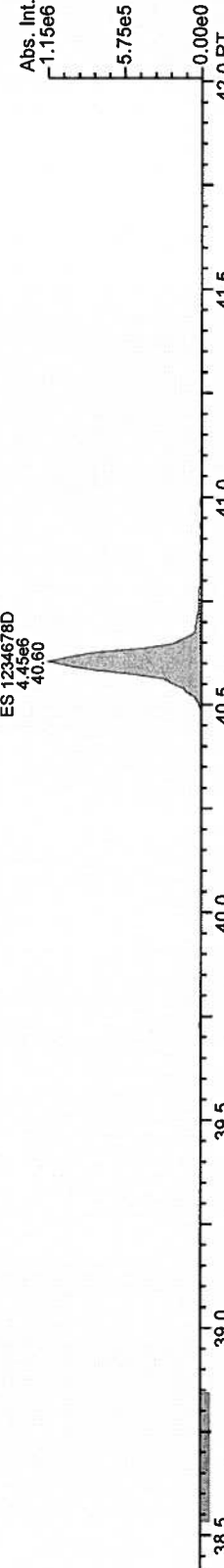
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HpCDD  
38.37-42.01  
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Flags: PB  
4σ 6.44e2



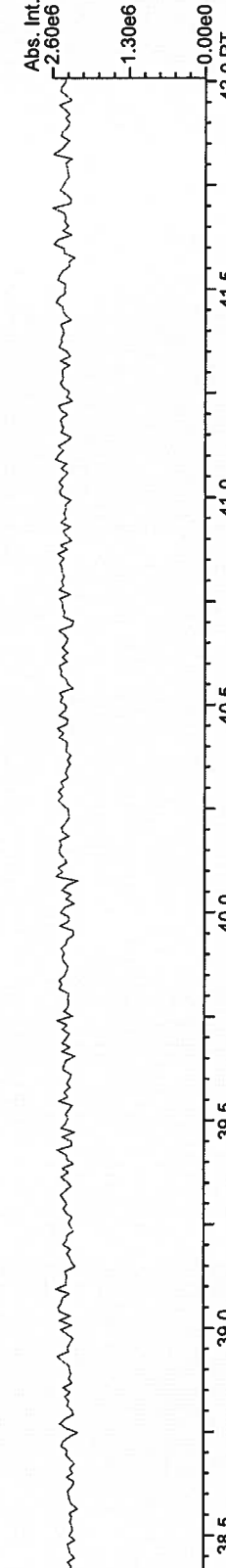
Rel. Int.  
100%  
HpCDD Std.  
38.37-42.01  
435.8169 Fn4  
Flags: PB  
4σ 1.04e3



Rel. Int.  
100%  
HpCDD Std.  
38.37-42.01  
437.8140 Fn4  
Flags: PB  
4σ 7.75e2



Rel. Int.  
100%  
QC Check  
38.37-42.01  
430.9728 Fn4  
Flags: -

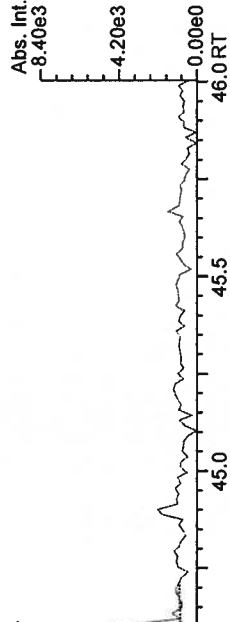
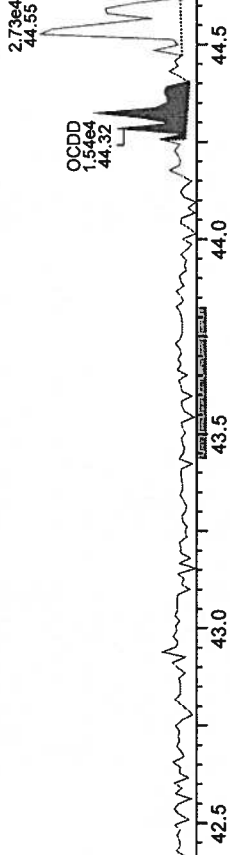


AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

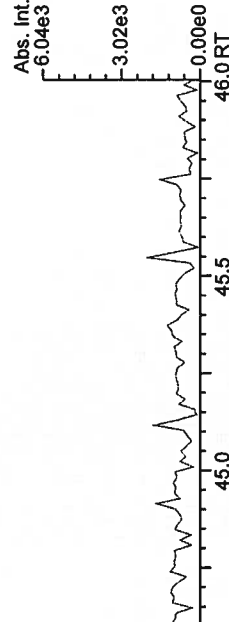
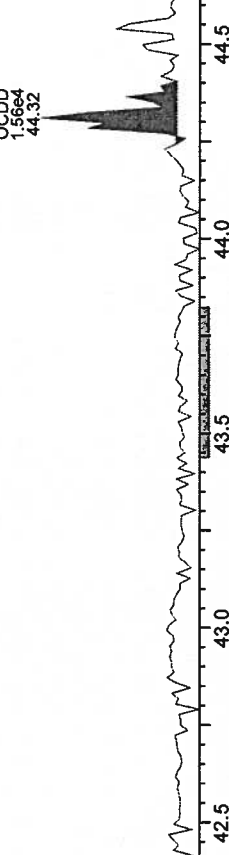
Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03

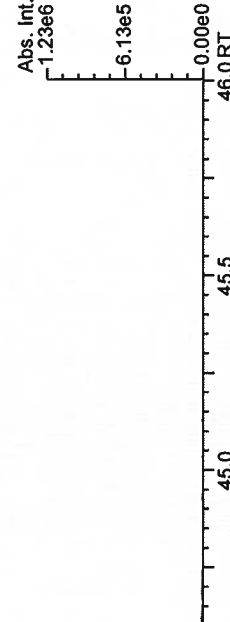
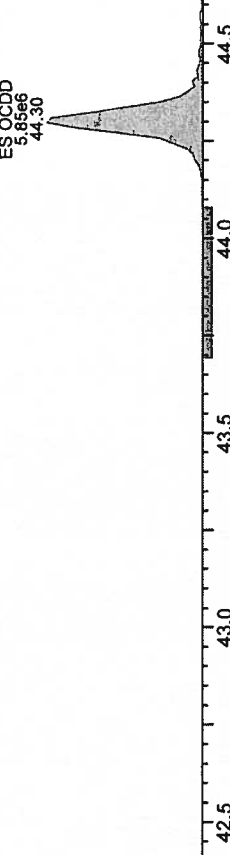
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457.7377 Fn5  
Flags: PB  
4σ 8.52e2



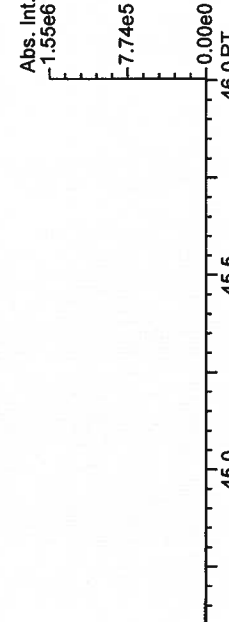
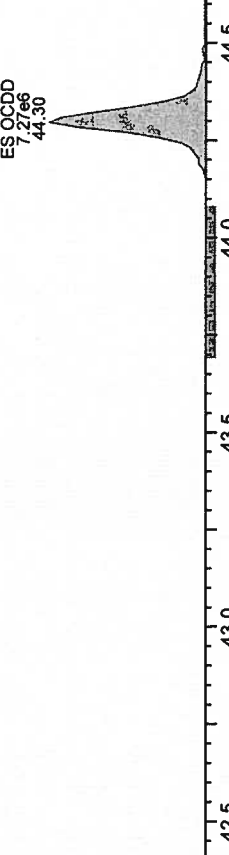
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4σ 5.58e2



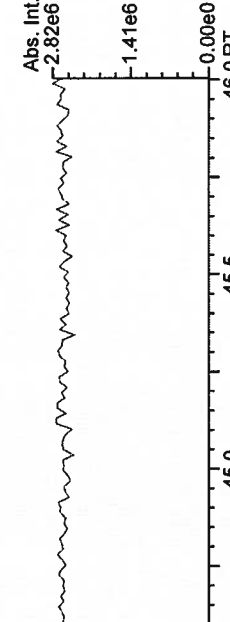
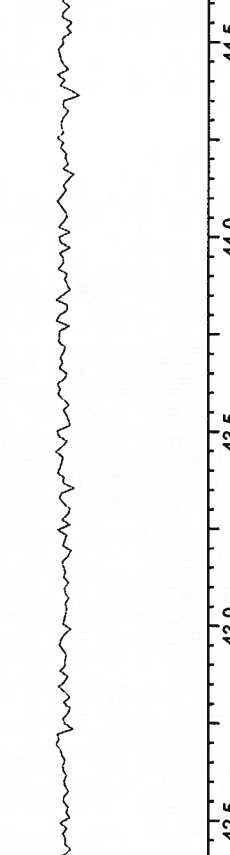
Rel. Int.  
100%  
OCDD Std.  
42.04-46.00  
469.7780 Fn5  
Flags: PB  
4σ 1.08e3



Rel. Int.  
100%  
OCDD Std.  
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471.7750 Fn5  
Flags: PB  
4σ 8.72e2



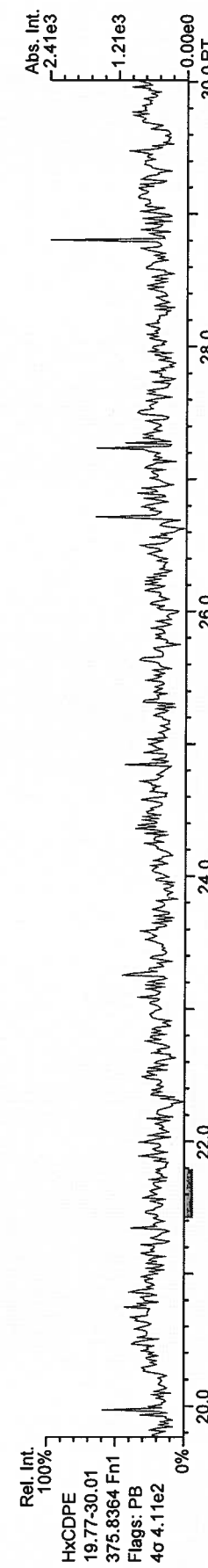
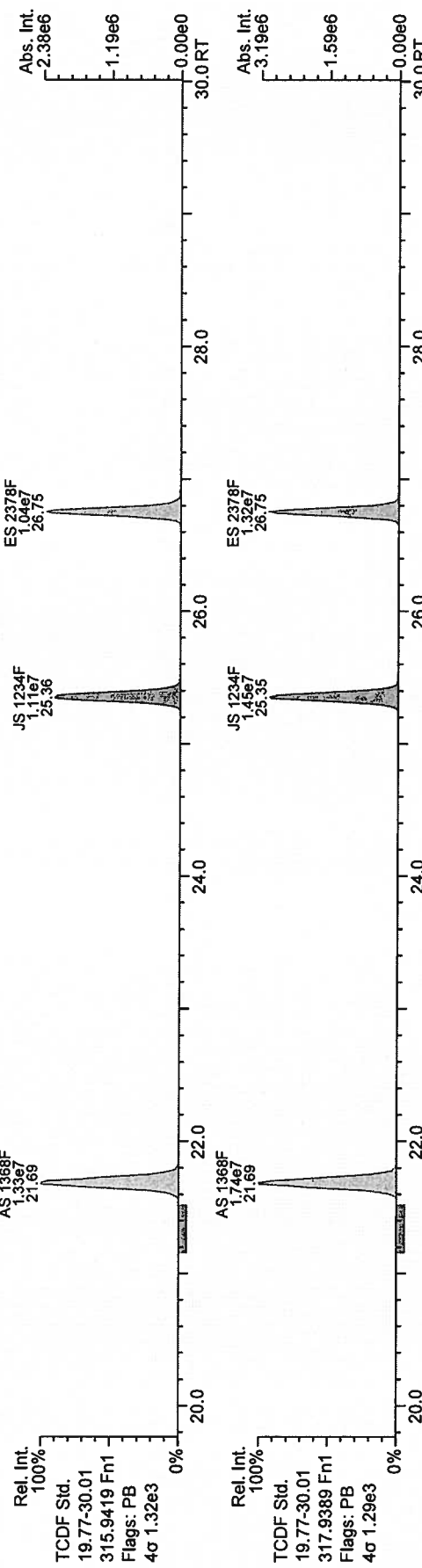
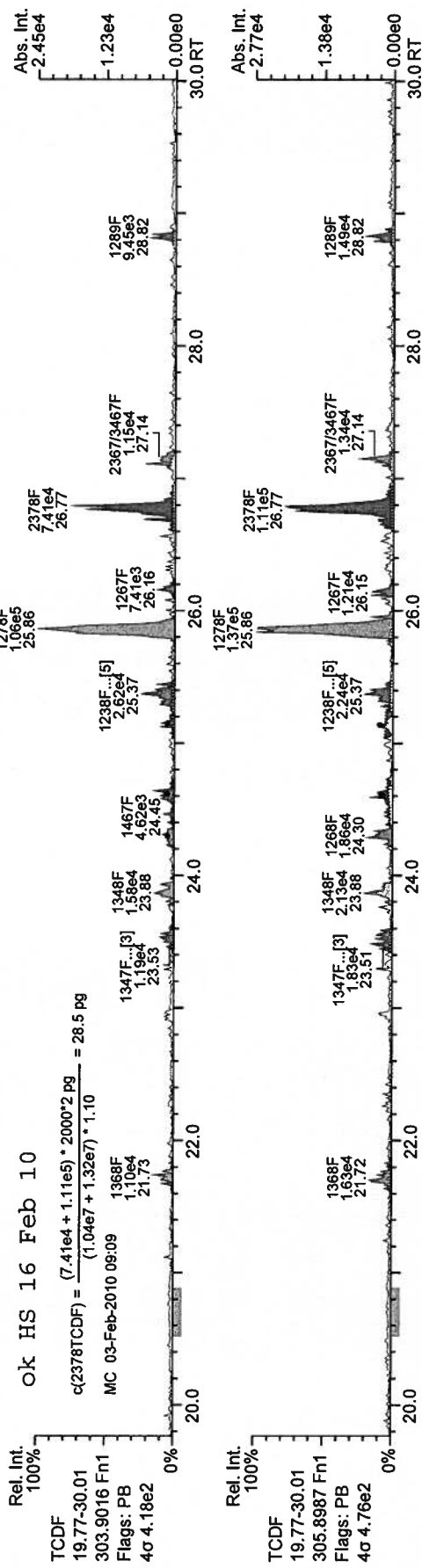
Rel. Int.  
100%  
QC Check  
42.04-46.00  
454.9728 Fn5  
Flags: -



ok HS 16 Feb 10

$$c(2378TCDF) = \frac{(7.41e4 + 1.11e5) \cdot 2000 \cdot 2 \text{ pg}}{(1.04e7 + 1.32e7) \cdot 1.10} = 28.5 \text{ pg}$$

MC 03-Feb-2010 09:09

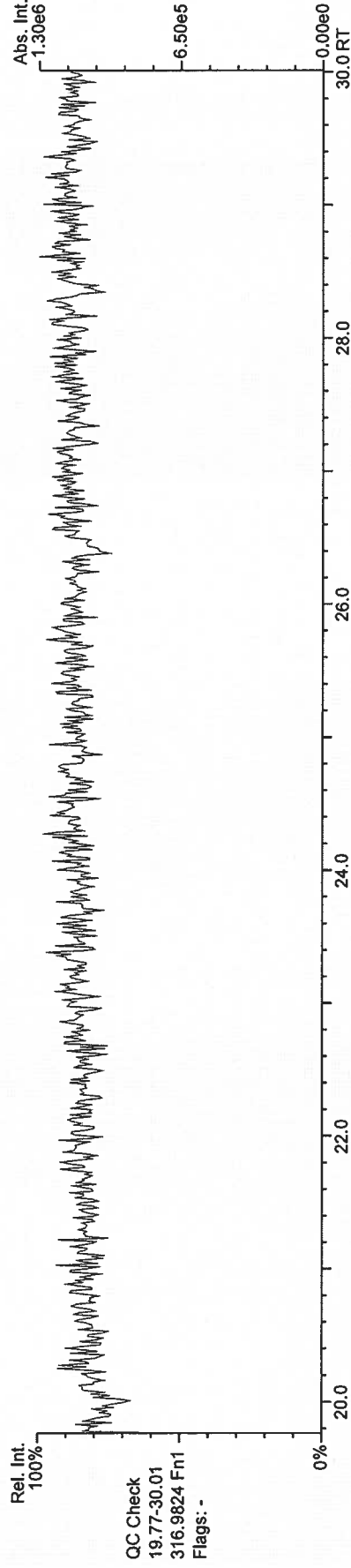
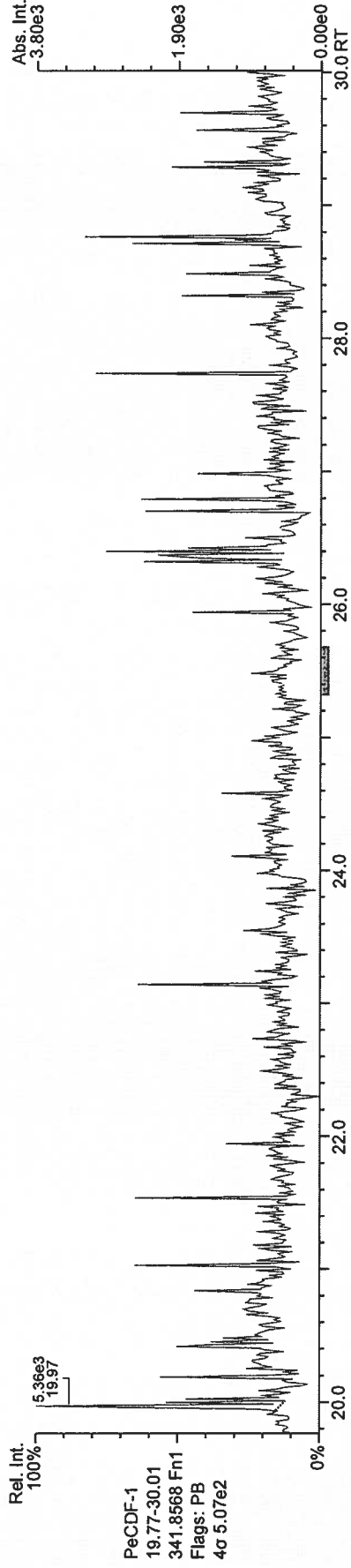
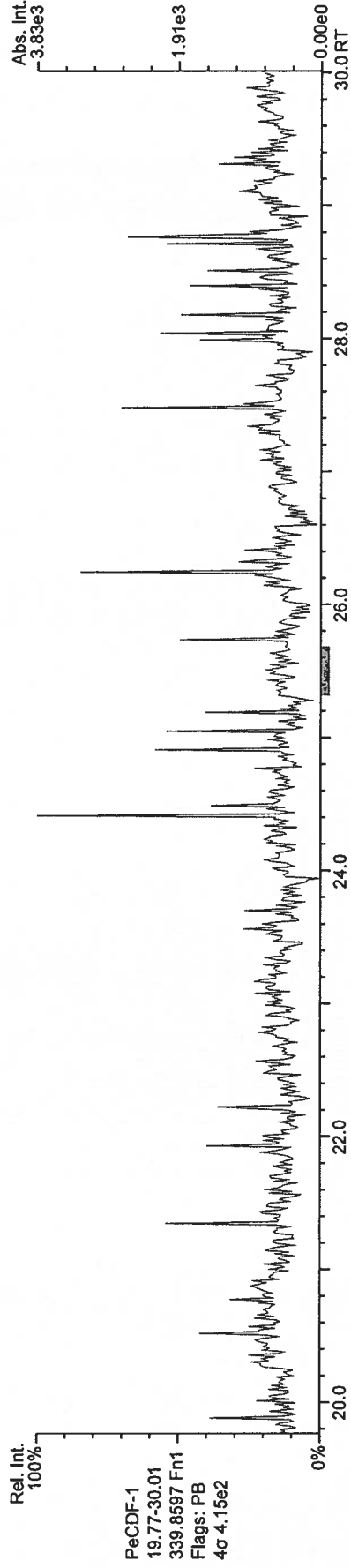




AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

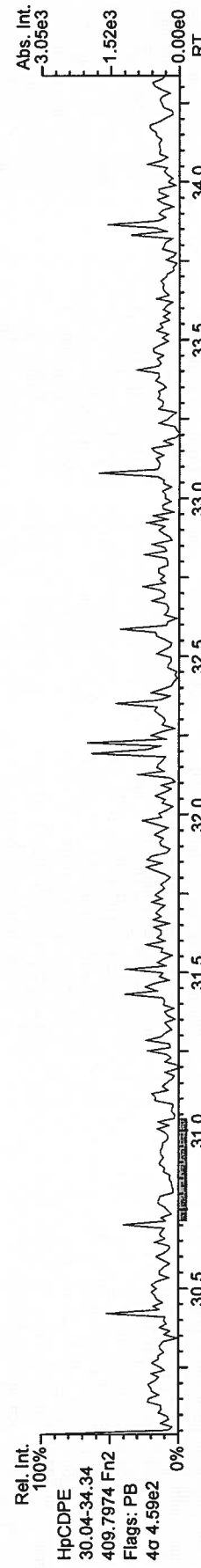
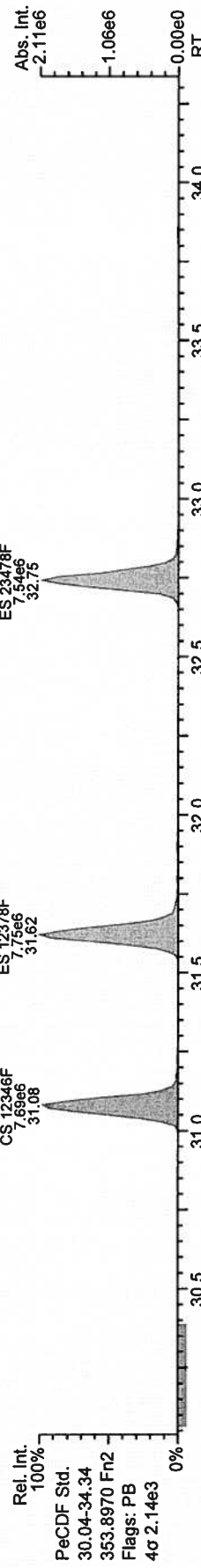
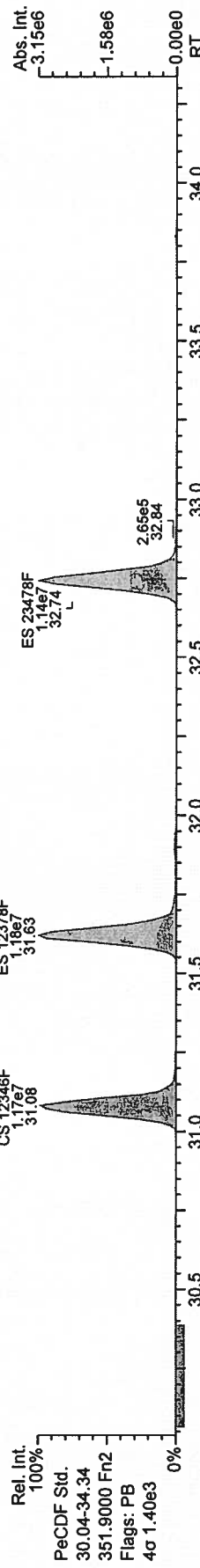
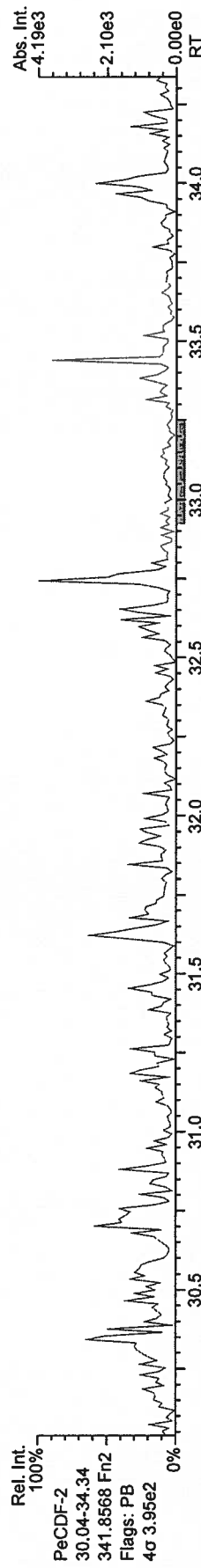
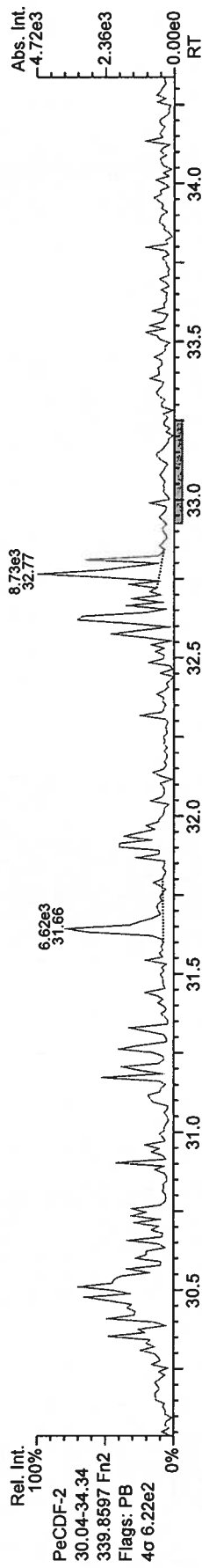
Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

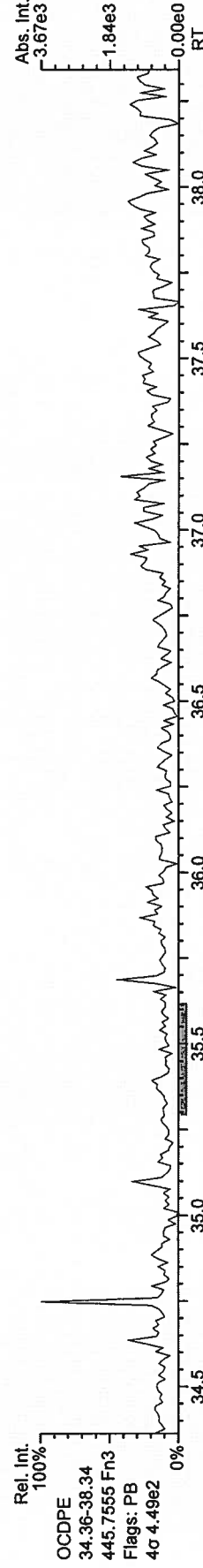
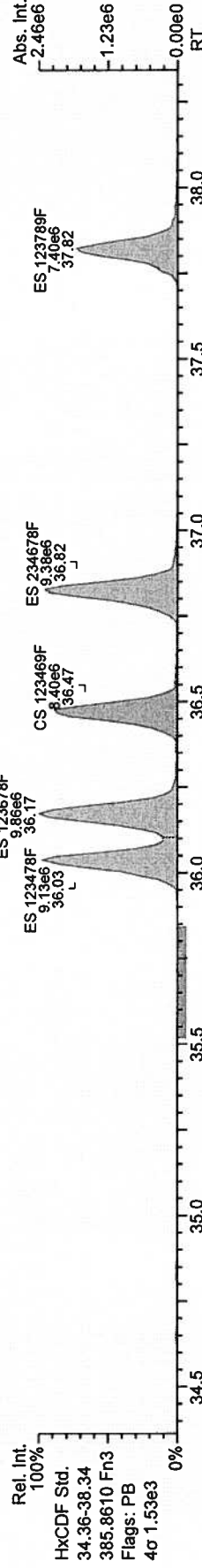
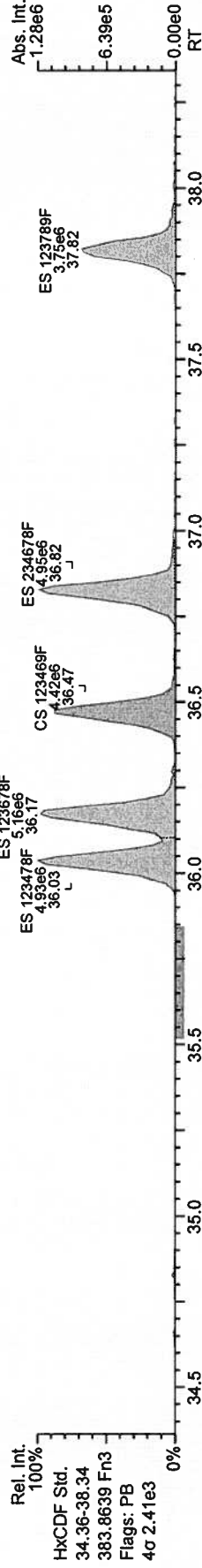
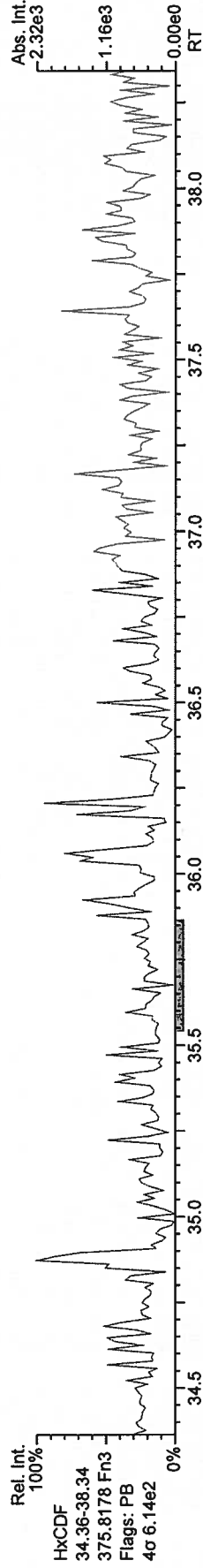
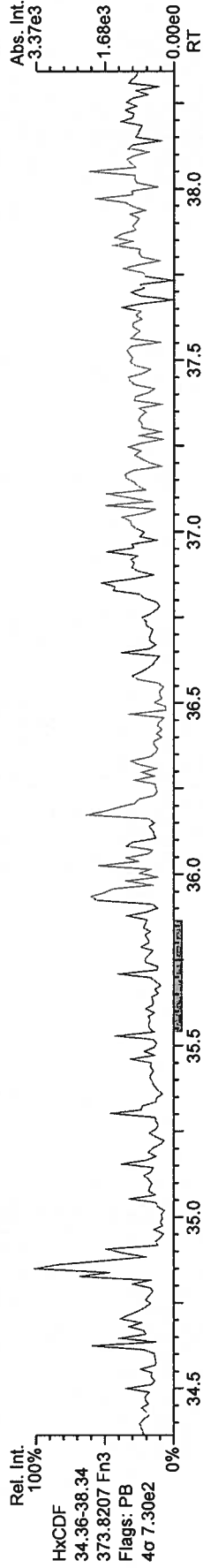
Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

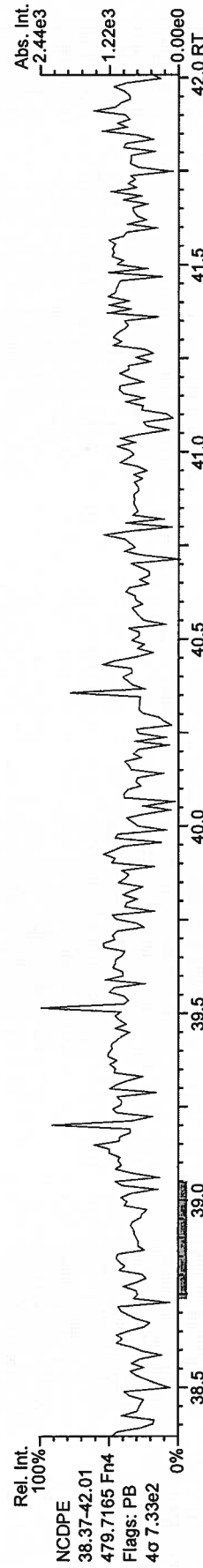
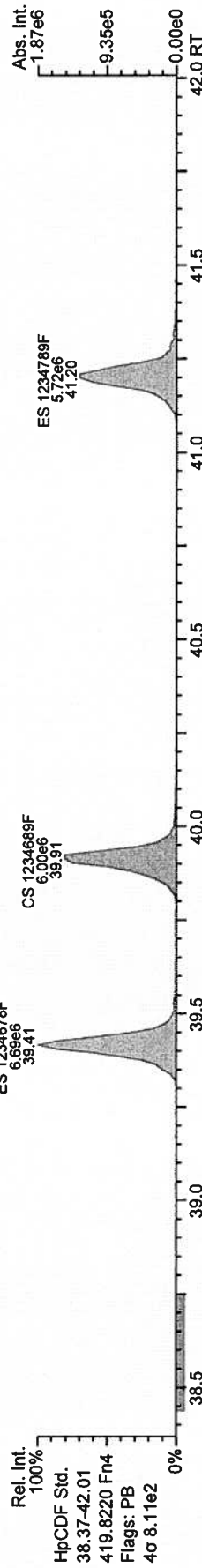
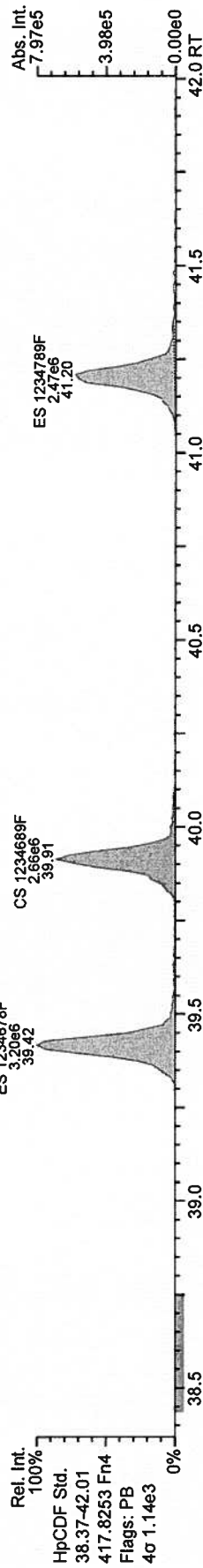
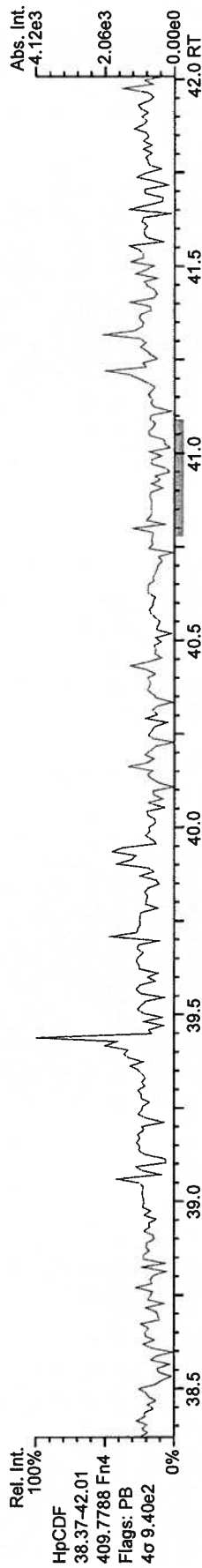
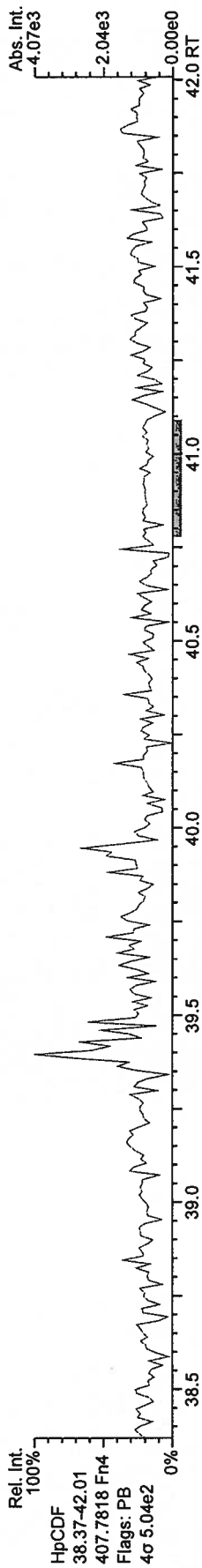
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User: MC Datafile: 100202P3-03



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

SIR expt: DE\_CL4-8A GC: DB5MS\_60M Vial: 19

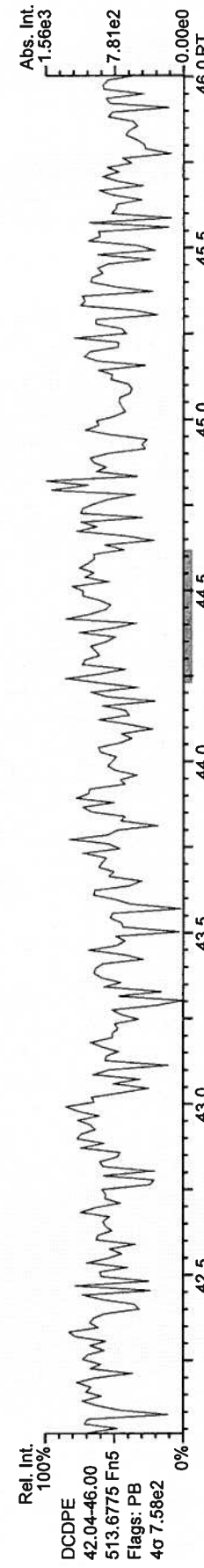
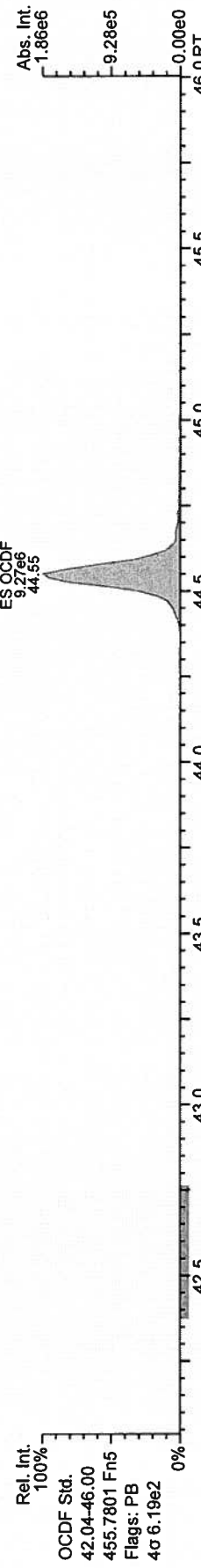
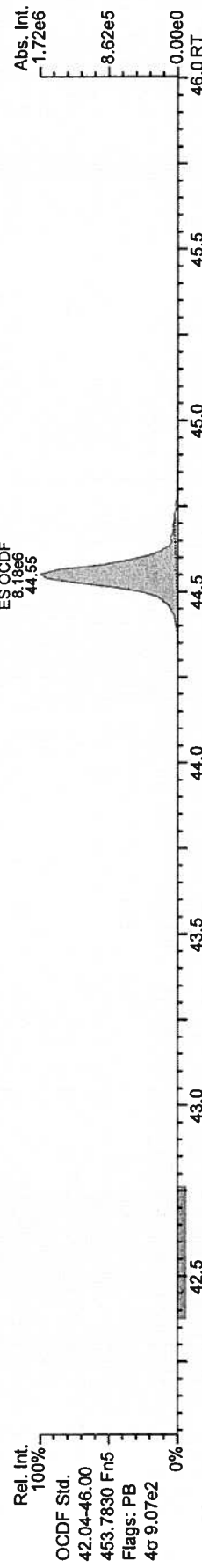
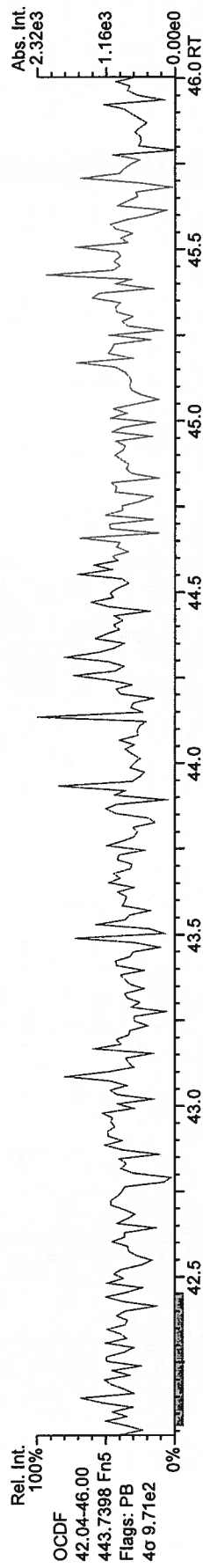
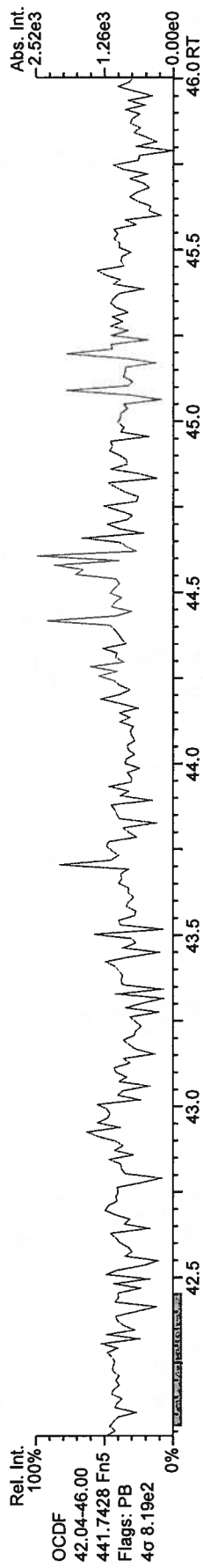
Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03



AP Lab ID: P1977\_7528\_002RJ  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 19

Acq: 2-FEB-2010 23:46:30  
User: MC Datafile: 100202P3-03



Lab ID: P1977\_7528\_003

Client ID: SSI #1-R-2

Datafile: 100202P1-07

Acq'd: 02 Feb 2010 15:01 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:59 MC

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB

Checksum: 908-955

Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.06	-	920	2.45
12378-PeCDF	NotEnd		1.0005	-		-	-	-	1.08	-	914	2.61
123478-HxCDD	NotEnd		1.0004	-		-	-	-	1.14	-	926	2.78
123678-HxCDD	NotEnd		1.0036	-		-	-	-	1.00	-	926	2.98
123789-HxCDD	NotEnd		1.0121	-		-	-	-	0.98	-	926	3.51
1234678-HpCDD	40.65		1.0003	1.0002	-0.2	1.50E+04	1.03	Y	1.00	6.62	738	3.01
OCDD	44.35		1.0004	1.0001	-0.8	4.62E+04	1.02	Y	1.09	25.1	825	5.2
2378-TCDF	26.79		1.0008	1.0009	+0.2	8.27E+04	0.59	N	1.11	13.2	1071	2
12378-PeCDF	NotEnd		1.0006	-		-	-	-	1.06	-	1082	2
23478-PeCDF	NotEnd		1.0005	-		-	-	-	1.10	-	1082	2.02
123478-HxCDF	NotEnd		1.0004	-		-	-	-	1.20	-	895	1.95
123678-HxCDF	NotEnd		1.0005	-		-	-	-	1.20	-	895	1.77
234678-HxCDF	NotEnd		1.0004	-		-	-	-	1.17	-	895	1.86
123789-HxCDF	NotEnd		1.0004	-		-	-	-	1.19	-	895	2.29
1234678-HpCDF	39.48		1.0003	1.0005	+0.5	1.33E+04	1.80	N	1.48	3.65	877	1.98
1234789-HpCDF	NotEnd		1.0002	-		-	-	-	1.42	-	877	2.72
OCDF	44.64		1.0003	1.0010	+1.9	1.94E+04	1.18	N	1.03	8.01	895	3.86

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.66	1.0254	1.0254	0	1.56E+07	0.73	Y	0.96	88.7
ES 12378-PeCDD	33.13	1.2285	1.2284	-0.2	1.18E+07	1.57	Y	0.74	85.8
ES 123478-HxCDD	37.04	0.9915	0.9915	0	9.56E+06	1.28	Y	0.84	94.2
ES 123678-HxCDD	37.16	0.9946	0.9946	0	1.08E+07	1.23	Y	0.97	92.5
ES 123789-HxCDD	37.47	1.0031	1.0030	-0.2	1.05E+07	1.35	Y	0.95	91.1
ES 1234678-HpCDD	40.65	1.0881	1.0880	-0.2	9.12E+06	1.02	Y	0.78	96.5
ES OCDD	44.35	1.1872	1.1871	-0.2	1.36E+07	0.81	Y	0.63	88.8
ES 2378-TCDF	26.76	1.0560	1.0561	+0.2	2.25E+07	0.78	Y	0.98	89.1
ES 12378-PeCDF	31.67	1.2497	1.2497	0	1.88E+07	1.53	Y	0.85	85.4
ES 23478-PeCDF	32.79	1.2939	1.2939	0	1.75E+07	1.51	Y	0.80	84.5
ES 123478-HxCDF	36.07	0.9656	0.9656	0	1.30E+07	0.53	Y	1.13	94.5
ES 123678-HxCDF	36.21	0.9694	0.9693	-0.2	1.46E+07	0.53	Y	1.23	97.8
ES 234678-HxCDF	36.86	0.9869	0.9868	-0.2	1.35E+07	0.51	Y	1.18	94
ES 123789-HxCDF	37.86	1.0134	1.0134	0	1.15E+07	0.53	Y	1.07	88.7
ES 1234678-HpCDF	39.46	1.0563	1.0562	-0.2	9.80E+06	0.45	Y	0.86	94.2
ES 1234789-HpCDF	41.24	1.1043	1.1040	-0.7	8.20E+06	0.46	Y	0.71	95.4
ES OCDF	44.59	1.1938	1.1936	-0.4	1.88E+07	0.88	Y	0.86	90.1

Lab ID: P1977\_7528\_003

Client ID: SSI #1-R-2

Datafile: 100202P1-07

Acq'd: 02 Feb 2010 15:01 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:59 MC

Cal: BCS3\_7528\_DF\_PAB

Checkcode: 908-955

Split: 2

WVVol: 1

J-level: 10 pg

ES spike: 4000 pg

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.97		-	-	-	1.84E+07	0.75	Y	-	-
JS 1234-TCDF	25.34		-	-	-	2.58E+07	0.78	Y	-	-
JS 123467-HxCDD	37.36		-	-	-	6.07E+06	1.39	Y	-	-
CS 37C1-2378-TCDD	27.68		1.0262	1.0263	+0.2	6.72E+06	n/a	-	1.01	90
CS 12347-PeCDD	32.62		1.2096	1.2095	-0.2	1.11E+07	1.66	Y	0.70	86.8
CS 12346-PeCDF	31.12		1.2281	1.2281	0	1.94E+07	1.48	Y	0.86	87.6
CS 123469-HxCDF	36.51		0.9773	0.9772	-0.2	1.26E+07	0.54	Y	1.06	98.4
CS 1234689-HpCDF	39.95		1.0695	1.0694	-0.2	9.02E+06	0.45	Y	0.75	99.6
SS 37C1-2378-TCDD	27.68		1.0262	1.0263	+0.2	6.72E+06	n/a	-	1.06	101
SS 12347-PeCDD	32.62		1.2096	1.2095	-0.2	1.11E+07	1.66	Y	0.93	101
SS 12346-PeCDF	31.12		1.2281	1.2281	0	1.94E+07	1.48	Y	1.01	102
SS 123469-HxCDF	36.51		0.9773	0.9772	-0.2	1.26E+07	0.54	Y	0.86	101
SS 1234689-HpCDF	39.95		1.0695	1.0694	-0.2	9.02E+06	0.45	Y	0.87	106
AS 1368-TCDD	23.83		0.8836	0.8836	0	1.77E+07	0.74	Y	1.01	95.5
AS 1368-TCDF	21.61		0.8527	0.8529	+0.3	3.00E+07	0.78	Y	1.23	94.7
FS 1278-TCDD	NotEnd		1.0120							
FS 12478-PeCDD	NotEnd		0.9628							
FS 123468-HxCDD	NotEnd		0.9717							
FS 1234679-HpCDD	NotEnd		0.9784							
TS 1378-TCDD	NotEnd		0.9391							

Totals	Conc	EMPC
Total TCDD	6.01	6.01
Total PeCDD	0	0
Total HxCDD	8.63	8.63
Total HpCDD	12.3	12.3
Total Tetra-Octa Dioxins	52	52
Total TCDF	35.4	52.7
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	3.65
Total Tetra-Octa Furans	35.4	64.4
Total Tetra-Octa Dioxins & Furans	87.4	116

Lab ID: P1977\_7528\_003  
Client ID: SSI #1-R-2  
Datafile: 100202P1-07

Acq'd: 02 Feb 2010 15:01 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:59 MC

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 908-955  
Split: 2

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.86		0.8628	0.8627	-0.2	2.48E+04	0.81	Y	1.06	6.01	920	2.45
1379-TCDD	NotFnd		0.8792						1.06		920	2.45
1369-TCDD	NotFnd		0.8950						1.06		920	2.45
1469-TCDD	NotFnd		0.9239						1.06		920	2.45
1247/1246/1248/1249-TCDD	NotFnd		0.9326						1.06		920	2.45
1378-TCDD	NotFnd		0.9400						1.06		920	2.45
1268-TCDD	NotFnd		0.9472						1.06		920	2.45
1478-TCDD	NotFnd		0.9564						1.06		920	2.45
1279-TCDD	NotFnd		0.9628						1.06		920	2.45
1234/1269-TCDD	NotFnd		0.9758						1.06		920	2.45
1236-TCDD	NotFnd		0.9807						1.06		920	2.45
1237/1238-TCDD	NotFnd		0.9899						1.06		920	2.45
1239-TCDD	NotFnd		0.9949						1.06		920	2.45
2378-TCDD	NotFnd		1.0008						1.06		920	2.45
1278-TCDD	NotFnd		1.0129						1.06		920	2.45
1267-TCDD	NotFnd		1.0176						1.06		920	2.45
1289-TCDD	NotFnd		1.0371						1.06		920	2.45
12479/12468-PeCDD	NotFnd		0.9239						1.08		914	2.61
12469-PeCDD	NotFnd		0.9408						1.08		914	2.61
12368-PeCDD	NotFnd		0.9576						1.08		914	2.61
12478-PeCDD	NotFnd		0.9633						1.08		914	2.61
12379-PeCDD	NotFnd		0.9665						1.08		914	2.61
12369/12467/12489-PeCDD	NotFnd		0.9742						1.08		914	2.61
12346/12347-PeCDD	NotFnd		0.9854						1.08		914	2.61
12378-PeCDD	NotFnd		1.0005						1.08		914	2.61
12367-PeCDD	NotFnd		1.0032						1.08		914	2.61
12389-PeCDD	NotFnd		1.0140						1.08		914	2.61
124679/124689-HxCDD	NotFnd		0.9544						1.04		926	3.07
123468-HxCDD	36.00		0.9721	0.9719	-0.4	2.30E+04	1.13	Y	1.04	8.63	926	3.07
123679/123689-HxCDD	NotFnd		0.9798						1.04		926	3.07
123469-HxCDD	NotFnd		0.9833						1.04		926	3.07
123478-HxCDD	NotFnd		1.0004						1.14		926	2.78
123678-HxCDD	NotFnd		1.0036						1.00		926	2.98
123467-HxCDD	NotFnd		1.0089						1.04		926	3.07
123789-HxCDD	NotFnd		1.0121						0.98		926	3.51



Lab ID: P1977\_7528\_003

Client ID: SSI #1-R-2

Datafile: 100202P1-07

Acq'd: 02 Feb 2010 15:01 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:59 MC

Wt/Vol: 1

Cal: BCS3\_7528\_DE\_PAB

Checkcode: 908-955

Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRT	Conc.	Noise	DL
1234679-HpCDD	39.79		0.9789	0.9790	+0.2	1.29E+04	0.94	Y	1.00	5.66	738	3.01
1234678-HpCDD	40.65		1.0003	1.0002	-0.2	1.50E+04	1.03	Y	1.00	6.62	738	3.01
OCDD	44.35		1.0004	1.0001	-0.8	4.62E+04	1.02	Y	1.09	25.1	825	5.2
OCDD-a	NotEnd		1.0004						0.06		1009	109
1368-TCDF	21.63		0.8086	0.8083	-0.5	2.59E+04	0.95	N	1.11	4.12	1071	2
1468-TCDF	NotEnd		0.8345						1.11		1071	2
2468-TCDF	NotEnd		0.8560						1.11		1071	2
1346/1246-TCDF	NotEnd		0.8731						1.11		1071	2
1347/1378/1247-TCDF	NotEnd		0.8791						1.11		1071	2
1348-TCDF	23.83		0.8894	0.8903	+1.4	4.39E+04	0.70	Y	1.11	7.01	1071	2
1248/1367/1379-TCDF	NotEnd		0.8943						1.11		1071	2
1268-TCDF	NotEnd		0.9092						1.11		1071	2
1467-TCDF	NotEnd		0.9142						1.11		1071	2
1478-TCDF	NotEnd		0.9207						1.11		1071	2
1369/1237-TCDF	NotEnd		0.9349						1.11		1071	2
2467-TCDF	NotEnd		0.9398						1.11		1071	2
2368-TCDF	NotEnd		0.9454						1.11		1071	2
1238/1234/1678/1469/1236-TCDF	25.36		0.9481	0.9476	-0.8	4.60E+04	0.88	Y	1.11	7.33	1071	2
1278-TCDF	25.86		0.9669	0.9663	-1.0	1.32E+05	0.70	Y	1.11	21.1	1071	2
1349-TCDF	NotEnd		0.9708						1.11		1071	2
1267-TCDF	NotEnd		0.9772						1.11		1071	2
2346/1249-TCDF	NotEnd		0.9845						1.11		1071	2
2347/1279-TCDF	NotEnd		0.9925						1.11		1071	2
2348-TCDF	NotEnd		0.9964						1.11		1071	2
2378-TCDF	26.79		1.0008	1.0009	+0.2	8.27E+04	0.59	N	1.11	13.2	1071	2
2367/3467-TCDF	NotEnd		1.0147						1.11		1071	2
1269-TCDF	NotEnd		1.0237						1.11		1071	2
1239-TCDF	NotEnd		1.0338						1.11		1071	2
1289-TCDF	NotEnd		1.0782						1.11		1071	2
13468/12468-PeCDF	NotEnd		0.9093						1.08		985	1.83
13678/13467/12467-PeCDF	NotEnd		0.9597						1.08		1082	2.01
12368/13478/12478-PeCDF	NotEnd		0.9636						1.08		1082	2.01
14678-PeCDF	NotEnd		0.9678						1.08		1082	2.01
13479-PeCDF	NotEnd		0.9708						1.08		1082	2.01
13469/12479-PeCDF	NotEnd		0.9788						1.08		1082	2.01
12346-PeCDF	NotEnd		0.9834						1.08		1082	2.01

Lab ID: P1977\_7528\_003

Client ID: SSI #1-R-2

Datafile: 100202P1-07

Acq'd: 02 Feb 2010 15:01 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:59 MC

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB

Checkcode: 908-955

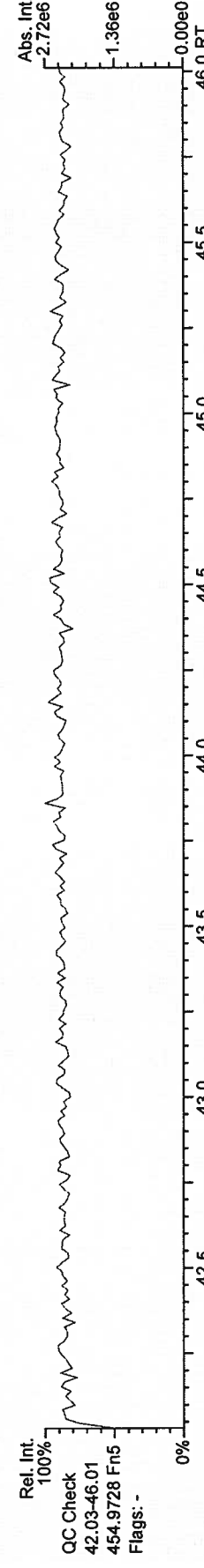
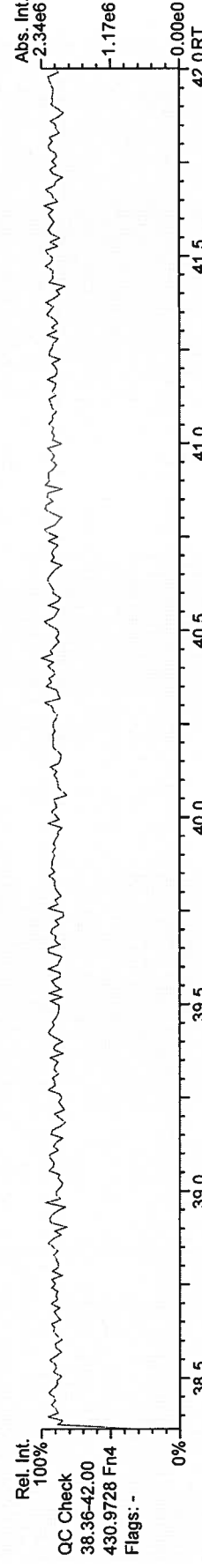
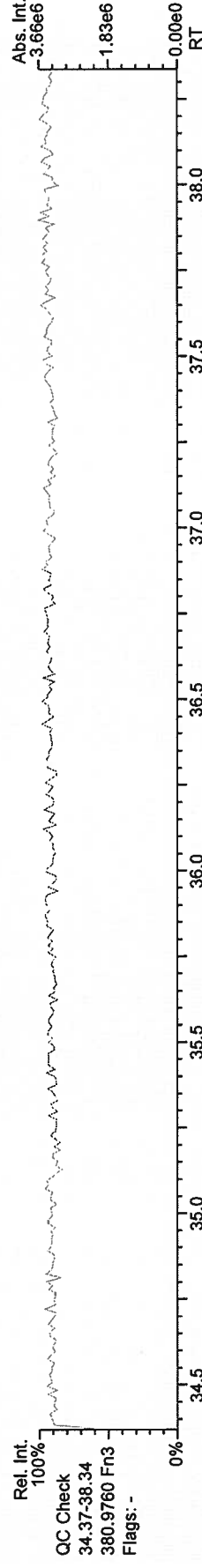
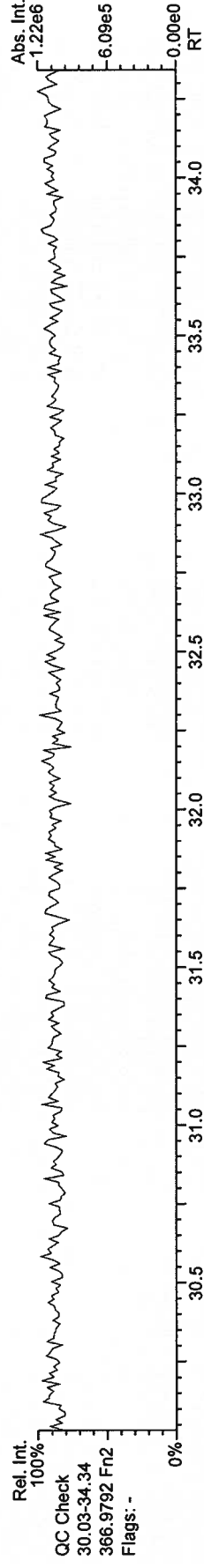
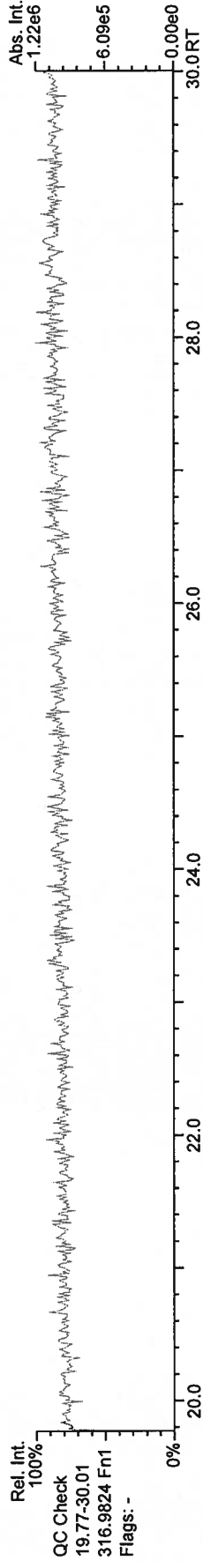
Split: 2

Name	Act RT	QC	Pred. RRT	Act RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotEnd		0.9862						1.08		1082	2.01
12347-PeCDF	NotEnd		0.9887						1.08		1082	2.01
12348-PeCDF	NotEnd		0.9936						1.08		1082	2.01
12378-PeCDF	NotEnd		1.0006						1.06		1082	2
12678/12367-PeCDF	NotEnd		1.0098						1.08		1082	2.01
12379-PeCDF	NotEnd		1.0145						1.08		1082	2.01
12679-PeCDF	NotEnd		0.9927						1.08		1082	2.01
23467/12369-PeCDF	NotEnd		0.9967						1.08		1082	2.01
23478-PeCDF	NotEnd		1.0005						1.10		1082	2.02
23478/12489-PeCDF	NotEnd		1.0006						1.10		1082	2.02
12489-PeCDF	NotEnd		1.0023						1.08		1082	2.01
12349-PeCDF	NotEnd		1.0103						1.08		1082	2.01
12389-PeCDF	NotEnd		1.0336						1.08		1082	2.01
123468-HxCDF	NotEnd		0.9619						1.19		895	1.95
124678/134678-HxCDF	NotEnd		0.9675						1.19		895	1.95
134679-HxCDF	NotEnd		0.9741						1.19		895	1.95
124679-HxCDF	NotEnd		0.9793						1.19		895	1.95
124689-HxCDF	NotEnd		0.9855						1.19		895	1.95
123467-HxCDF	NotEnd		0.9972						1.19		895	1.95
123478-HxCDF	NotEnd		1.0004						1.20		895	1.95
123678-HxCDF	NotEnd		1.0005						1.20		895	1.77
123479-HxCDF	NotEnd		1.0047						1.19		895	1.95
123469-HxCDF	NotEnd		1.0087						1.19		895	1.95
123679-HxCDF	NotEnd		0.9944						1.19		895	1.95
234678-HxCDF	NotEnd		1.0004						1.17		895	1.86
234678/123689-HxCDF	NotEnd		1.0004						1.17		895	1.86
123689-HxCDF	NotEnd		1.0009						1.19		895	1.95
123789-HxCDF	NotEnd		1.0004						1.19		895	2.29
123789/123489-HxCDF	NotEnd		1.0010						1.19		895	2.29
123489-HxCDF	NotEnd		1.0017						1.19		895	1.95
1234678-HpCDF	39.48		1.0003	1.0005	+0.5	1.33E+04	1.80	N	1.48	3.65	877	1.98
1234679-HpCDF	NotEnd		1.0085						1.45		877	2.31
1234689-HpCDF	NotEnd		1.0128						1.45		877	2.31
1234789-HpCDF	NotEnd		1.0002						1.42		877	2.72
OCDF	44.64		1.0003	1.0010	+1.9	1.94E+04	1.18	N	1.03	8.01	895	3.86
OCDF--a	NotEnd		1.0003						0.06		1086	86.2

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

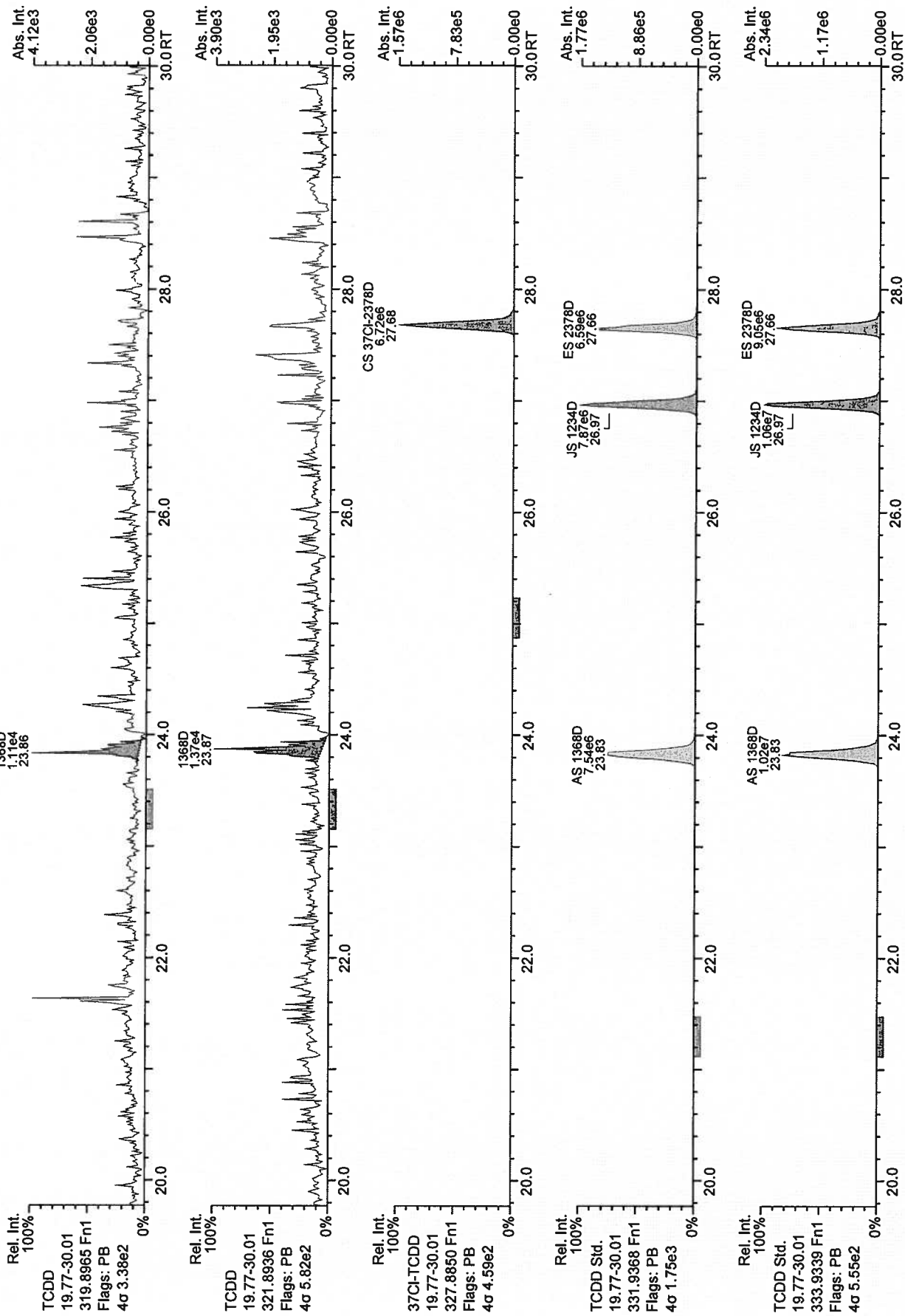
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AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07

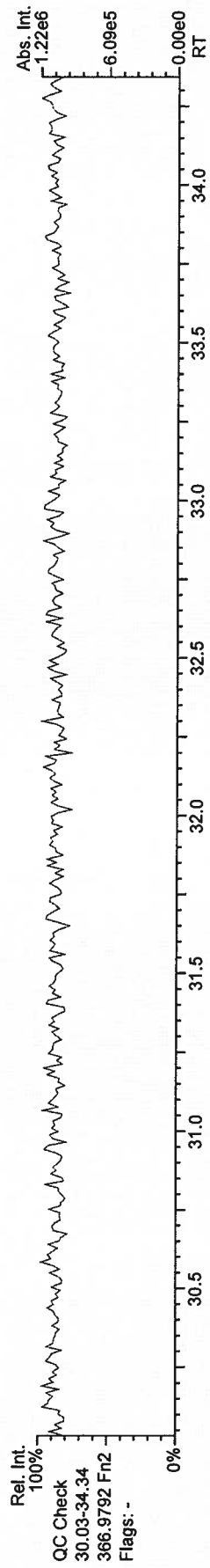
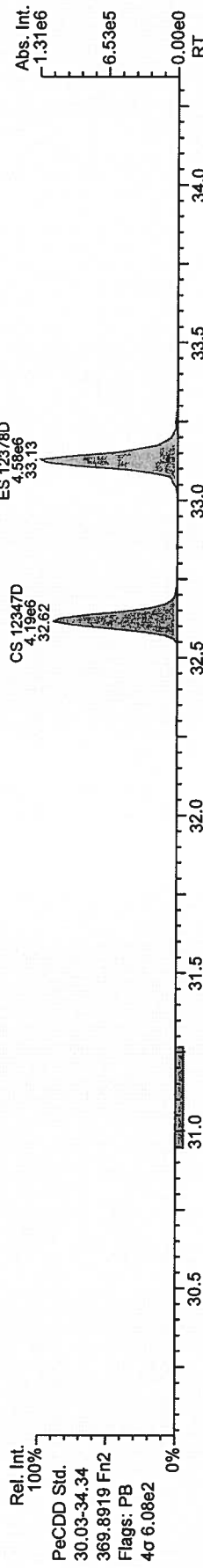
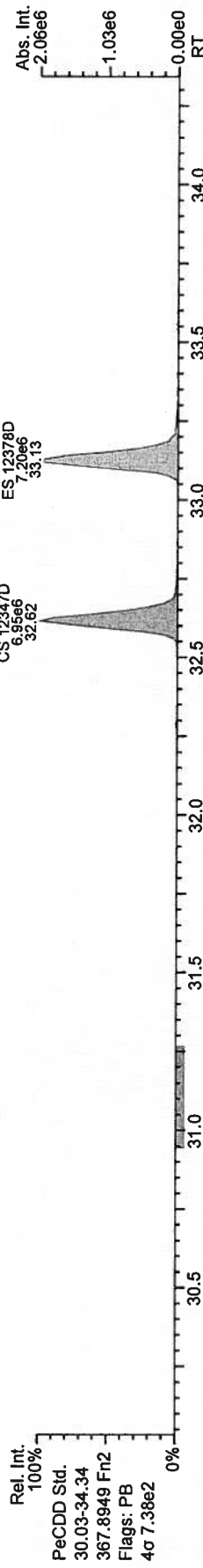
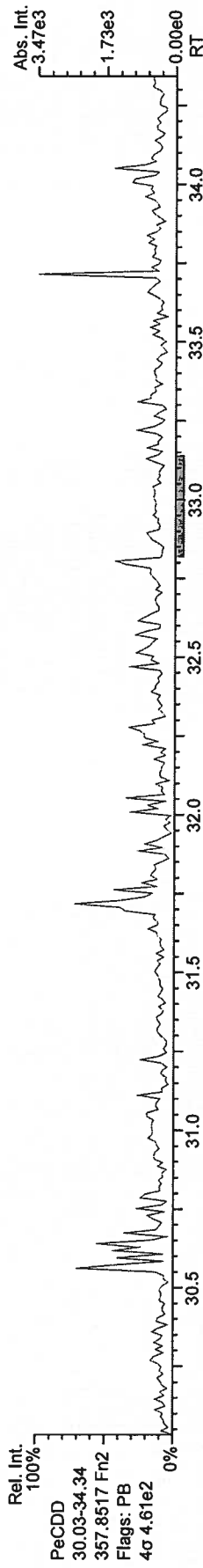
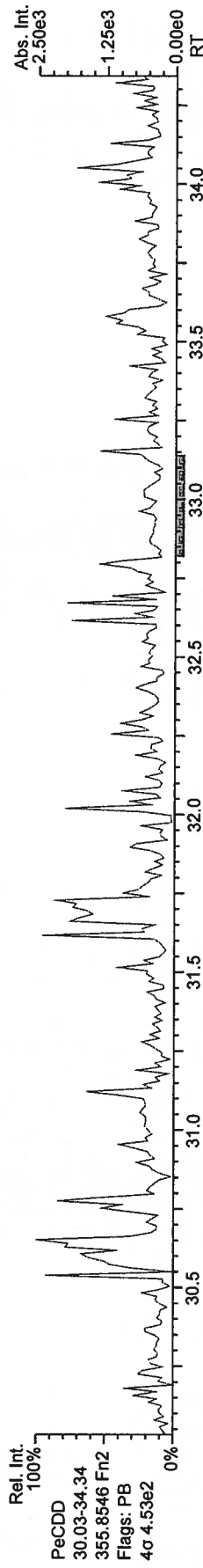


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AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

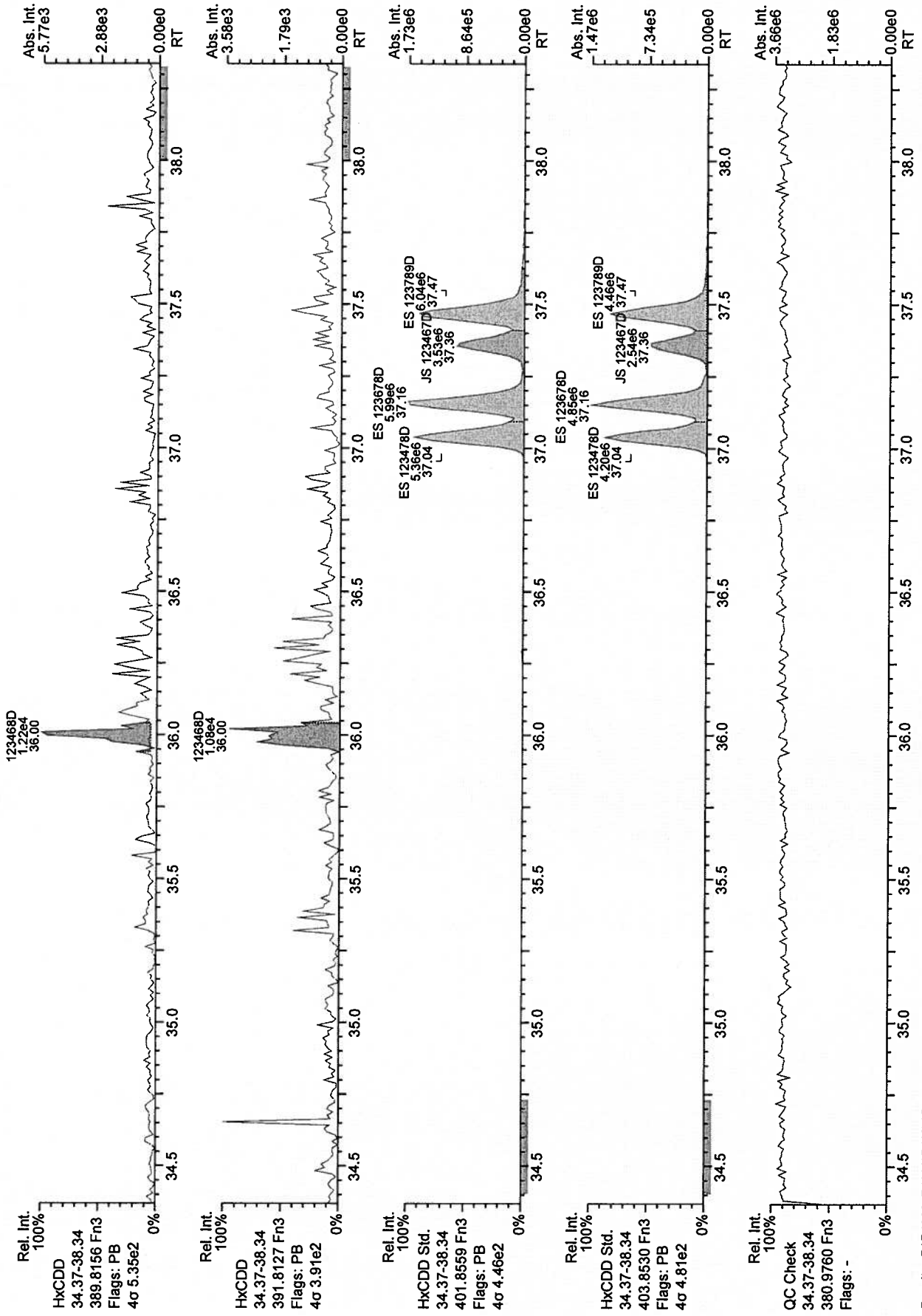
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AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07

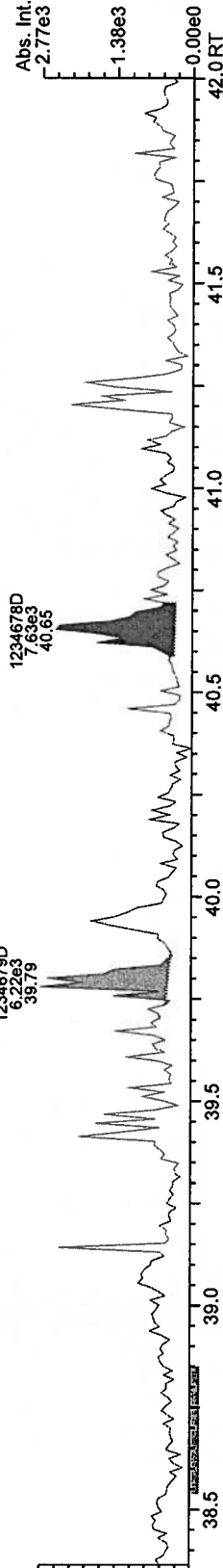


AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

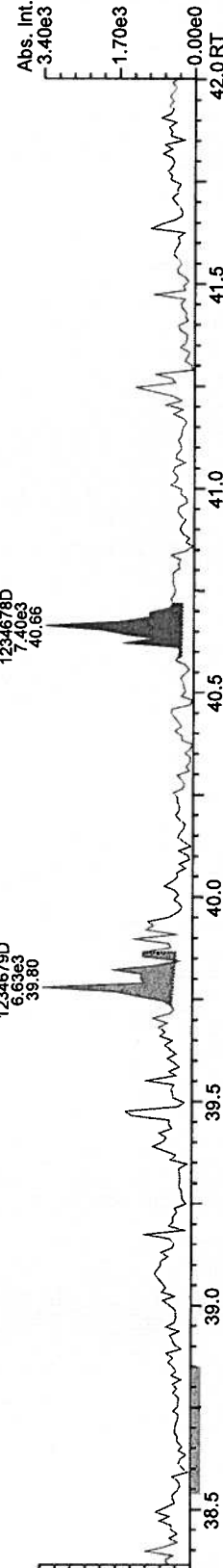
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Acq: 2-FEB-2010 15:01:55  
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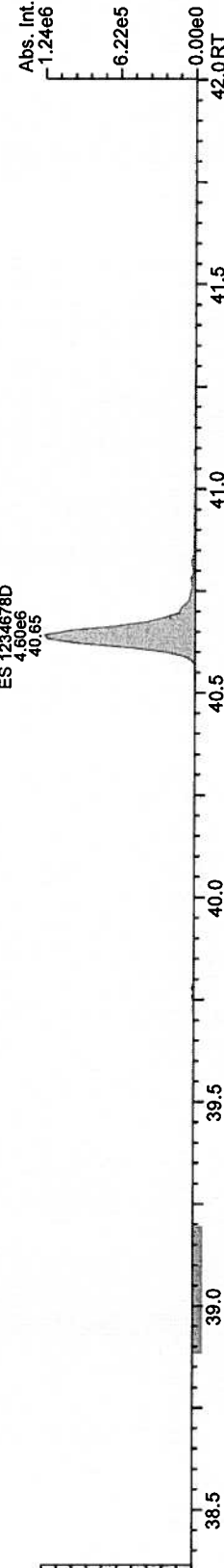
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HpCDD  
38.36-42.00  
423.7767 Fn4  
Flags: PB  
4σ 3.77e2



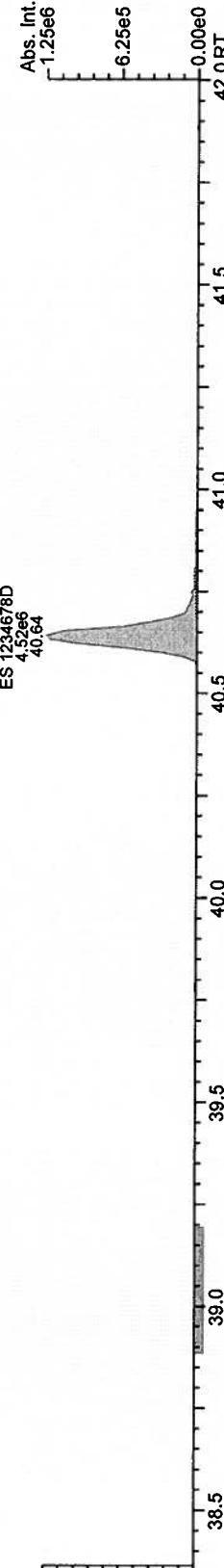
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4σ 3.61e2



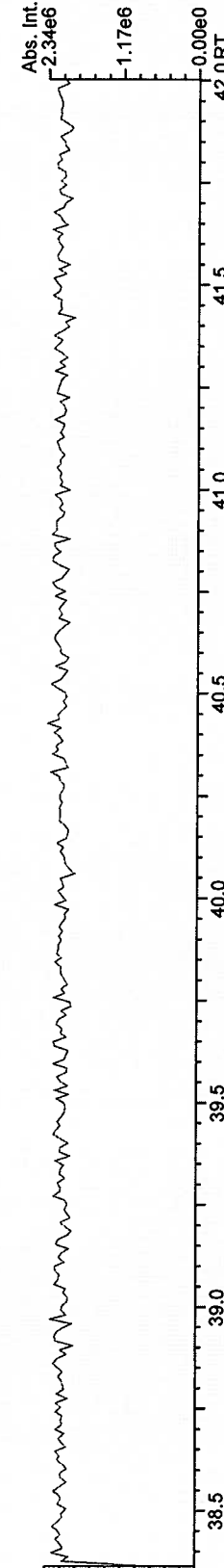
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HpCDD Std.  
38.36-42.00  
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Flags: PB  
4σ 8.02e2



Rel. Int.  
100%  
0%  
HpCDD Std.  
38.36-42.00  
437.8140 Fn4  
Flags: PB  
4σ 8.63e2



Rel. Int.  
100%  
0%  
QC Check  
38.36-42.00  
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Flags: -

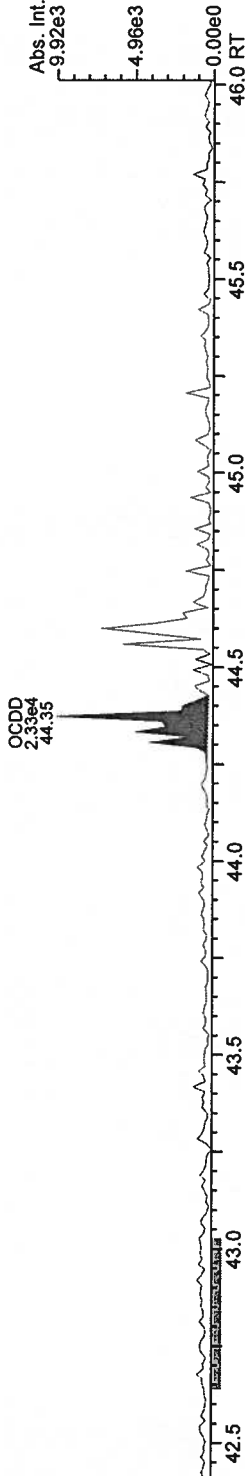


AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

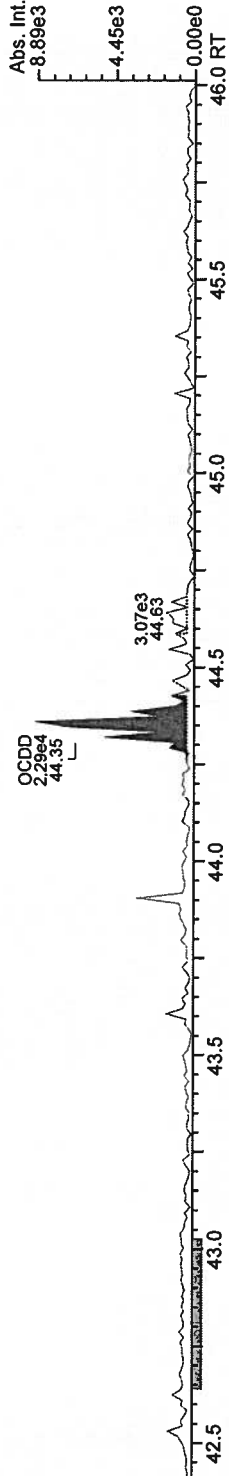
Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07

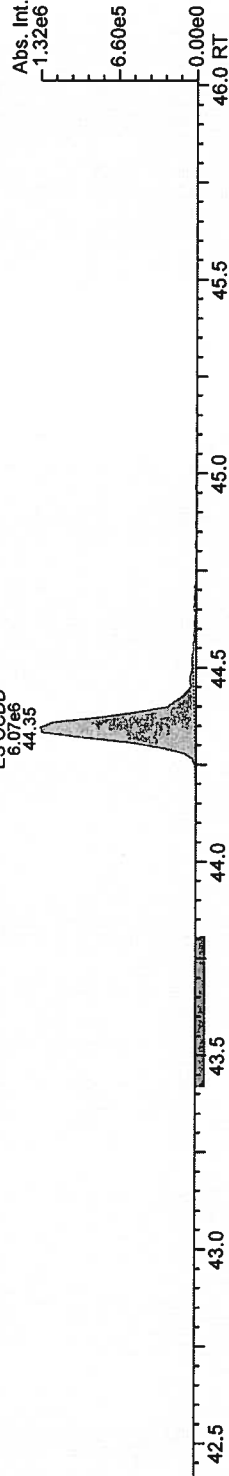
Rel. Int.  
100%  
OCDD  
42.03-46.01  
457.7377 Fn5  
Flags: PB  
4σ 5.36e2



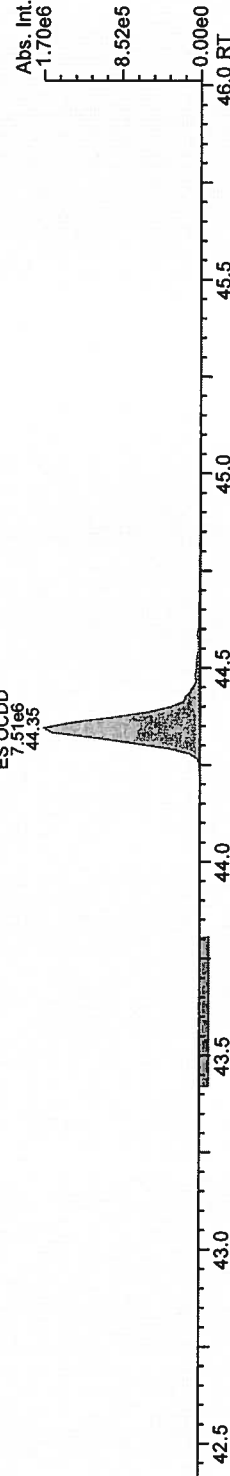
Rel. Int.  
100%  
OCDD  
42.03-46.01  
459.7348 Fn5  
Flags: PB  
4σ 2.89e2



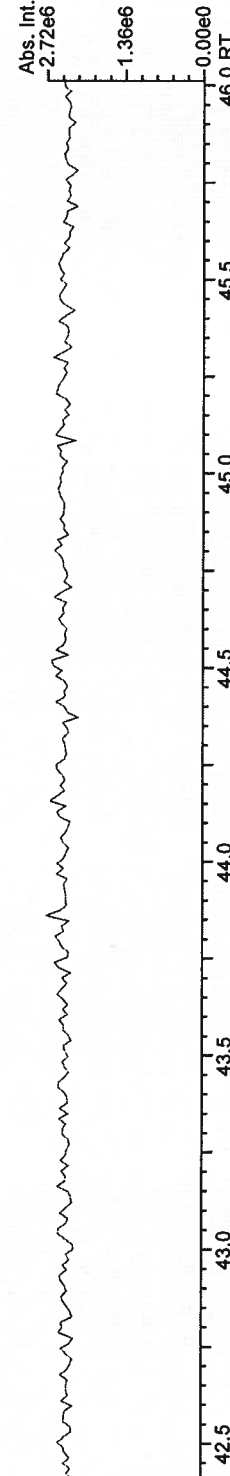
Rel. Int.  
100%  
OCDD Std.  
42.03-46.01  
469.7780 Fn5  
Flags: PB  
4σ 5.56e2



Rel. Int.  
100%  
OCDD Std.  
42.03-46.01  
471.7750 Fn5  
Flags: PB  
4σ 5.86e2



Rel. Int.  
100%  
QC Check  
42.03-46.01  
454.9728 Fn5  
Flags: -

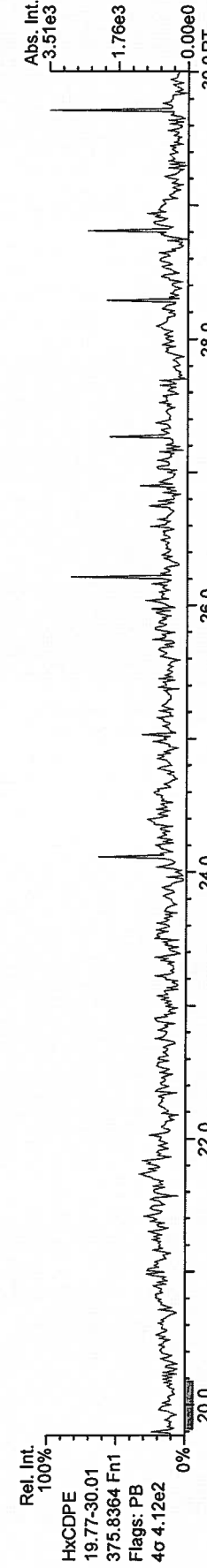
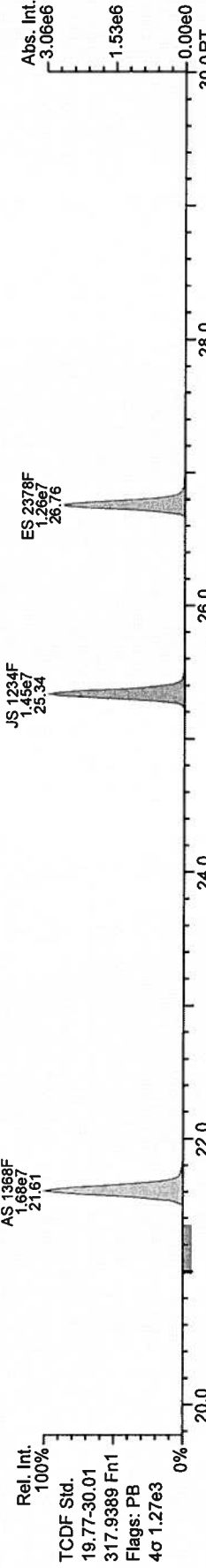
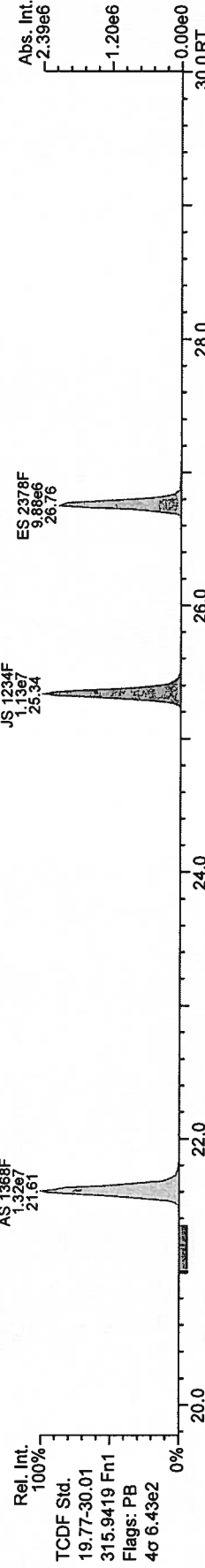
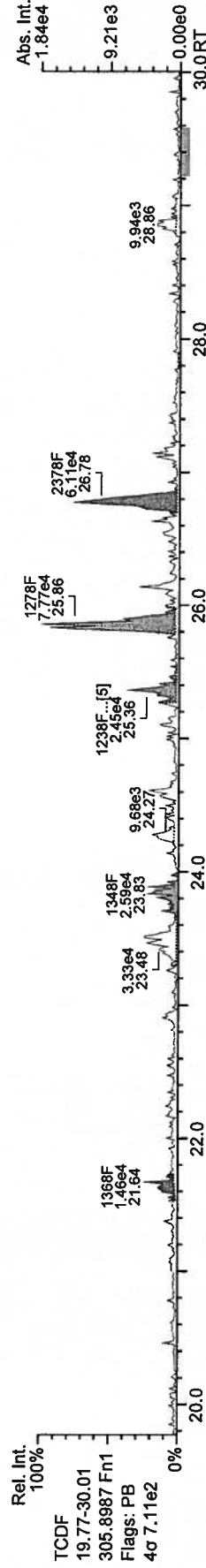
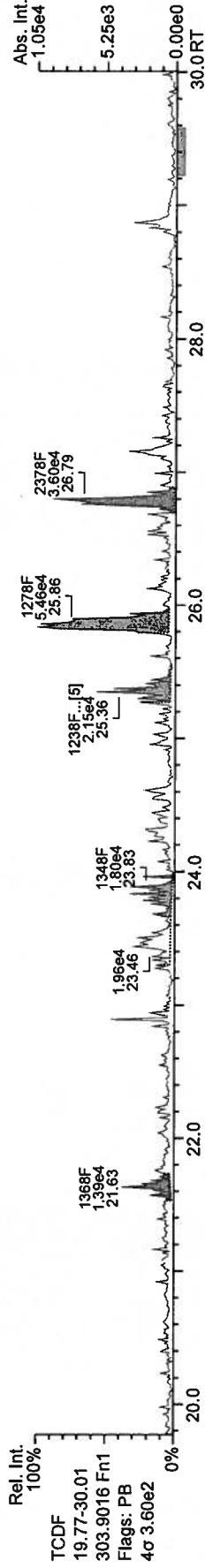




AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

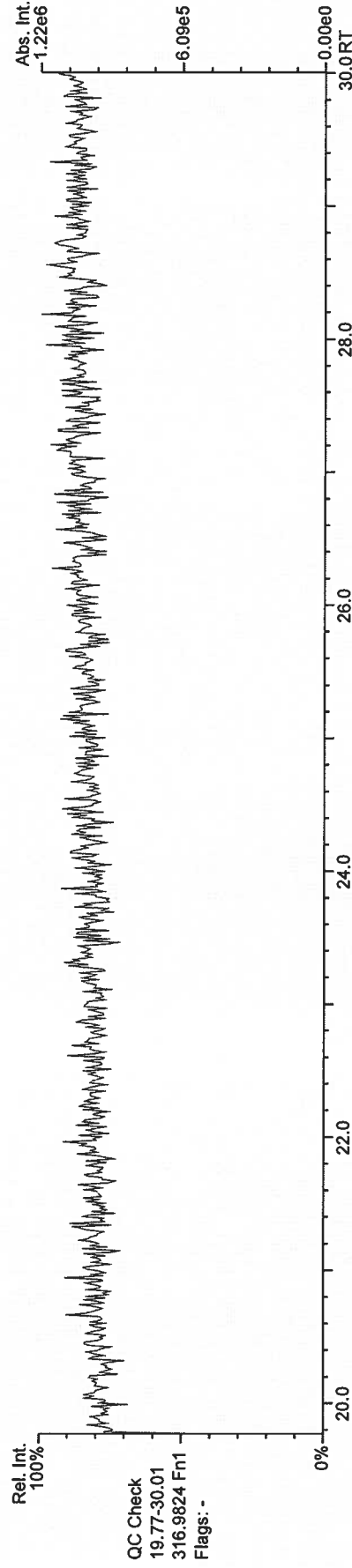
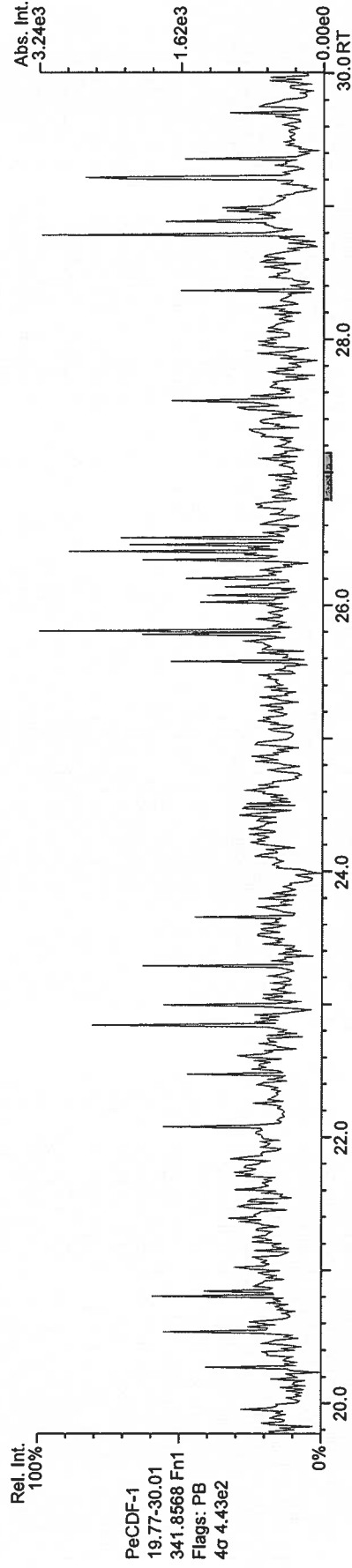
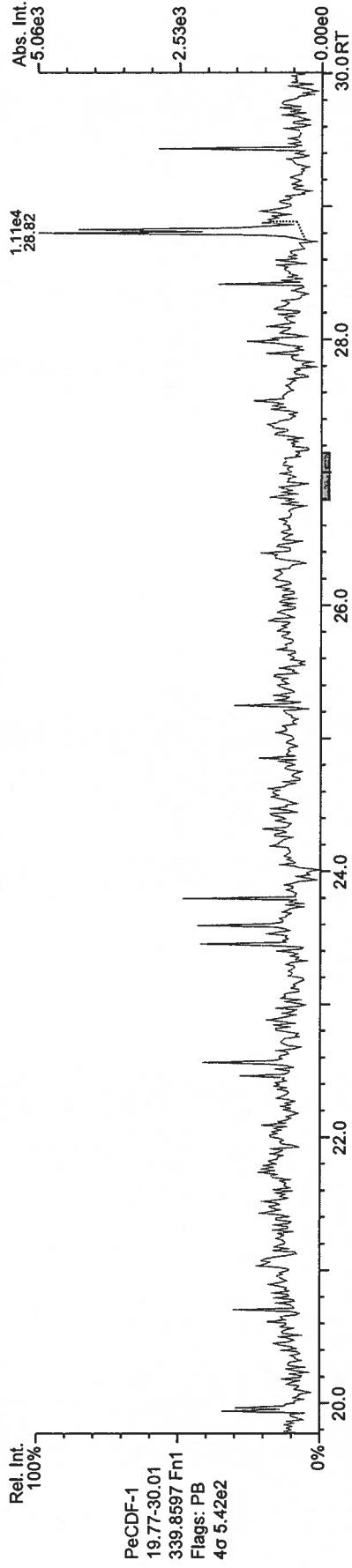
Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

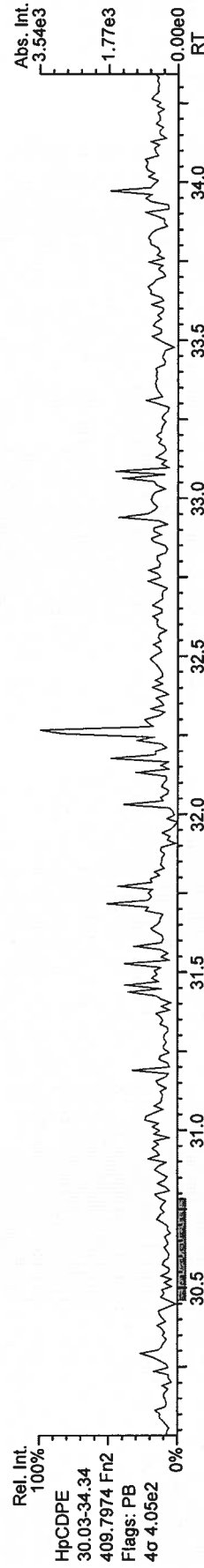
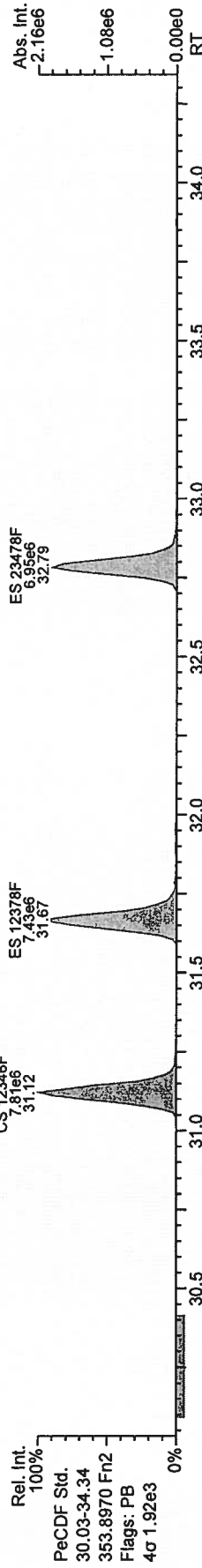
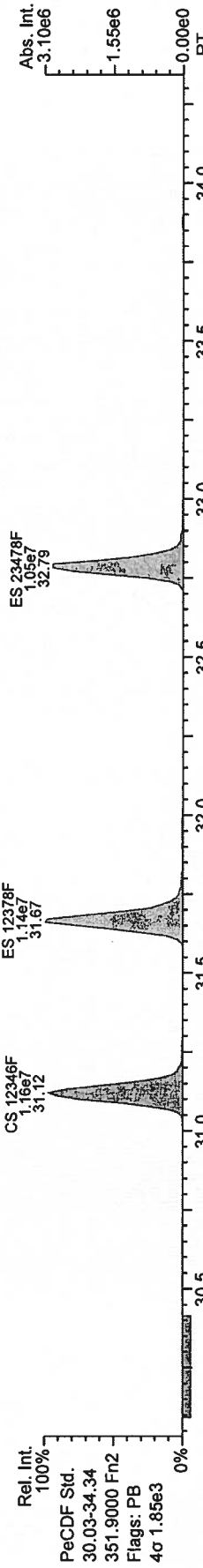
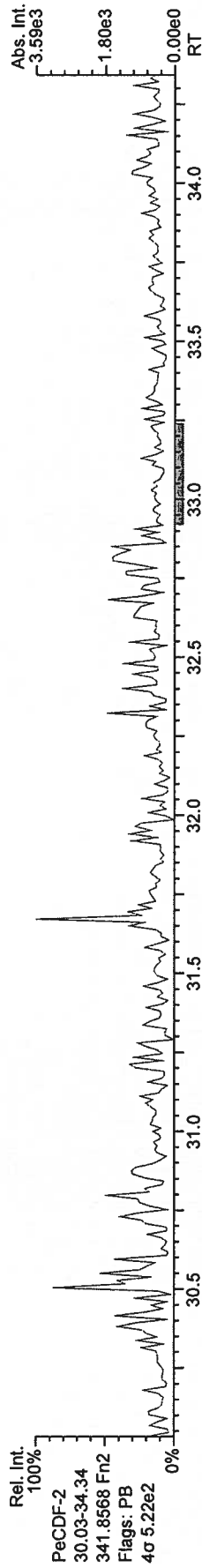
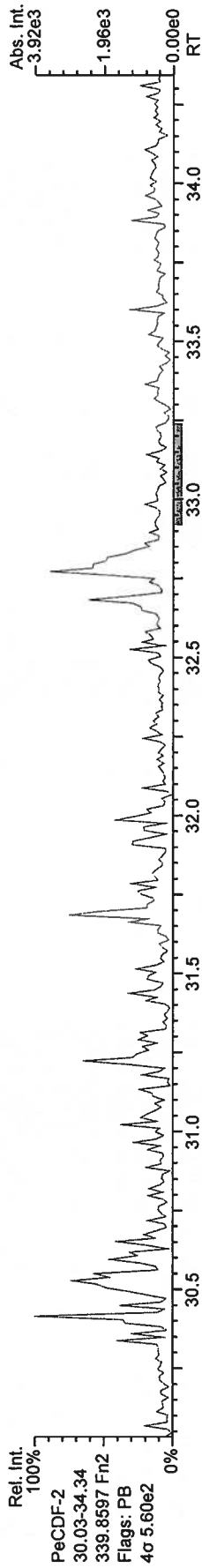
Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

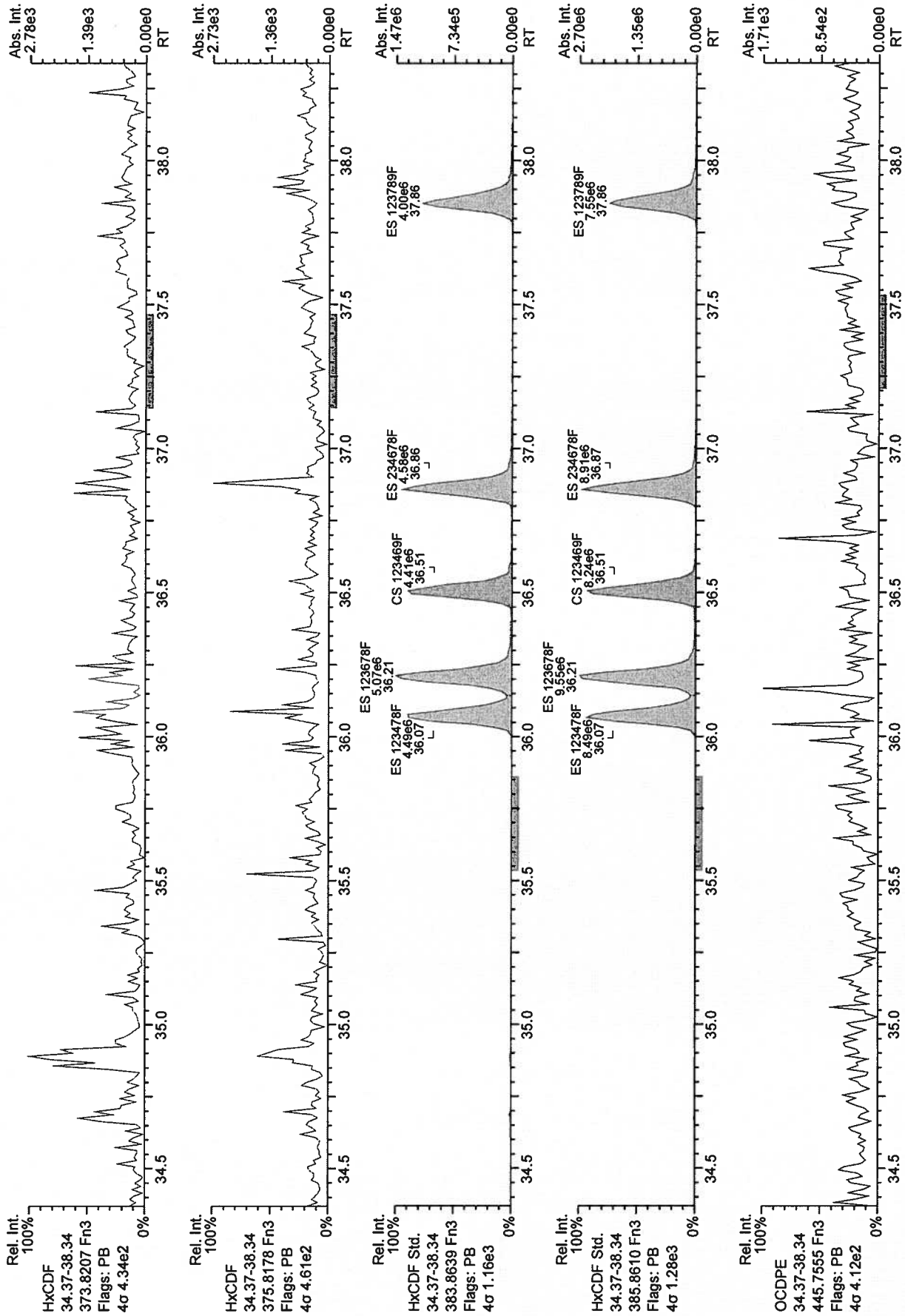
Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

SIR expt: DE\_CL4-8A GC: DB5MS\_60M Vial: 20

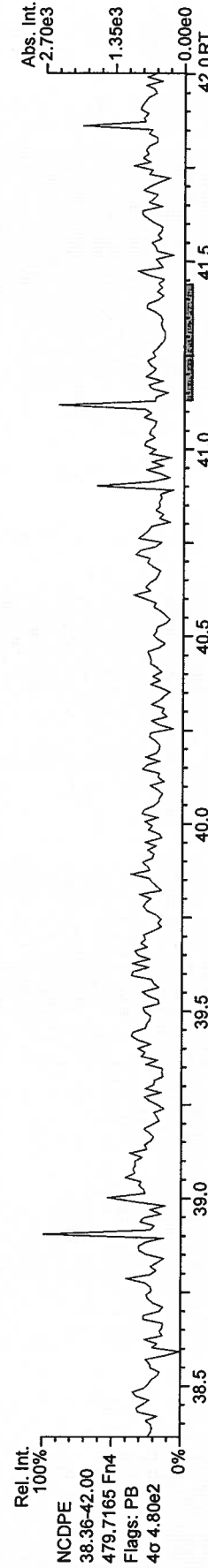
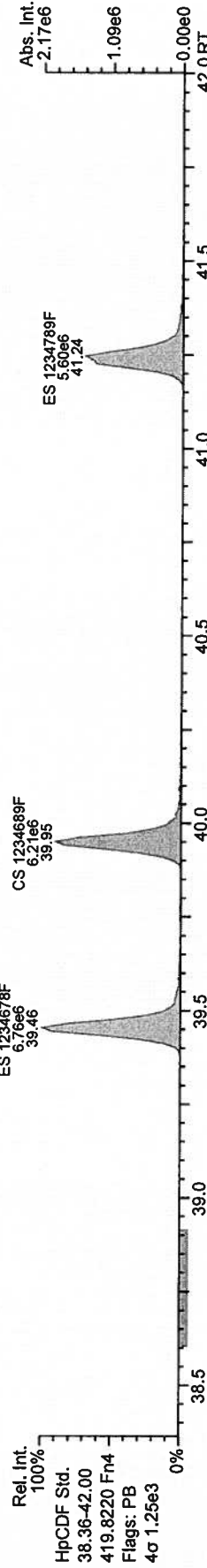
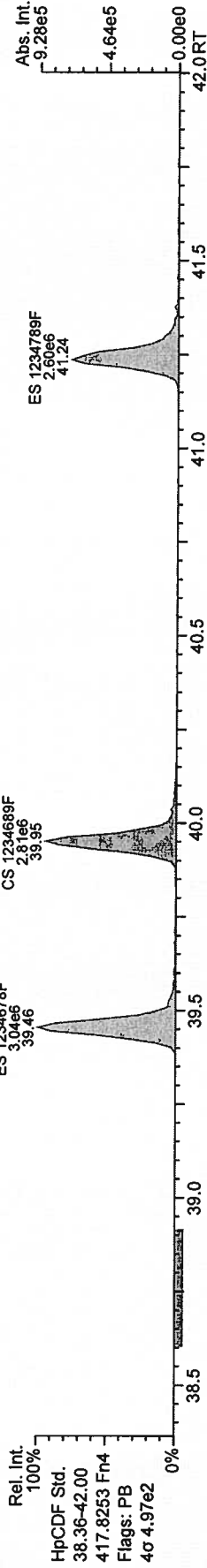
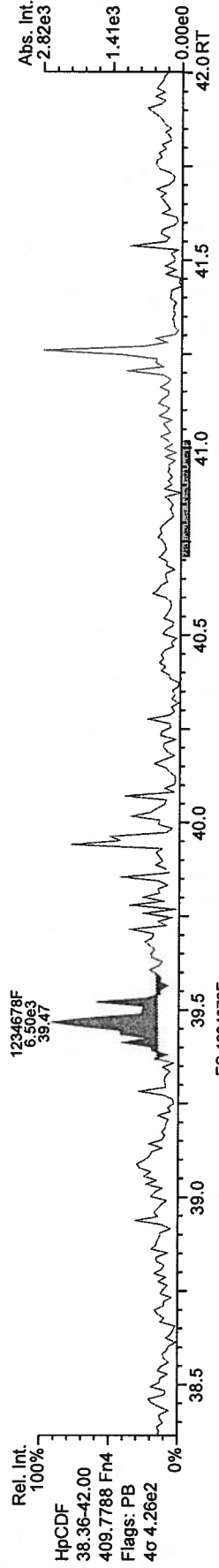
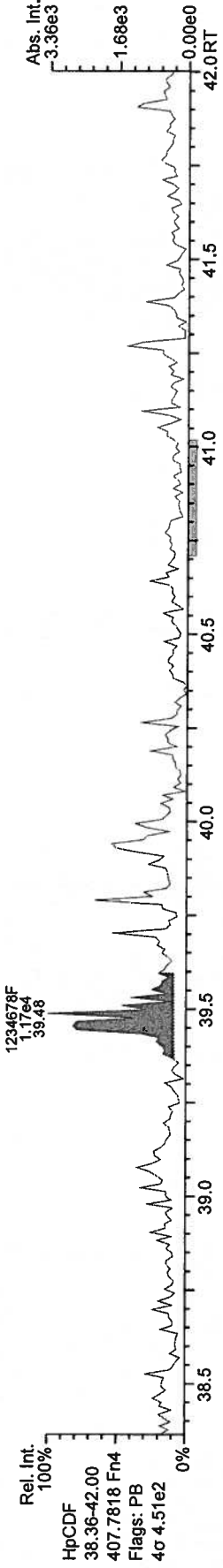
Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



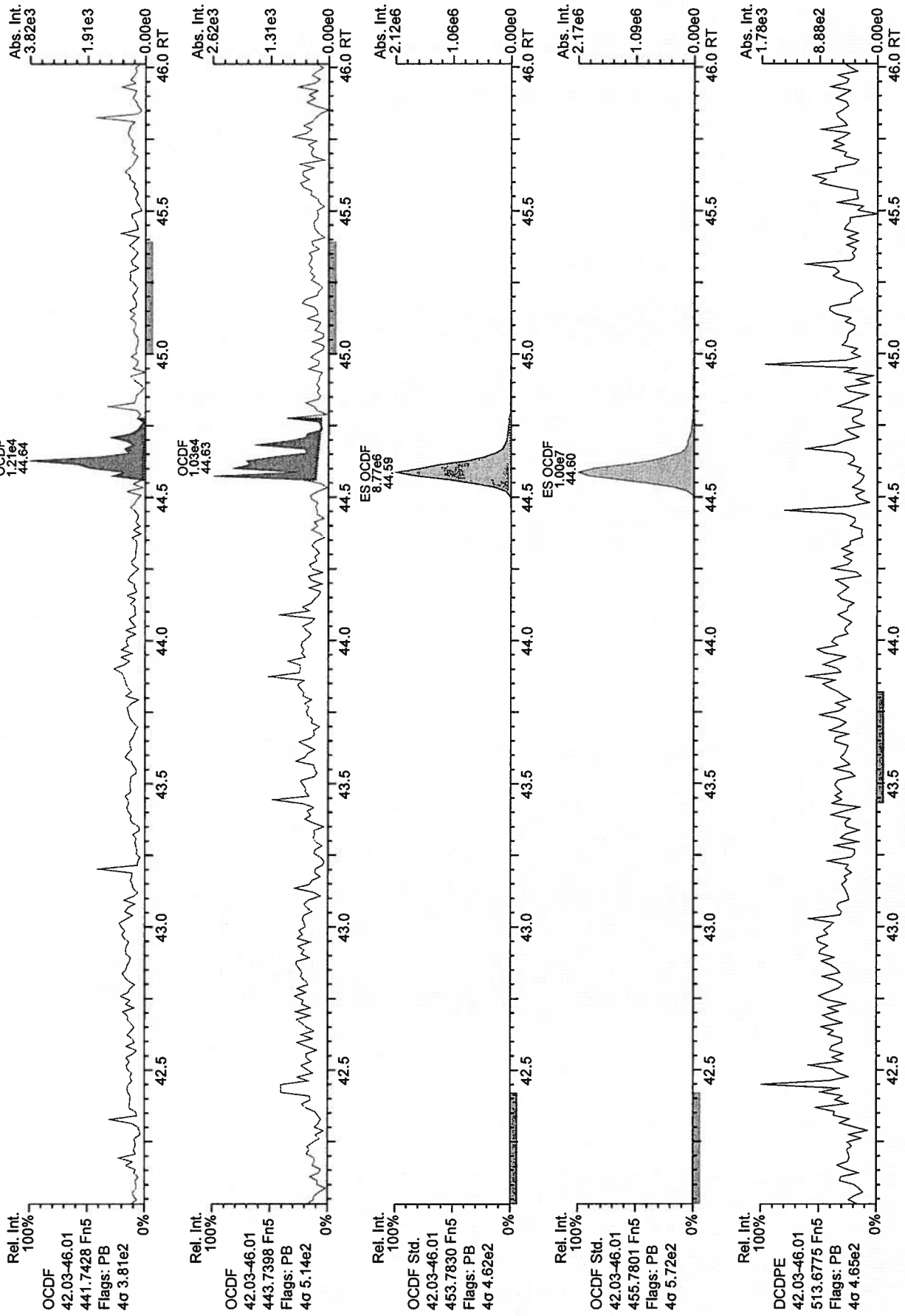
Results: P:\P1900\_P1999P1977P1977\_7528\_DFResources\P1977\_7528\_003.ult.res, saved 03-Feb-2010 08:54 (MC)  
AP UltraTrace-Pro V4.12 User/System: MC/MC17-047 cc: 8747, 5999, 1844 soc: 908-955

Revised: 02-Feb-2010 16:01:24 (MC) Printed: 03-Feb-2010 09:18:39 Page 11 of 12

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 20

Acq: 2-FEB-2010 15:01:55  
User: MC Datafile: 100202P1-07



Lab ID: P1977\_7528\_004

Client ID: SSI #1-R-3

Datafile: 100202P1-08

Acq'd: 02 Feb 2010 15:52 MC

UTP: 03-Feb-2010 08:54 MC

Report: 03 Feb 2010 08:59 MC

Wt/Vol: 1

J-level: 10 pg

ES spike: 4000 pg

Cal: BCS3\_7528\_DE\_PAB

Checksum: 959-761

Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotEnd		1.0008	-		-	-	-	1.06	-	992	2.03
12378-PeCDD	NotEnd		1.0005	-		-	-	-	1.08	-	1041	2.28
123478-HxCDD	NotEnd		1.0004	-		-	-	-	1.14	-	965	2.85
123678-HxCDD	NotEnd		1.0036	-		-	-	-	1.00	-	965	3.01
123789-HxCDD	NotEnd		1.0121	-		-	-	-	0.98	-	965	3.27
1234678-HpCDD	NotEnd		1.0003	-		-	-	-	1.00	-	944	3.72
OCDD	44.34		1.0004	1.0005	+0.3	4.25E+04	1.07	N	1.09	18.7	846	5.21
2378-TCDF	26.80		1.0008	1.0008	0	1.45E+05	0.76	Y	1.11	17.9	828	1.05
12378-PeCDF	NotEnd		1.0006	-		-	-	-	1.06	-	1226	1.72
23478-PeCDF	32.79		1.0005	1.0007	+0.4	1.79E+04	1.15	N	1.10	2.8	1226	1.83
123478-HxCDF	NotEnd		1.0004	-		-	-	-	1.20	-	912	1.71
123678-HxCDF	NotEnd		1.0005	-		-	-	-	1.20	-	912	1.67
234678-HxCDF	NotEnd		1.0004	-		-	-	-	1.17	-	912	1.88
123789-HxCDF	NotEnd		1.0004	-		-	-	-	1.19	-	912	2.33
1234678-HpCDF	39.44		1.0003	1.0003	0	1.41E+04	0.84	N	1.48	3.03	931	2.08
1234789-HpCDF	NotEnd		1.0002	-		-	-	-	1.42	-	931	2.95
OCDF	NotEnd		1.0003	-		-	-	-	1.03	-	833	3.76
Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %			
ES 2378-TCDD	27.66	1.0254	1.0251	-0.5	1.92E+07	0.76	Y	0.96	89.3			
ES 12378-PeCDD	33.11	1.2285	1.2272	-2.1	1.54E+07	1.58	Y	0.74	91.7			
ES 123478-HxCDD	37.02	0.9915	0.9915	0	1.23E+07	1.34	Y	0.84	92.2			
ES 123678-HxCDD	37.13	0.9946	0.9946	0	1.40E+07	1.30	Y	0.97	91			
ES 123789-HxCDD	37.45	1.0031	1.0031	0	1.40E+07	1.29	Y	0.95	92.1			
ES 1234678-HpCDD	40.62	1.0881	1.0880	-0.2	1.15E+07	1.10	Y	0.78	92.2			
ES OCDD	44.32	1.1872	1.1870	-0.4	1.68E+07	0.86	Y	0.63	83.4			
ES 2378-TCDF	26.77	1.0560	1.0552	-1.2	2.92E+07	0.78	Y	0.98	98.1			
ES 12378-PeCDF	31.65	1.2497	1.2474	-3.5	2.43E+07	1.53	Y	0.85	93.8			
ES 23478-PeCDF	32.77	1.2939	1.2915	-3.7	2.31E+07	1.55	Y	0.80	94.8			
ES 123478-HxCDF	36.06	0.9656	0.9657	+0.2	1.63E+07	0.54	Y	1.13	90			
ES 123678-HxCDF	36.19	0.9694	0.9694	0	1.89E+07	0.52	Y	1.23	95.8			
ES 234678-HxCDF	36.84	0.9869	0.9868	-0.2	1.69E+07	0.54	Y	1.18	89.5			
ES 123789-HxCDF	37.84	1.0134	1.0135	+0.2	1.46E+07	0.53	Y	1.07	85.1			
ES 1234678-HpCDF	39.43	1.0563	1.0562	-0.2	1.26E+07	0.48	Y	0.86	91.8			
ES 1234789-HpCDF	41.22	1.1043	1.1041	-0.4	1.01E+07	0.47	Y	0.71	89.4			
ES OCDF	44.56	1.1938	1.1936	-0.4	2.23E+07	0.91	Y	0.86	81.1			

Lab ID: P1977\_7528\_004  
Client ID: SSI #1-R-3  
Datafile: 100202P1-08

Acq'd: 02 Feb 2010 15:52 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:59 MC

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 959-761  
Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.98	-	-	-	-	2.25E+07	0.77	Y	-	-
JS 1234-TCDF	25.37	-	-	-	-	3.04E+07	0.79	Y	-	-
JS 123467-HxCDD	37.33	-	-	-	-	8.00E+06	1.26	Y	-	-
CS 37C1-2378-TCDD	27.68	1.0262	1.0259	-0.5	7.75E+06	n/a	-	1.01	85	
CS 12347-PeCDD	32.60	1.2096	1.2083	-2.1	1.46E+07	1.67	Y	0.70	93.6	
CS 12346-PeCDF	31.11	1.2281	1.2259	-3.3	2.44E+07	1.51	Y	0.86	93.5	
CS 123469-HxCDF	36.49	0.9773	0.9774	+0.2	1.53E+07	0.55	Y	1.06	90.5	
CS 1234689-HpCDF	39.93	1.0695	1.0695	0	1.10E+07	0.47	Y	0.75	92	
SS 37C1-2378-TCDD	27.68	1.0262	1.0259	-0.5	7.75E+06	n/a	-	1.06	95.2	
SS 12347-PeCDD	32.60	1.2096	1.2083	-2.1	1.46E+07	1.67	Y	0.93	102	
SS 12346-PeCDF	31.11	1.2281	1.2259	-3.3	2.44E+07	1.51	Y	1.01	99.7	
SS 123469-HxCDF	36.49	0.9773	0.9774	+0.2	1.53E+07	0.55	Y	0.86	94.5	
SS 1234689-HpCDF	39.93	1.0695	1.0695	0	1.10E+07	0.47	Y	0.87	100	
AS 1368-TCDD	23.88	0.8836	0.8850	+2.3	2.19E+07	0.77	Y	1.01	96.8	
AS 1368-TCDF	21.70	0.8527	0.8552	+3.8	3.63E+07	0.78	Y	1.23	97.2	
FS 1278-TCDD	NotFnd	1.0120								
FS 12478-PeCDD	NotFnd	0.9628								
FS 123468-HxCDD	NotFnd	0.9717								
FS 1234679-HpCDD	NotFnd	0.9784								
TS 1378-TCDD	NotFnd	0.9391								

Totals	Conc	EMPC
Total TCDD	0	6.39
Total PeCDD	0	0
Total HxCDD	3.46	8.94
Total HpCDD	0	0
Total Tetra-Octa Dioxins	3.46	34
Total TCDF	47.4	47.4
Total PeCDF	0	2.8
Total HxCDF	0	0
Total HpCDF	0	3.03
Total Tetra-Octa Furans	47.4	53.2
Total Tetra-Octa Dioxins & Furans	50.8	87.2



Lab ID: P1977\_7528\_004      Acq'd: 02 Feb 2010 15:52 MC      Wt/Vol: 1      Cal: BCS3\_7528\_DF\_PAB  
Client ID: SSI #1-R-3      UTP: 03-Feb-2010 08:54 MC      J-level: 10 pg      Checkcode: 959-761  
Datafile: 100202P1-08      Report: 03 Feb 2010 08:59 MC      ES spike: 4000 pg      Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.92		0.8628	0.8649	+3.5	3.24E+04	0.91	N	1.06	6.39	992	2.03
1379-TCDD	NotEnd		0.8792						1.06		992	2.03
1369-TCDD	NotEnd		0.8950						1.06		992	2.03
1469-TCDD	NotEnd		0.9239						1.06		992	2.03
1247/1246/1248/1249-TCDD	NotEnd		0.9326						1.06		992	2.03
1378-TCDD	NotEnd		0.9400						1.06		992	2.03
1268-TCDD	NotEnd		0.9472						1.06		992	2.03
1478-TCDD	NotEnd		0.9564						1.06		992	2.03
1279-TCDD	NotEnd		0.9628						1.06		992	2.03
1234/1269-TCDD	NotEnd		0.9758						1.06		992	2.03
1236-TCDD	NotEnd		0.9807						1.06		992	2.03
1237/1238-TCDD	NotEnd		0.9899						1.06		992	2.03
1239-TCDD	NotEnd		0.9949						1.06		992	2.03
2378-TCDD	NotEnd		1.0008						1.06		992	2.03
1278-TCDD	NotEnd		1.0129						1.06		992	2.03
1267-TCDD	NotEnd		1.0176						1.06		992	2.03
1289-TCDD	NotEnd		1.0371						1.06		992	2.03
12479/12468-PeCDD	NotEnd		0.9239						1.08		1041	2.28
12469-PeCDD	NotEnd		0.9408						1.08		1041	2.28
12368-PeCDD	NotEnd		0.9576						1.08		1041	2.28
12478-PeCDD	NotEnd		0.9633						1.08		1041	2.28
12379-PeCDD	NotEnd		0.9665						1.08		1041	2.28
12369/12467/12489-PeCDD	NotEnd		0.9742						1.08		1041	2.28
12346/12347-PeCDD	NotEnd		0.9854						1.08		1041	2.28
12378-PeCDD	NotEnd		1.0005						1.08		1041	2.28
12367-PeCDD	NotEnd		1.0032						1.08		1041	2.28
12389-PeCDD	NotEnd		1.0140						1.08		1041	2.28
124679/124689-HxCDD	35.31		0.9544	0.9539	-1.1	1.20E+04	1.42	Y	1.04	3.46	965	3.03
123468-HxCDD	35.98		0.9721	0.9719	-0.4	1.91E+04	1.48	N	1.04	5.48	965	3.03
123679/123689-HxCDD	NotEnd		0.9798						1.04		965	3.03
123469-HxCDD	NotEnd		0.9833						1.04		965	3.03
123478-HxCDD	NotEnd		1.0004						1.14		965	2.85
123678-HxCDD	NotEnd		1.0036						1.00		965	3.01
123467-HxCDD	NotEnd		1.0089						1.04		965	3.03
123789-HxCDD	NotEnd		1.0121						0.98		965	3.27

Lab ID: P1977\_7528\_004  
Client ID: SSI #1-R-3  
Datafile: 100202P1-08

Acq'd: 02 Feb 2010 15:52 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:59 MC

Wt/Vol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 959-761  
Split: 2

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotEnd		0.9789						1.00		944	3.72
1234678-HpCDD	NotEnd		1.0003						1.00		944	3.72
OCDD	44.34		1.0004	1.0005	+0.3	4.25E+04	1.07	N	1.09	18.7	846	5.21
OCDD-a	NotEnd		1.0004						0.06		918	96.7
1368-TCDF	NotEnd		0.8086						1.11		828	1.05
1468-TCDF	NotEnd		0.8345						1.11		828	1.05
2468-TCDF	NotEnd		0.8560						1.11		828	1.05
1346/1246-TCDF	NotEnd		0.8731						1.11		828	1.05
1347/1378/1247-TCDF	NotEnd		0.8791						1.11		828	1.05
1348-TCDF	NotEnd		0.8894						1.11		828	1.05
1248/1367/1379-TCDF	NotEnd		0.8943						1.11		828	1.05
1268-TCDF	NotEnd		0.9092						1.11		828	1.05
1467-TCDF	NotEnd		0.9142						1.11		828	1.05
1478-TCDF	NotEnd		0.9207						1.11		828	1.05
1369/1237-TCDF	NotEnd		0.9349						1.11		828	1.05
2467-TCDF	NotEnd		0.9398						1.11		828	1.05
2368-TCDF	NotEnd		0.9454						1.11		828	1.05
1238/1234/1678/1469/1236-TCDF	25.41		0.9481	0.9490	+1.4	4.20E+04	0.75	Y	1.11	5.17	828	1.05
1278-TCDF	25.88		0.9669	0.9667	-0.3	1.98E+05	0.71	Y	1.11	24.3	828	1.05
1349-TCDF	NotEnd		0.9708						1.11		828	1.05
1267-TCDF	NotEnd		0.9772						1.11		828	1.05
2346/1249-TCDF	NotEnd		0.9845						1.11		828	1.05
2347/1279-TCDF	NotEnd		0.9925						1.11		828	1.05
2348-TCDF	NotEnd		0.9964						1.11		828	1.05
2378-TCDF	26.80		1.0008	1.0008	0	1.45E+05	0.76	Y	1.11	17.9	828	1.05
2367/3467-TCDF	NotEnd		1.0147						1.11		828	1.05
1269-TCDF	NotEnd		1.0237						1.11		828	1.05
1239-TCDF	NotEnd		1.0338						1.11		828	1.05
1289-TCDF	NotEnd		1.0782						1.11		828	1.05
13468/12468-PeCDF	NotEnd		0.9093						1.08		983	1.42
13678/13467/12467-PeCDF	NotEnd		0.9597						1.08		1226	1.77
12368/13478/12478-PeCDF	NotEnd		0.9636						1.08		1226	1.77
14678-PeCDF	NotEnd		0.9678						1.08		1226	1.77
13479-PeCDF	NotEnd		0.9708						1.08		1226	1.77
13469/12479-PeCDF	NotEnd		0.9788						1.08		1226	1.77
12346-PeCDF	NotEnd		0.9834						1.08		1226	1.77

Lab ID: P1977\_7528\_004  
Client ID: SSI #1-R-3  
Datafile: 100202P1-08

Acq'd: 02 Feb 2010 15:52 MC  
UTP: 03-Feb-2010 08:54 MC  
Report: 03 Feb 2010 08:59 MC

WVVol: 1  
J-level: 10 pg  
ES spike: 4000 pg

Cal: BCS3\_7528\_DF\_PAB  
Checkcode: 959-761  
Split: 2

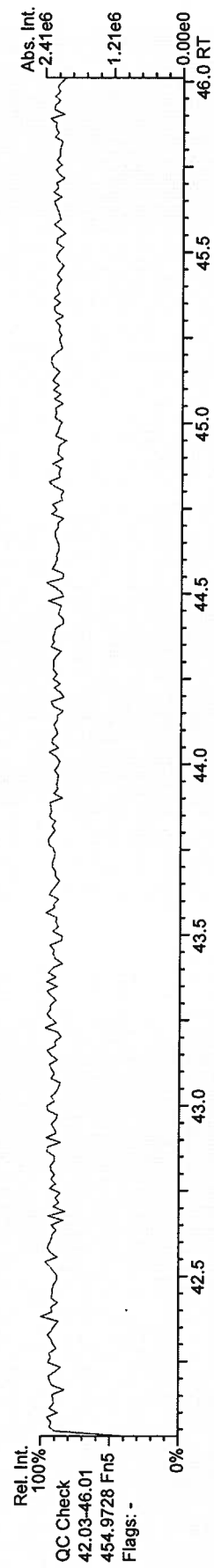
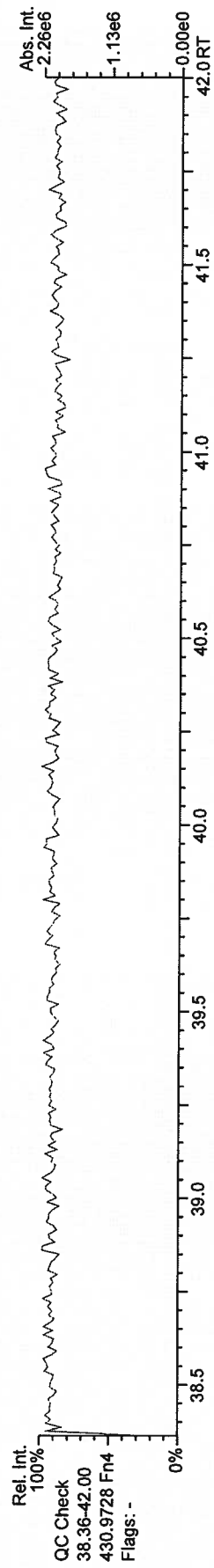
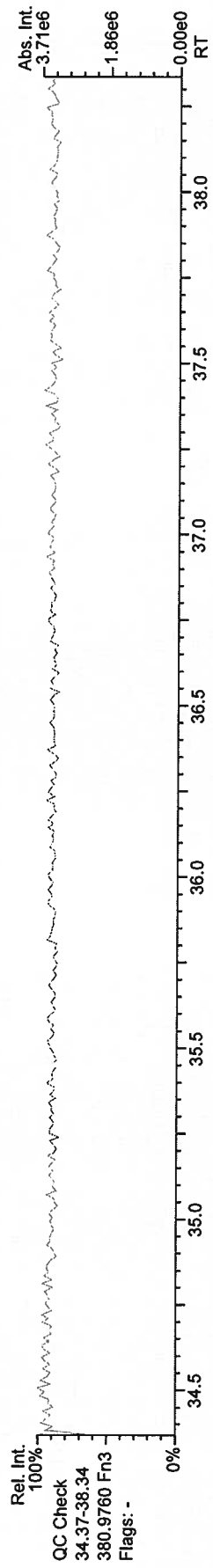
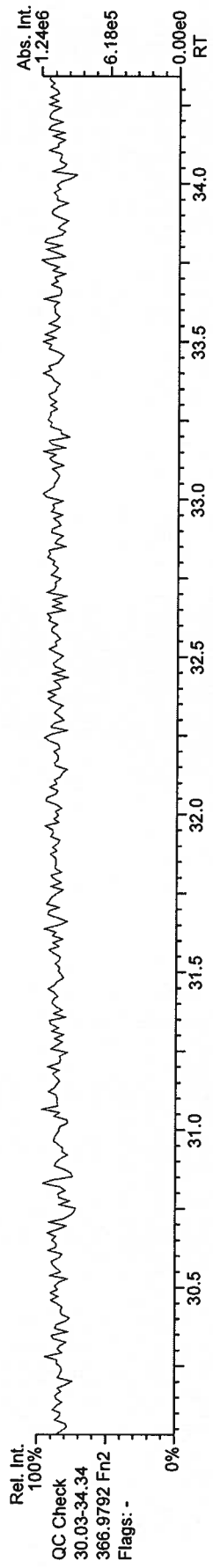
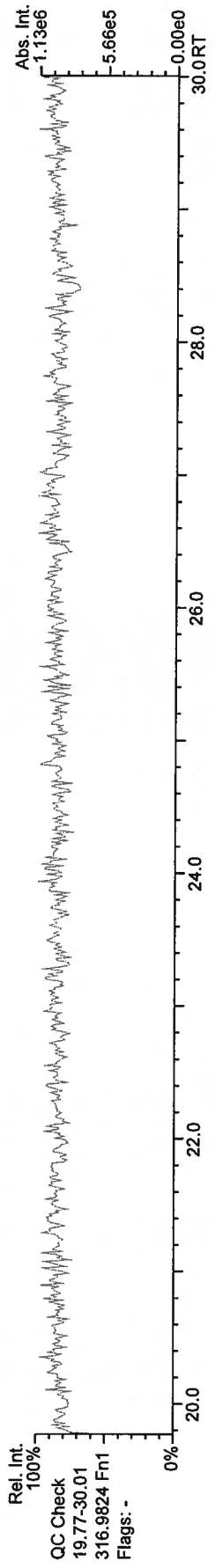
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23468/12469-PeCDF	NotEnd		0.9862						1.08		1226	1.77
12347-PeCDF	NotEnd		0.9887						1.08		1226	1.77
12348-PeCDF	NotEnd		0.9936						1.08		1226	1.77
12378-PeCDF	NotEnd		1.0006						1.06		1226	1.72
12678/12367-PeCDF	NotEnd		1.0098						1.08		1226	1.77
12379-PeCDF	NotEnd		1.0145						1.08		1226	1.77
12679-PeCDF	NotEnd		0.9927						1.08		1226	1.77
23467/12369-PeCDF	NotEnd		0.9967						1.08		1226	1.77
23478-PeCDF	32.79		1.0005	1.0007	+0.4	1.79E+04	1.15	N	1.10	2.8	1226	1.83
23478/12489-PeCDF	NotEnd		1.0006						1.10		1226	1.83
12489-PeCDF	NotEnd		1.0023						1.08		1226	1.77
12349-PeCDF	NotEnd		1.0103						1.08		1226	1.77
12389-PeCDF	NotEnd		1.0336						1.08		1226	1.77
123468-HxCDF	NotEnd		0.9619						1.19		912	1.88
124678/134678-HxCDF	NotEnd		0.9675						1.19		912	1.88
134679-HxCDF	NotEnd		0.9741						1.19		912	1.88
124679-HxCDF	NotEnd		0.9793						1.19		912	1.88
124689-HxCDF	NotEnd		0.9855						1.19		912	1.88
123467-HxCDF	NotEnd		0.9972						1.19		912	1.88
123478-HxCDF	NotEnd		1.0004						1.20		912	1.71
123678-HxCDF	NotEnd		1.0005						1.20		912	1.67
123479-HxCDF	NotEnd		1.0047						1.19		912	1.88
123469-HxCDF	NotEnd		1.0087						1.19		912	1.88
123679-HxCDF	NotEnd		0.9944						1.19		912	1.88
234678-HxCDF	NotEnd		1.0004						1.17		912	1.88
234678/123689-HxCDF	NotEnd		1.0004						1.17		912	1.88
123689-HxCDF	NotEnd		1.0009						1.19		912	1.88
123789-HxCDF	NotEnd		1.0004						1.19		912	2.33
123789/123489-HxCDF	NotEnd		1.0010						1.19		912	2.33
123489-HxCDF	NotEnd		1.0017						1.19		912	1.88
1234678-HpCDF	39.44		1.0003	1.0003	0	1.41E+04	0.84	N	1.48	3.03	931	2.08
1234679-HpCDF	NotEnd		1.0085						1.45		931	2.47
1234689-HpCDF	NotEnd		1.0128						1.45		931	2.47
1234789-HpCDF	NotEnd		1.0002						1.42		931	2.95
OCDF	NotEnd		1.0003						1.03		833	3.76
OCDF-a	NotEnd		1.0003						0.06		1002	83.3

Analytical Perspectives

AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

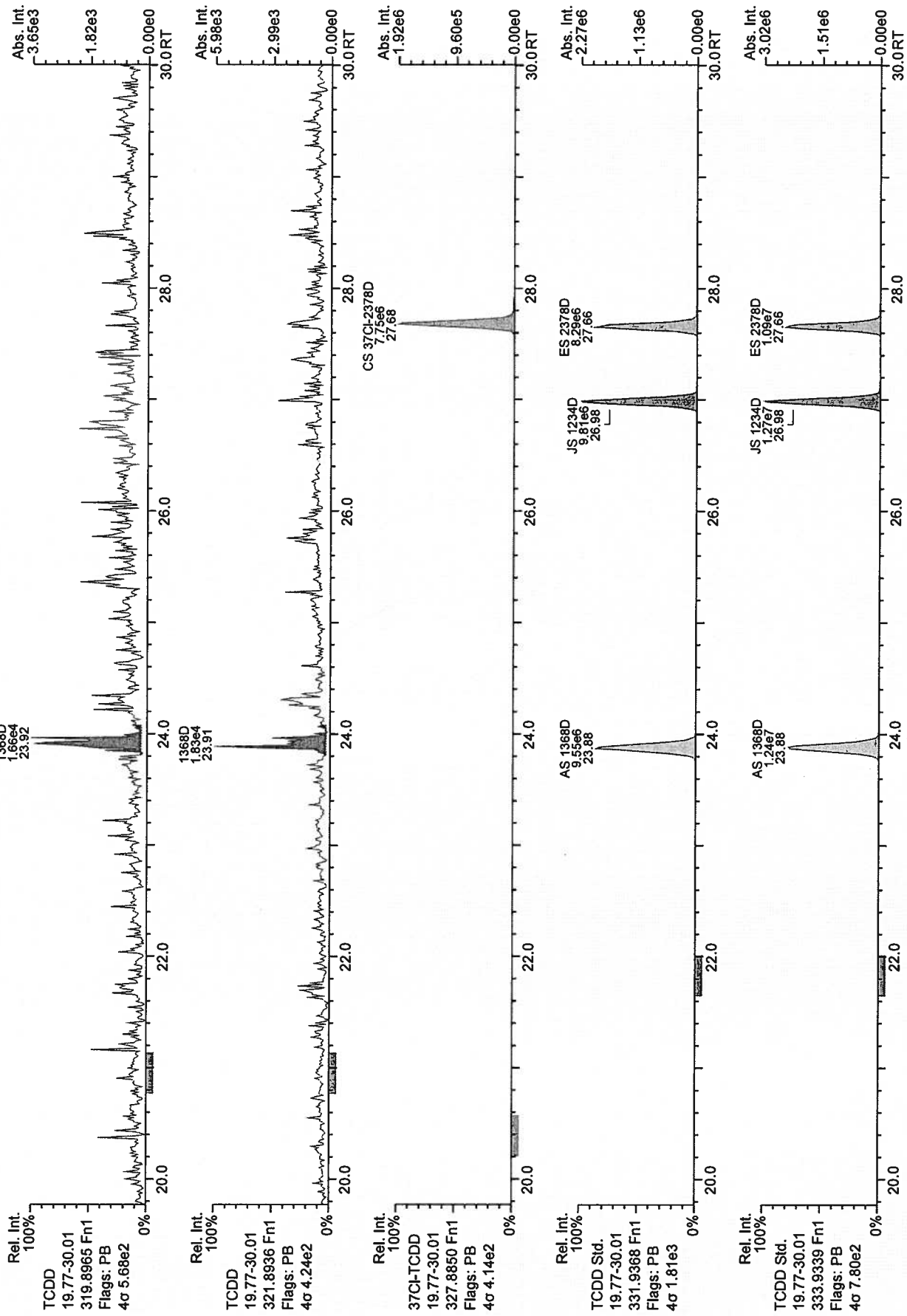
Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08

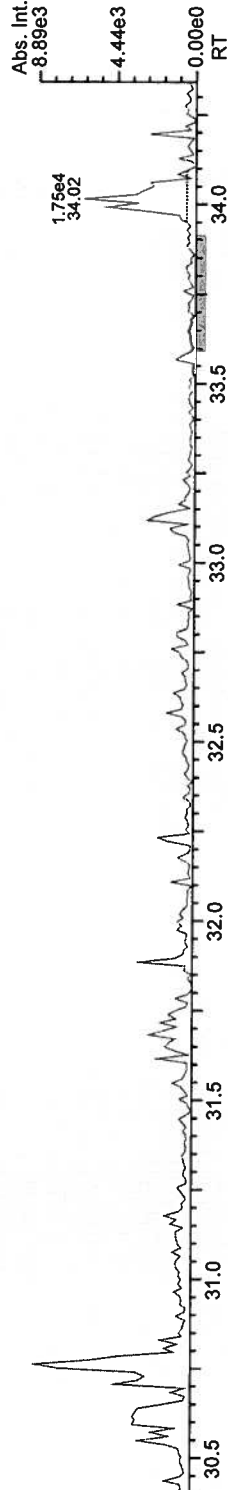


AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

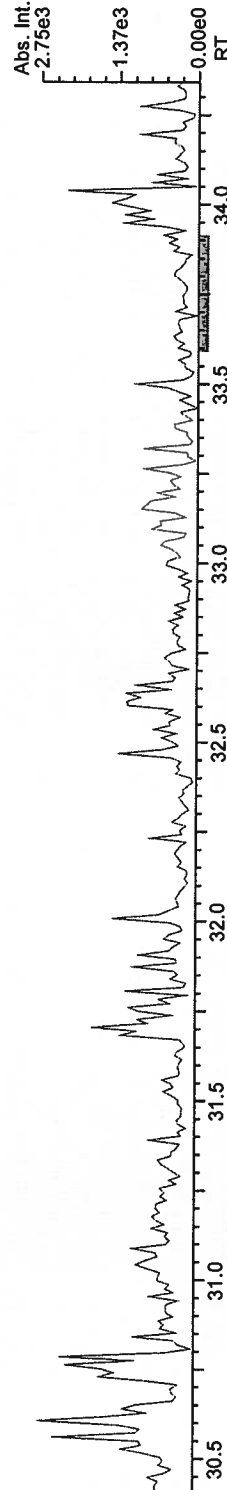
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SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08

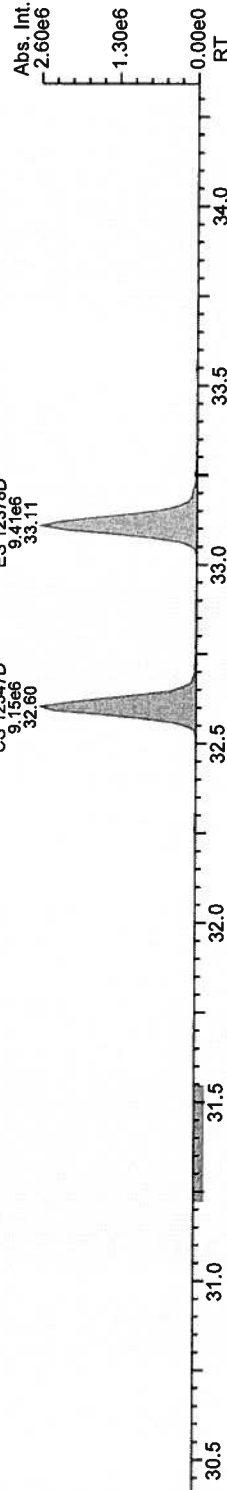
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4σ 5.57e2



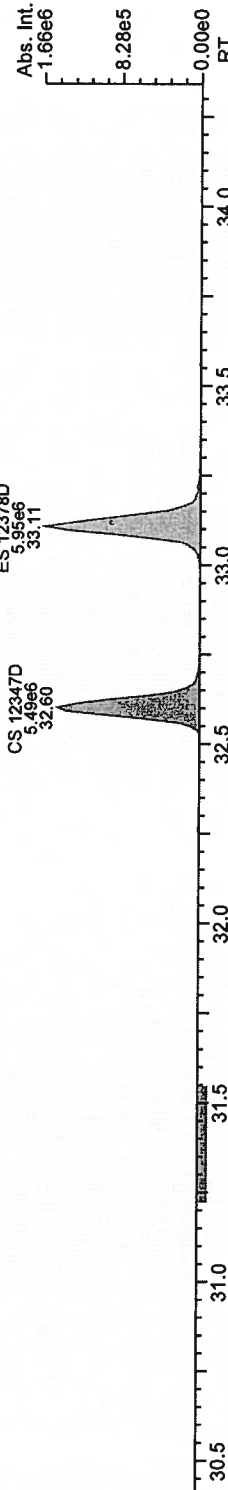
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4σ 4.84e2



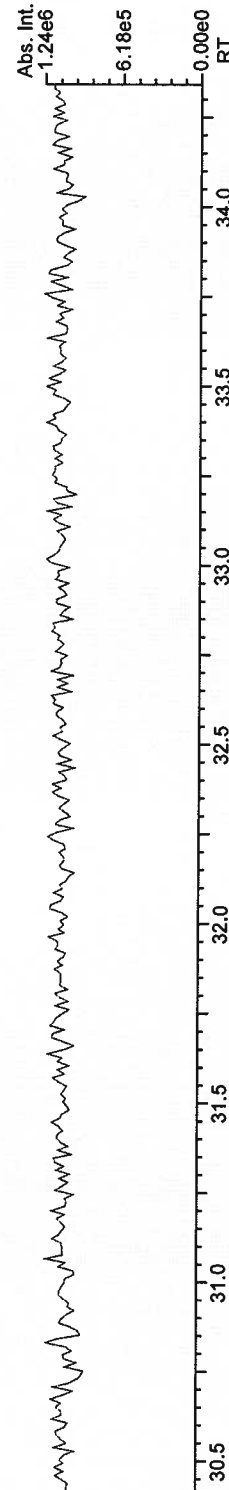
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Flags: PB  
4σ 7.46e2



Rel. Int.  
100%  
0%  
PeCDD Std.  
30.03-34.34  
369.8919 Fn2  
Flags: PB  
4σ 1.07e3



Rel. Int.  
100%  
0%  
QC Check  
30.03-34.34  
366.9792 Fn2  
Flags: -



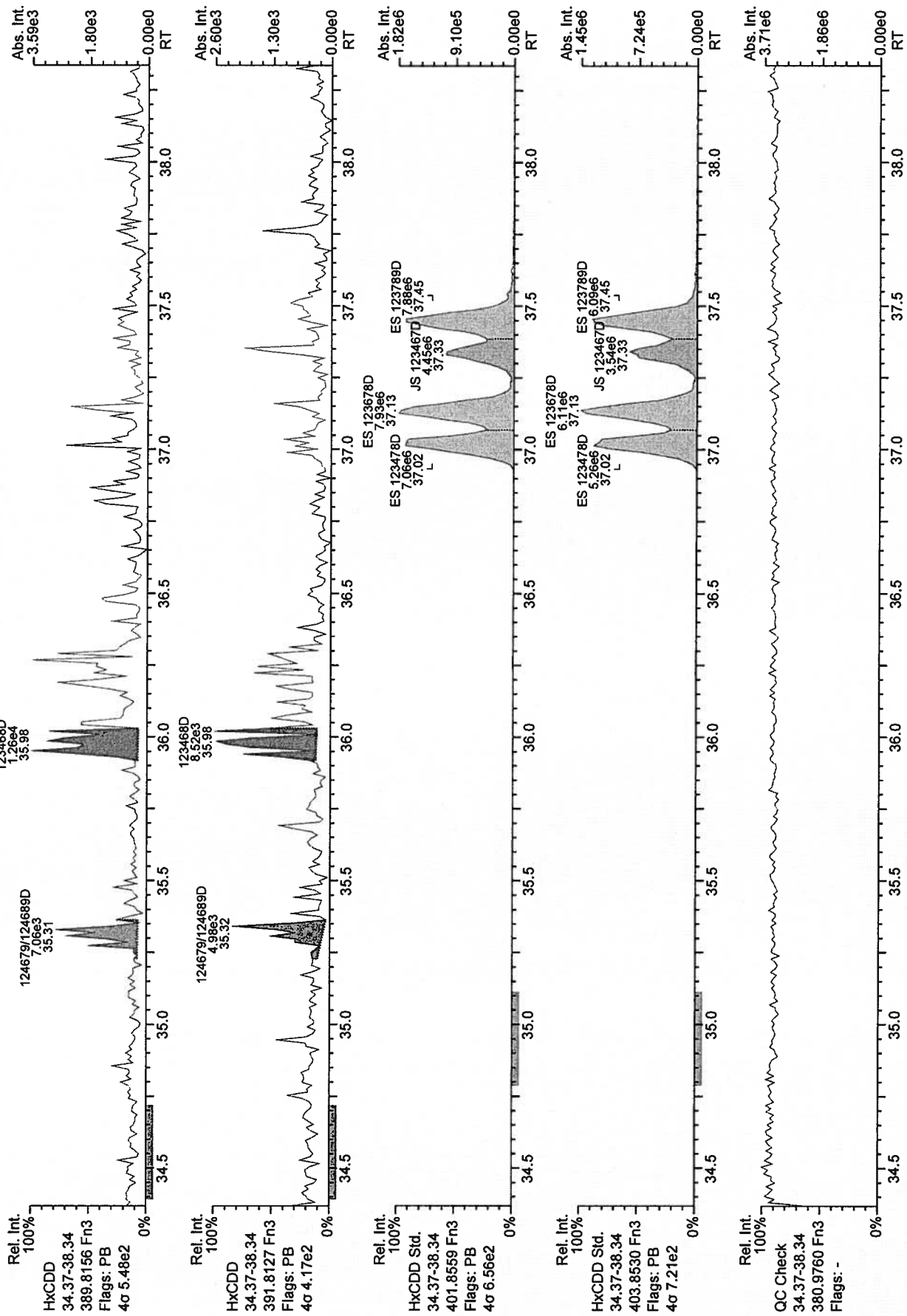
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AP UltraTrace-Pro V4.12 User\System: MCMCI7-047 cc: 9172, 7063 scc: 959-761

Revised: 02-Feb-2010 16:54:16 (MC) Printed: 03-Feb-2010 09:19:11 Page 3 of 12

AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

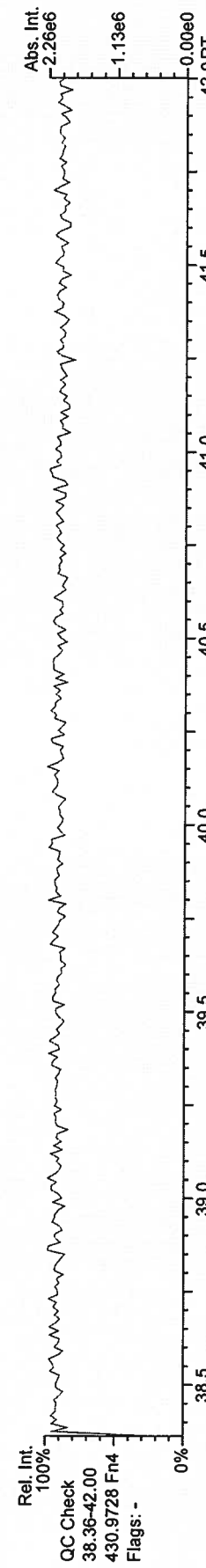
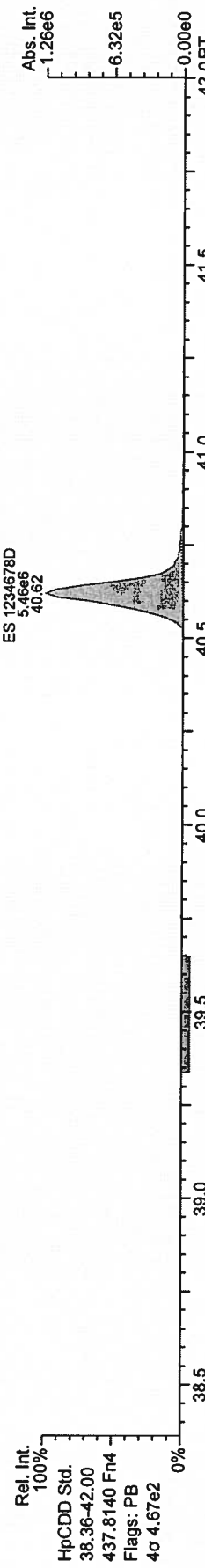
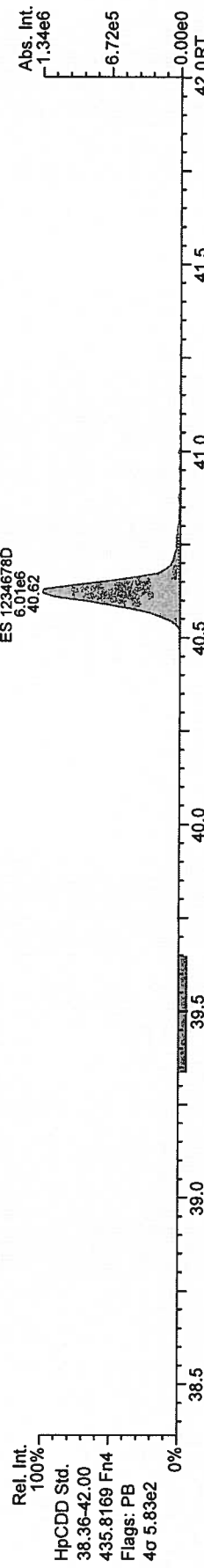
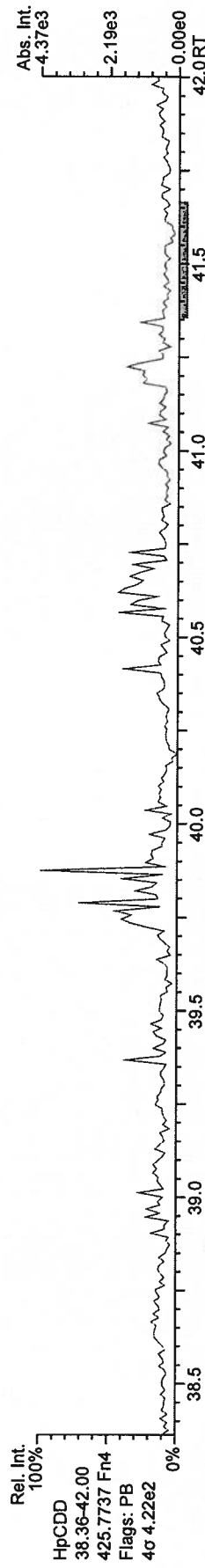
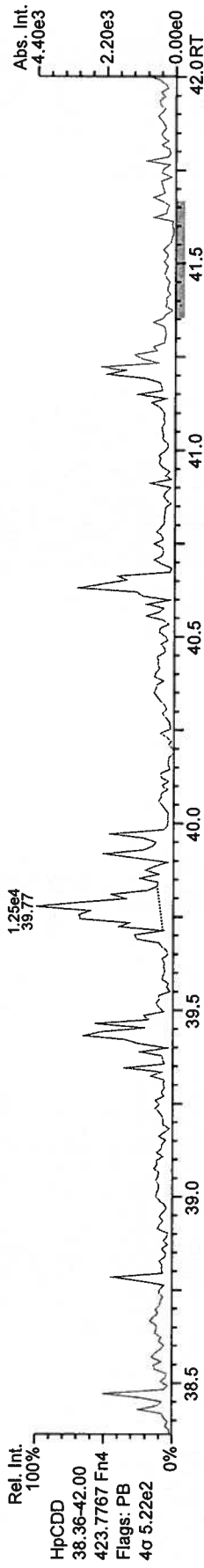
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User: MC Datafile: 100202P1-08



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08



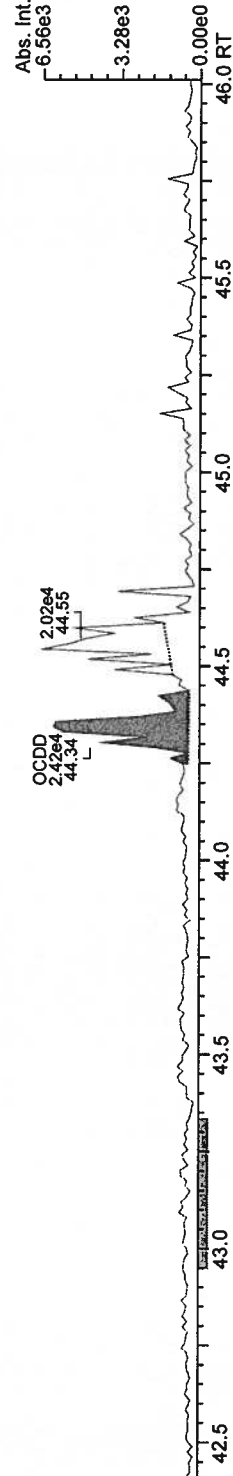


AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

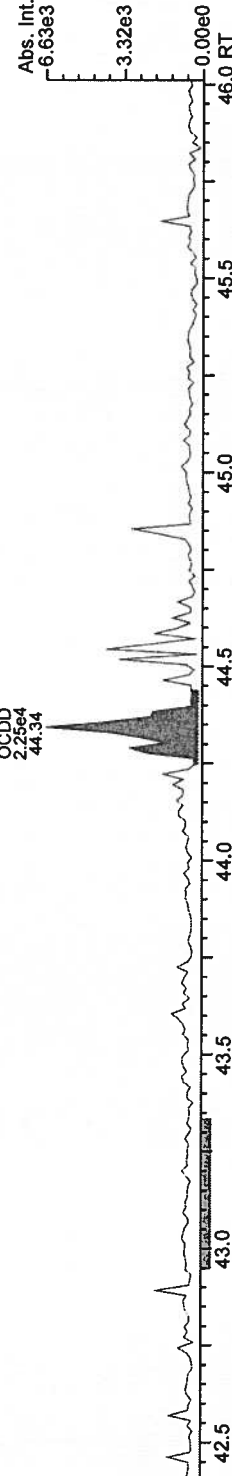
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Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08

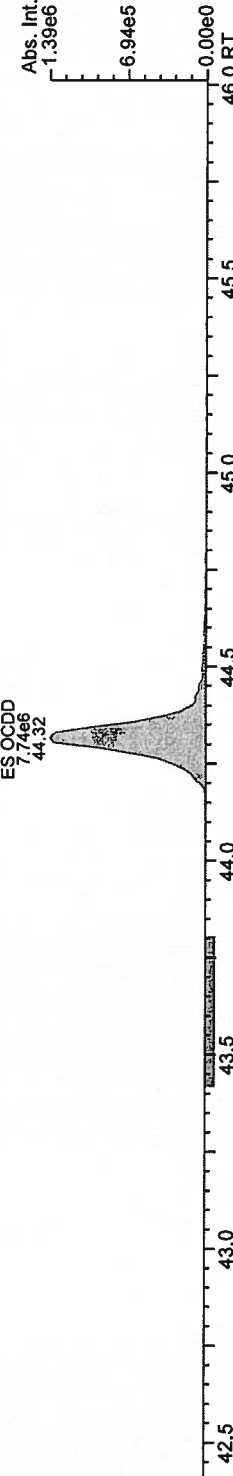
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Flags: PB  
4σ 4.73e2



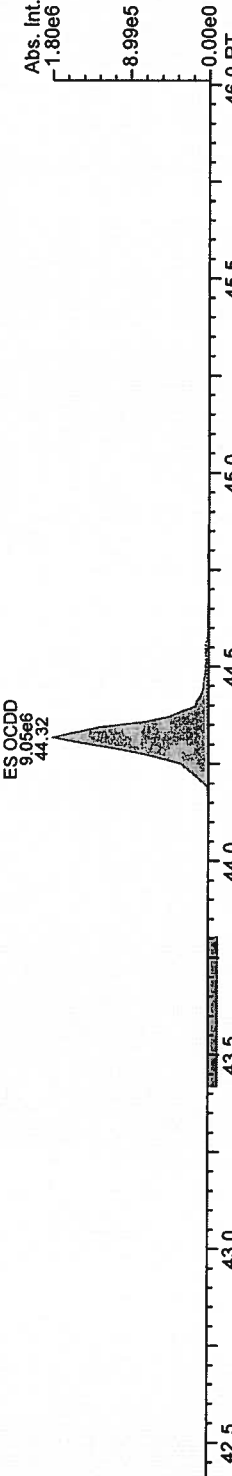
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Flags: PB  
4σ 3.73e2



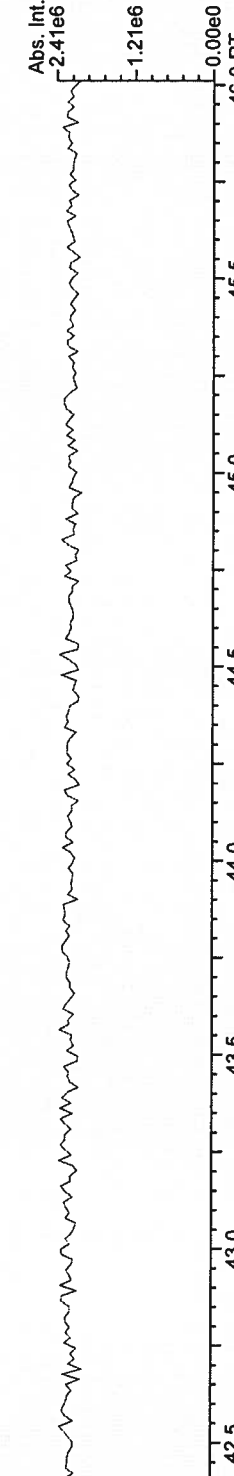
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OCDD Std.  
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469.7780 Fn5  
Flags: PB  
4σ 5.08e2



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OCDD Std.  
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Flags: PB  
4σ 6.86e2



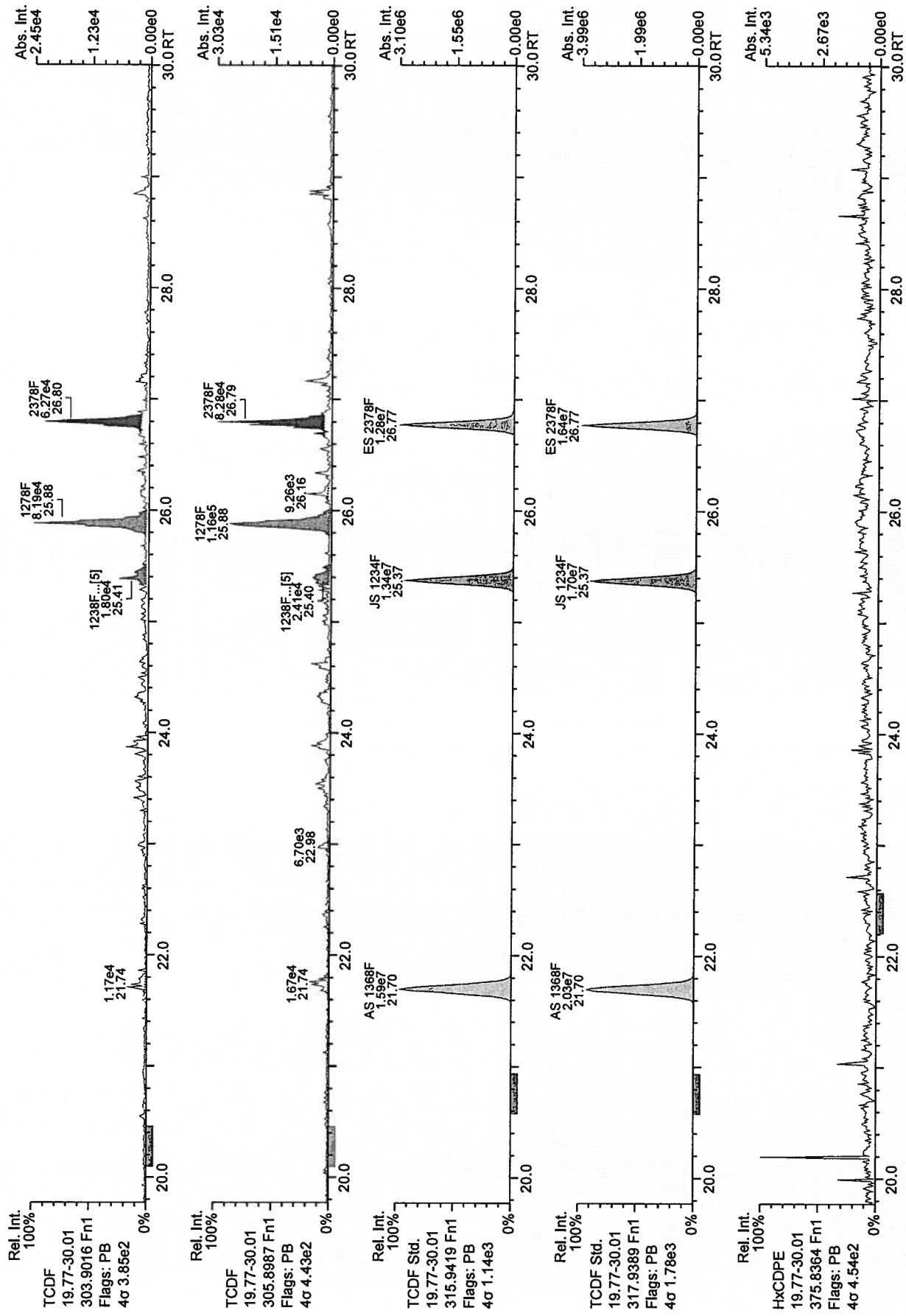
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QC Check  
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Flags: -



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

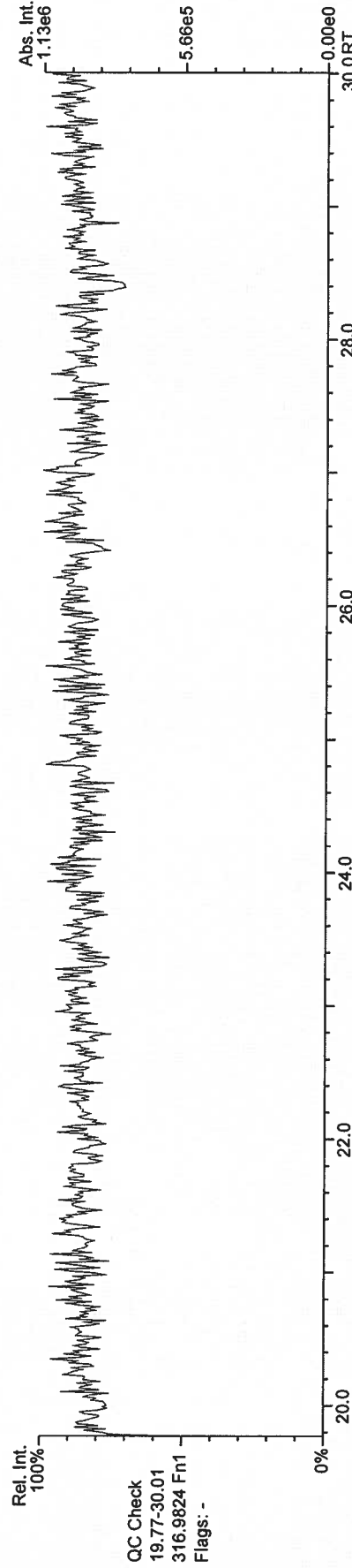
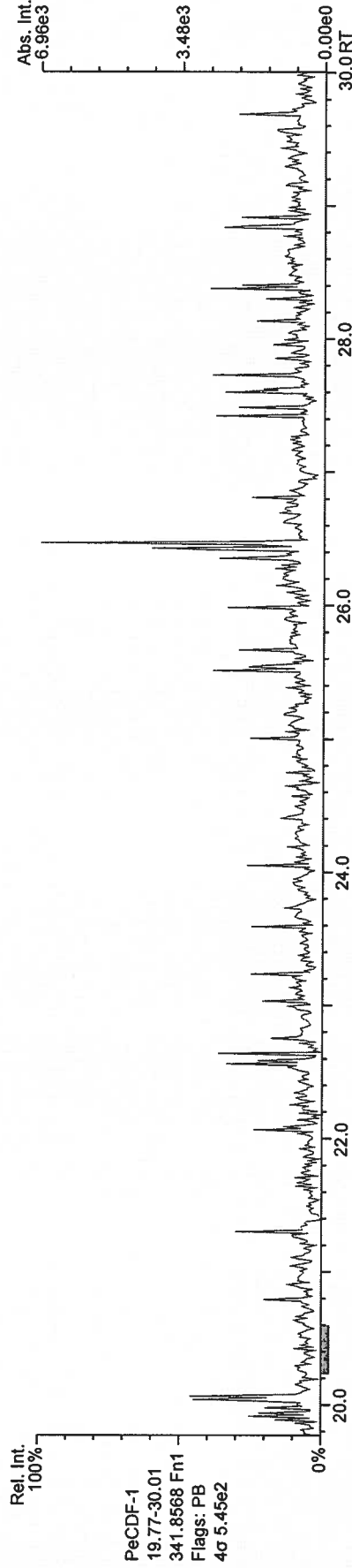
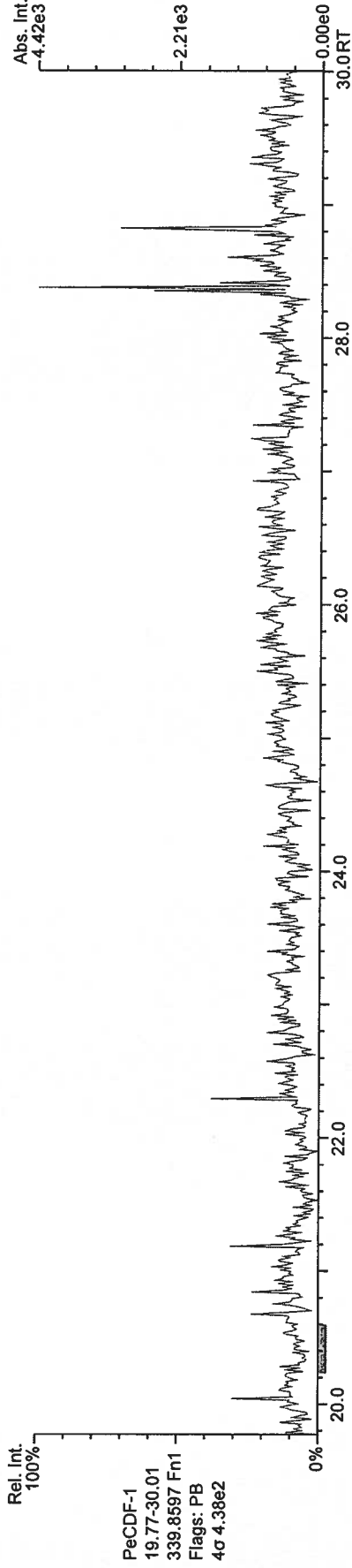
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User: MC Datafile: 100202P1-08



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08



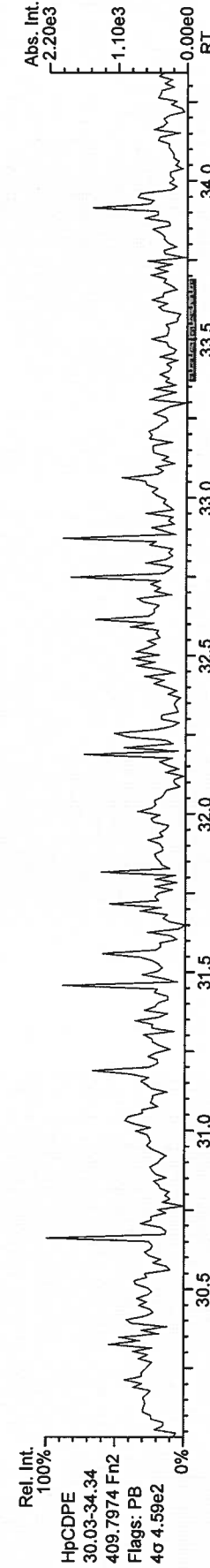
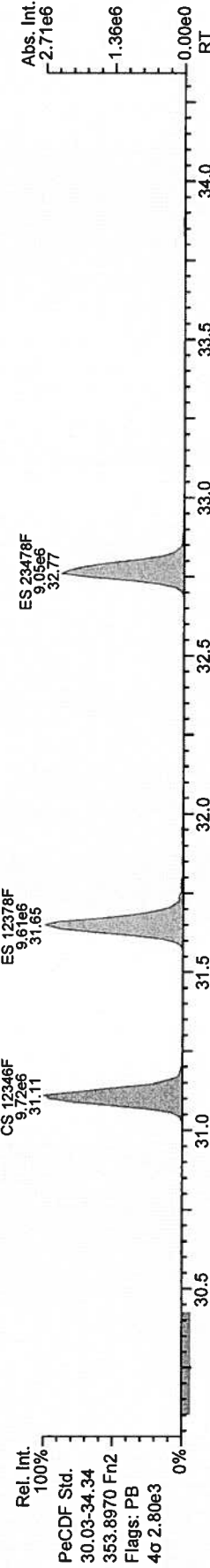
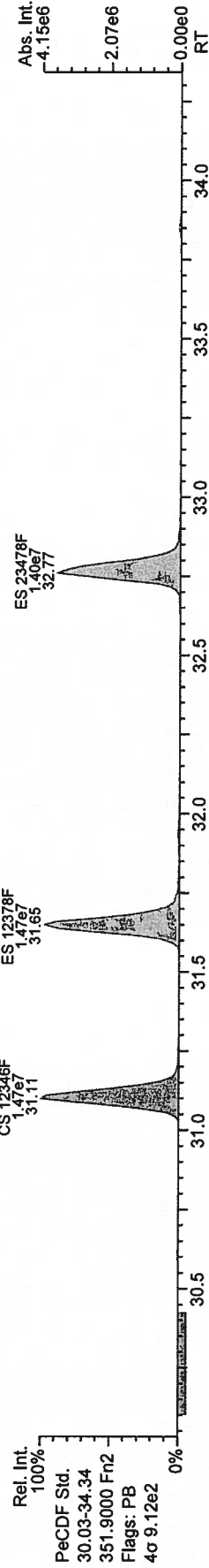
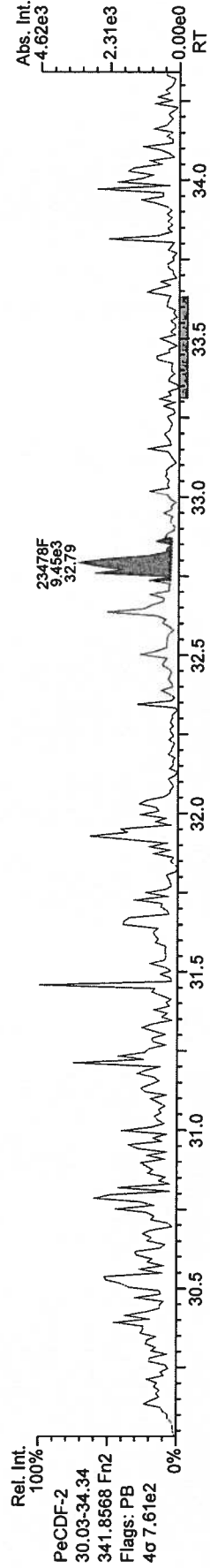
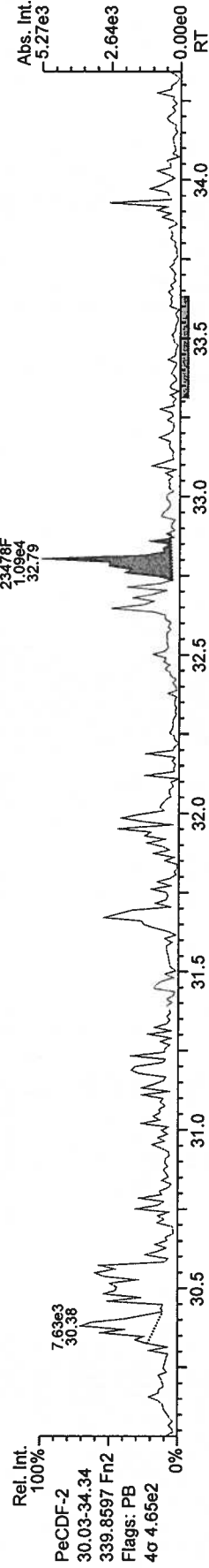
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AP UltraTrace-Pro V4.12 User/System: MC/MCI/7-047 cc: 3112 scc: 959-761

Peak annotation: Areas, Centroids  
PKD: 02-Feb-2010 16:53:27 Printed: 03-Feb-2010 09:19:48 Page 8 of 12

AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

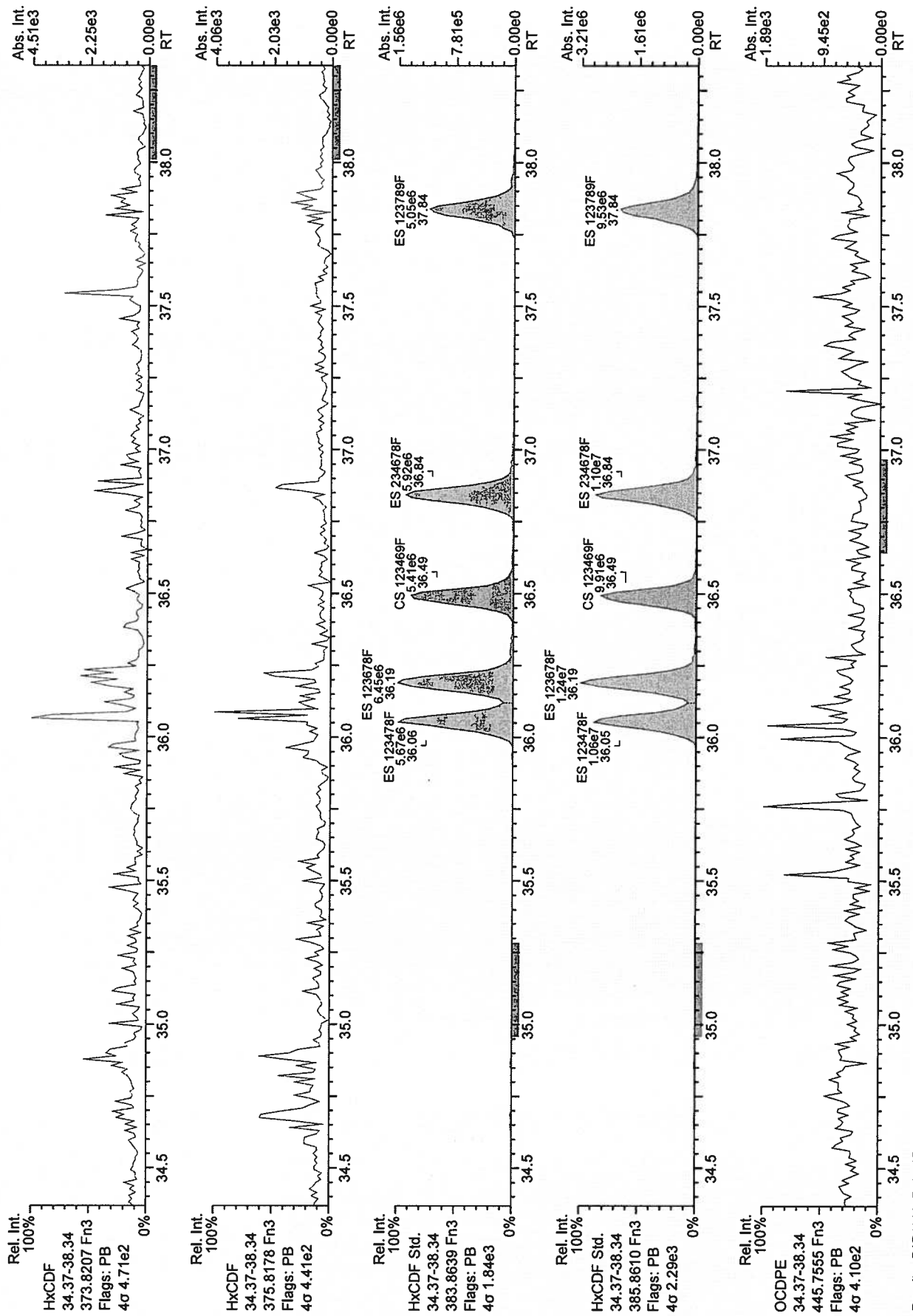
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AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

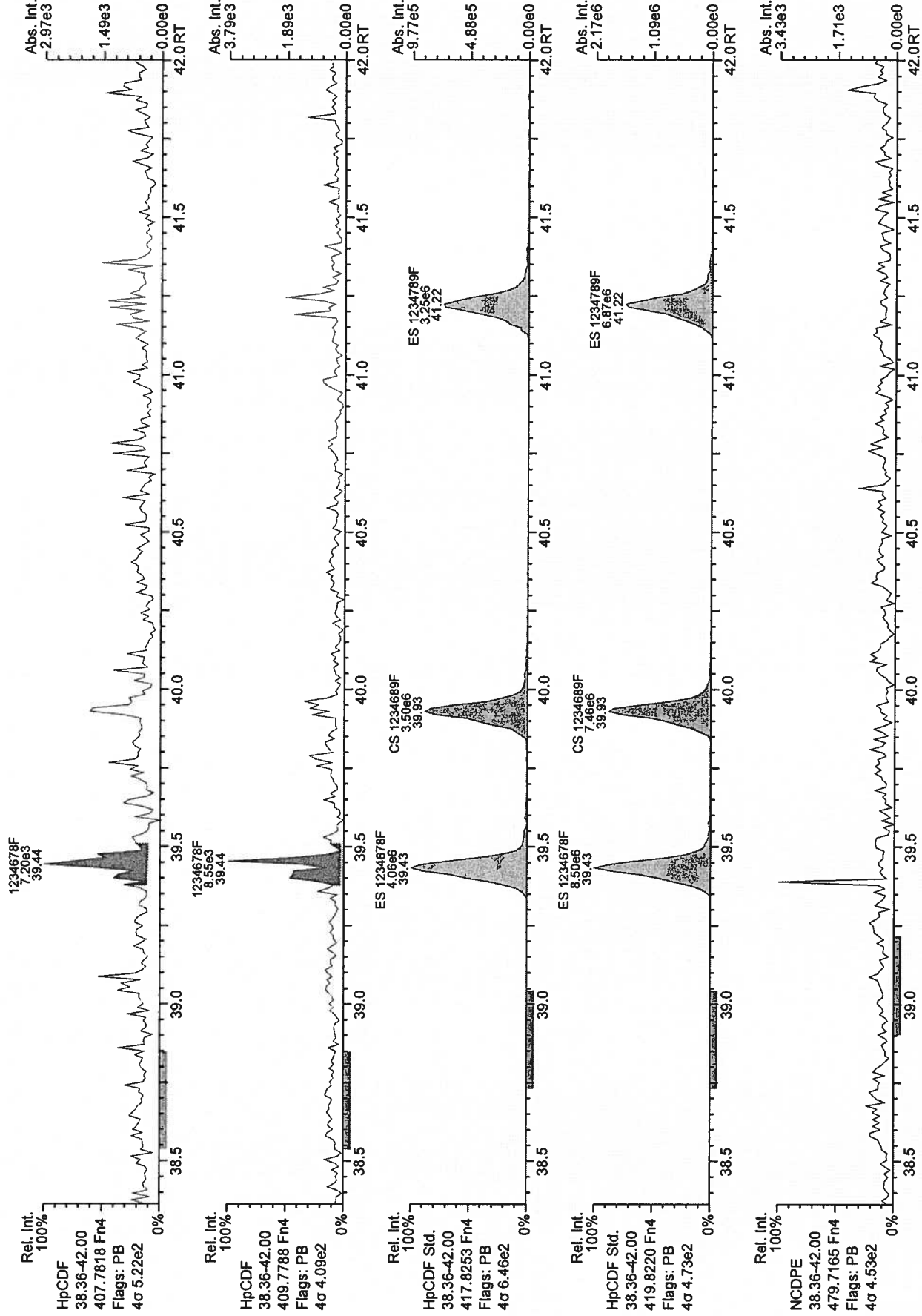
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User: MC Datafile: 100202P1-08



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

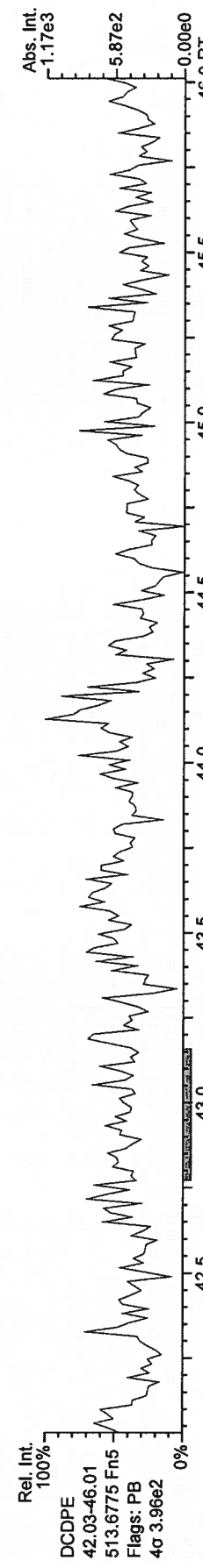
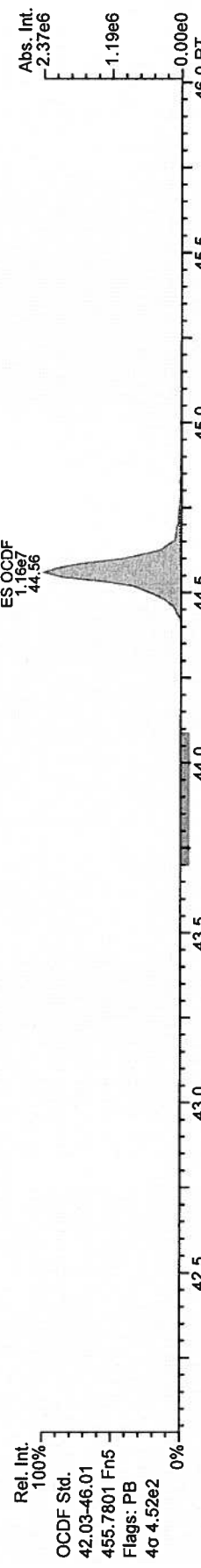
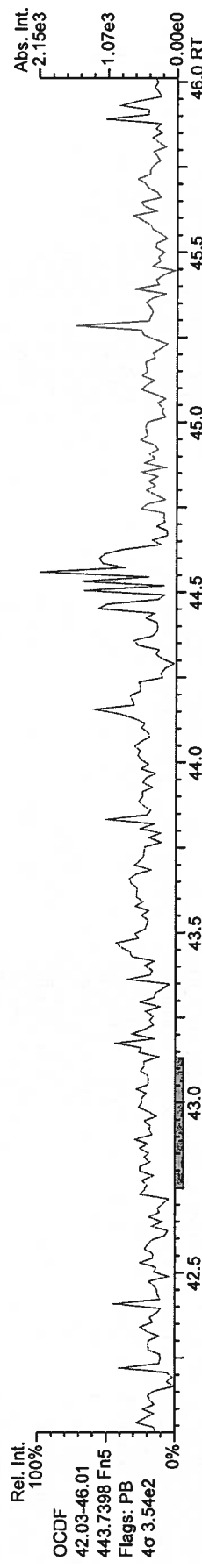
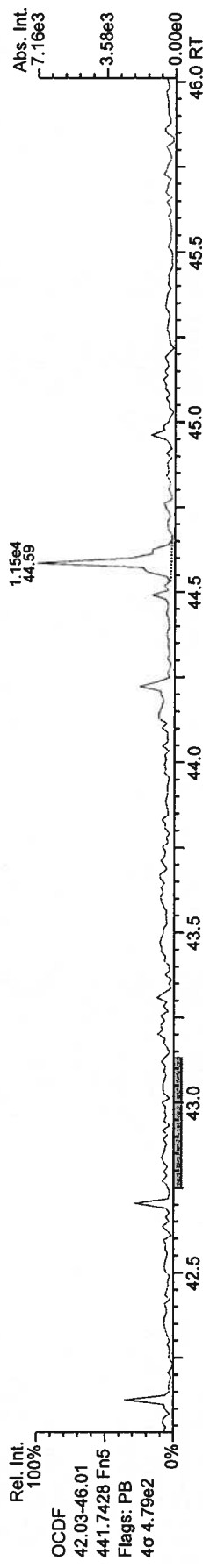
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User: MC Datafile: 100202P1-08



AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: DF\_CL4-8A GC: DB5MS\_60M Vial: 21

Acq: 2-FEB-2010 15:52:21  
User: MC Datafile: 100202P1-08



P1977



**ANALYTICAL PERSPECTIVES**

## **PART 3**

# **ANALYTICAL RESULTS**

DOCUMENTATION FOR THE ANALYSIS  
OF  
POLYNUCLEAR AROMATIC HYDROCARBONS



Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc ng/Train	Noise	DL	Checkcode: qp	
												ES/SS	qp
Largest +ve RT shift (secs)		PAH Ax	ES/SS										
Largest -ve RT shift (secs)		0.5	1.1										
		-0.5	-1.6										
Naphthalene	9.32		1.0006	1.0006	0	2.46E+07	-	1.04	1,040	4.51E+03	0.72500		
2-Methylnaphthalene	10.97		1.0005	1.0000	-0.3	1.29E+06	-	1.25	84.8	2.64E+03	0.66100		
Acenaphthylene	13.43		1.0007	1.0007	0	7.50E+04	-	1.04	3.86	2.59E+03	0.56900		
Acenaphthene	13.92		1.0007	1.0007	0	2.24E+05	-	1.31	16.2	2.40E+03	0.72500		
Fluorene	15.40		1.0006	1.0006	0	5.91E+05	-	1.11	37.8	2.19E+03	0.60400		
Phenanthrene	18.10		1.0000	1.0005	+0.5	2.00E+06	-	1.01	96.3	2.43E+03	0.49000		
Anthracene	18.24		1.0000	1.0000	0	5.32E+04	-	1.06	3.12	2.43E+03	0.65300		
Fluoranthene	21.26		1.0000	1.0000	0	4.28E+05	-	1.00	17.4	2.36E+03	0.41600		
Pyrene	21.85		1.0000	1.0004	+0.5	1.73E+05	-	1.01	5.9	2.36E+03	0.35200		
Benzo(a)Anthracene	-		1.0003	-		-		1.07	ND	1.07E+03	0.30000		
Chrysene	25.02		1.0000	1.0000	0	9.18E+03	-	1.00	0.47	1.07E+03	0.29800		
Benzo(b)Fluoranthene	28.42		1.0003	1.0000	-0.5	2.52E+04	-	1.04	1.31	1.33E+03	0.48600		
Benzo(k)Fluoranthene	-		1.0015	-		-		1.07	ND	1.33E+03	0.57700		
Benzo(e)Pyrene	29.53		1.0000	1.0003	+0.5	1.17E+04	-	1.08	0.591	1.33E+03	0.50200		
Benzo(a)Pyrene	-		1.0000	-		-		1.05	ND	1.33E+03	0.80400		
Perylene	-		1.0041	-		-		1.00	ND	1.33E+03	0.86500		
Indeno(1,2,3-cd)Pyrene	-		1.0002	-		-		1.05	ND	8.38E+02	1.47000		
Dibenzo(a,h)Anthracene	-		1.0002	-		-		1.00	ND	8.23E+02	1.71000		
Benzo(ghi)Perylene	-		1.0002	-		-		1.17	ND	8.38E+02	1.19000		

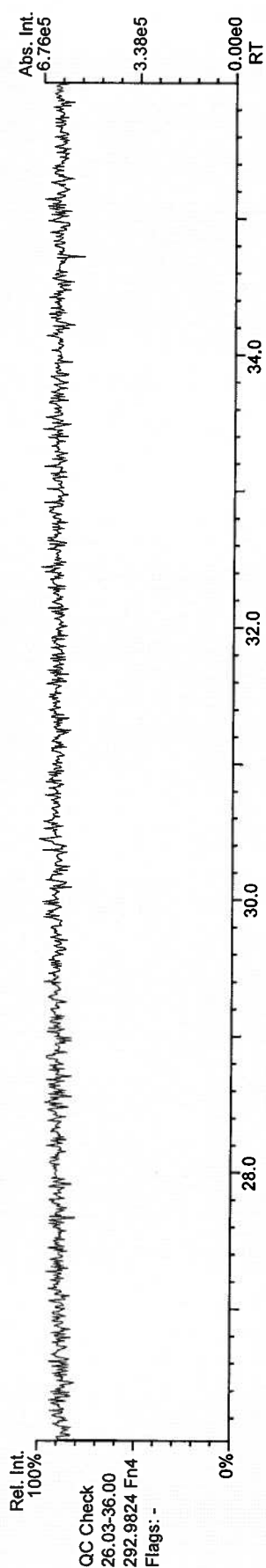
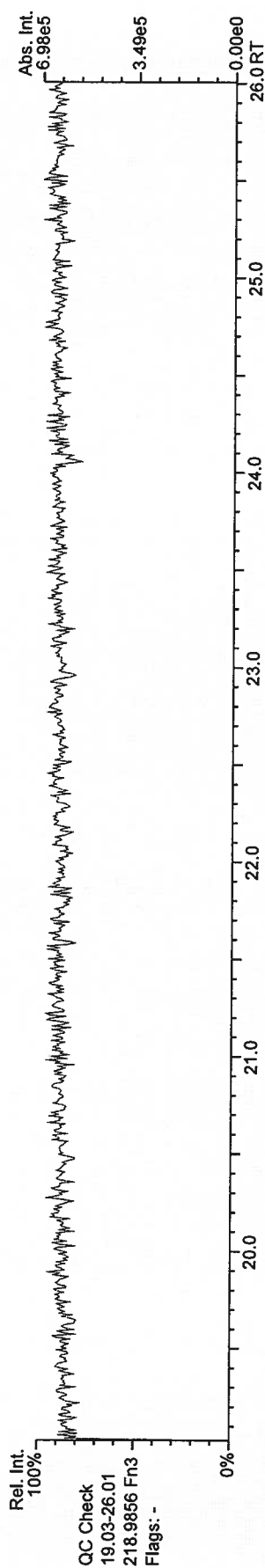
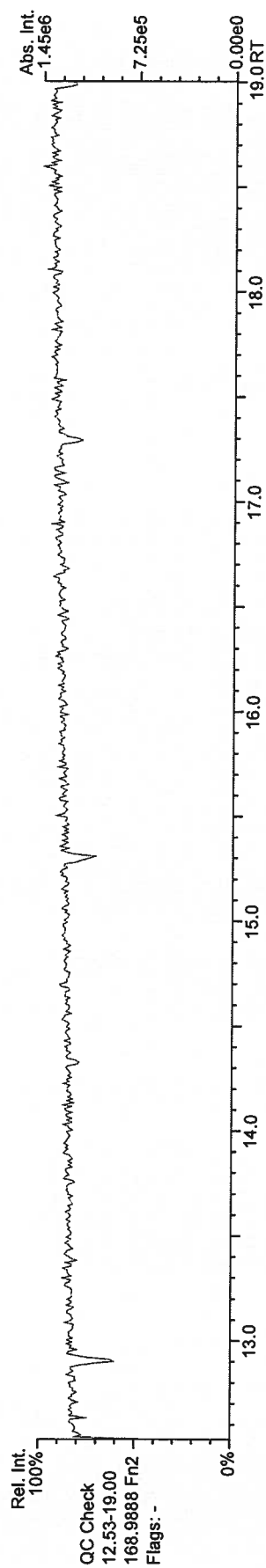
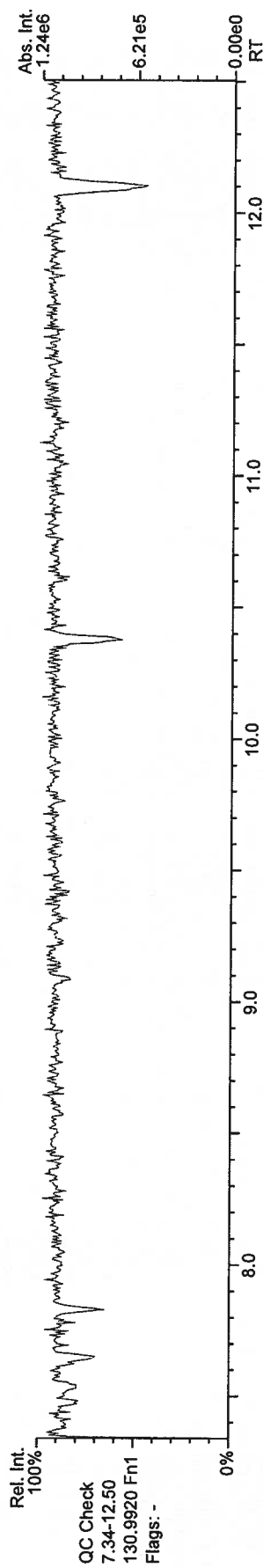
Lab ID: MB1\_7528\_PAH\_SDS

Name	Actual RT	PAH Ax	ES/SS	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Recv.
13C6-Naphthalene	9.31			0.8577	0.8553	-1.6	9.17E+05	-	2.23	67.9
13C6-2-Methylnaphthalene	10.97			1.0075	1.0080	+0.3	4.85E+05	-	1.03	77.8
13C6-Acenaphthylene	13.42			0.9712	0.9712	0	7.47E+05	-	1.57	75.6
13C6-Acenaphthene	13.91			1.0067	1.0067	0	4.25E+05	-	0.83	81.7
13C6-Fluorene	15.39			1.1138	1.1140	+0.2	5.63E+05	-	1.00	89.9
13C6-Phenanthrene	18.09			1.3086	1.3090	+0.3	8.19E+05	-	1.31	99.1
13C6-Anthracene	18.24			1.3187	1.3197	+0.8	6.42E+05	-	1.12	91.0
13C6-Fluoranthene	21.26			0.9755	0.9754	-0.1	9.82E+05	-	1.21	87.7
13C3-Pyrene	21.85			1.0023	1.0023	0	1.16E+06	-	1.35	93.3
13C6-Benzo (a) Anthracene	24.92			1.1431	1.1432	+0.1	6.71E+05	-	0.82	88.5
13C6-Chrysene	25.02			1.1481	1.1478	-0.4	7.82E+05	-	0.92	91.8
13C6-Benzo (b) Fluoranthene	28.42			0.9582	0.9588	+1.1	1.48E+06	-	1.28	91.7
13C6-Benzo (k) Fluoranthene	28.52			0.9621	0.9623	+0.4	1.51E+06	-	1.40	85.8
13C4-Benzo (e) Pyrene	29.52			0.9961	0.9961	0	1.47E+06	-	1.33	87.3
13C4-Benzo (a) Pyrene	29.75			1.0039	1.0039	0	1.12E+06	-	1.14	77.2
d12-Perylene	30.00			1.0119	1.0122	+0.5	1.17E+06	-	1.26	73.6
13C6-Indeno (1,2,3-cd) Pyrene	35.72			1.2048	1.2051	+0.5	6.06E+05	-	0.60	79.6
13C6-Dibenzo (ah) Anthracene	35.86			1.2101	1.2101	0	6.90E+05	-	0.69	79.3
13C12-Benzo (ghi) Perylene	37.48			1.2646	1.2647	+0.2	8.23E+05	-	0.79	81.9
AS--Anthracene	18.18			1.3147	1.3157	+0.8	6.29E+05	-	1.06	94.2
SS-Fluorene	15.31			0.9946	0.9946	0	6.84E+05	-	1.19	102.0
SS-Terphenyl	22.23			1.0453	1.0453	0	4.05E+05	-	0.39	105.0
JS-Methylnaphthalene	10.89			-	-	-	6.05E+05	-	-	-
JS-Acenaphthene	13.82			-	-	-	6.29E+05	-	-	-
JS-Pyrene	21.80			-	-	-	9.22E+05	-	-	-
JS-Benzo (a) Pyrene	29.64			-	-	-	6.32E+05	-	-	-

AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

Acq: 1-FEB-2010 14:37:23  
User: MC Datafile: 100201P2-03



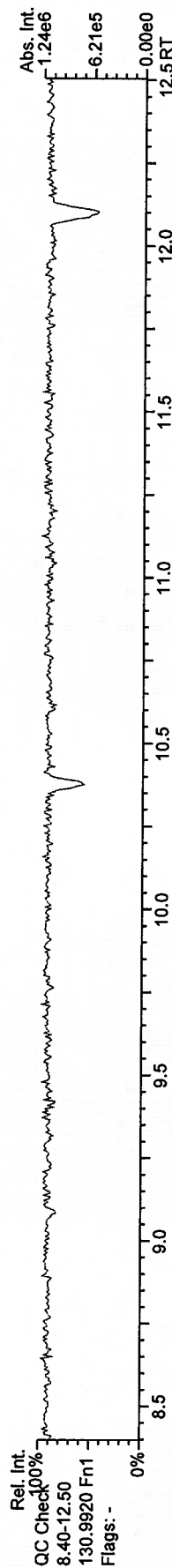
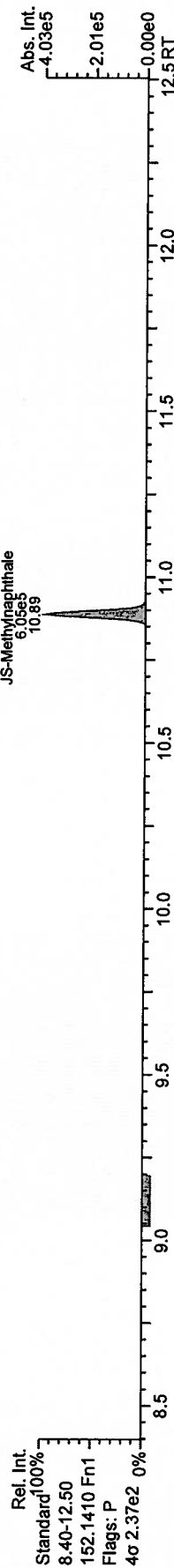
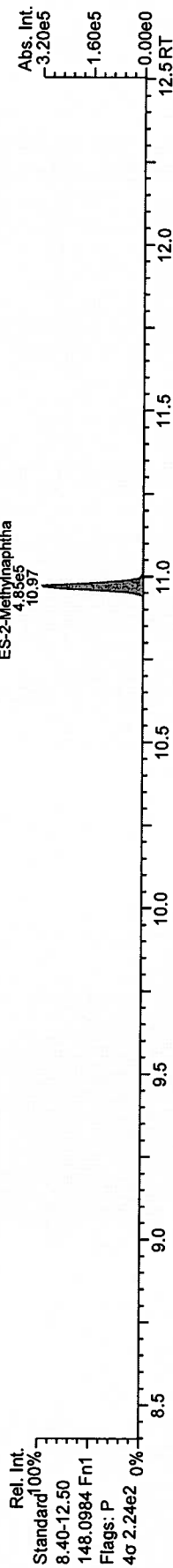
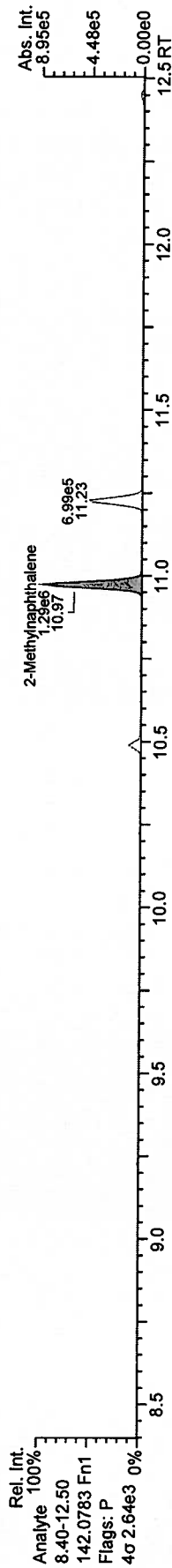
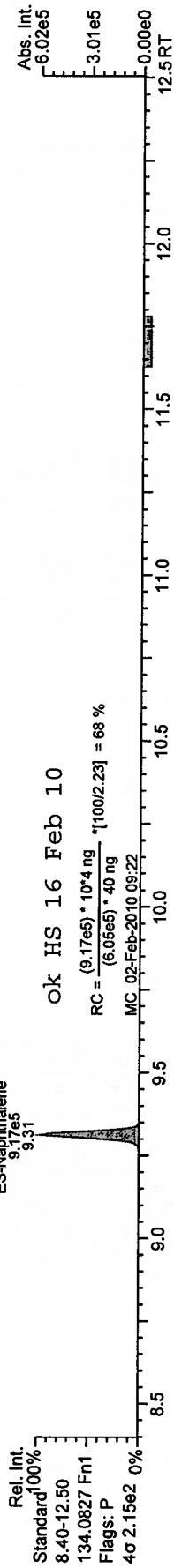
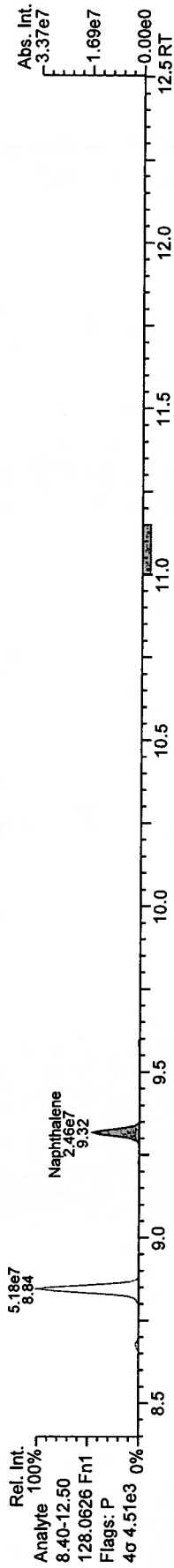
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AP UltraTrace-Pro V4.12 User\System: MCMCI7-047 scc: 588-134

Peak annotation: Areas, Peak tops  
PKD: n/a Printed: 02-Feb-2010 09:27:44 Page 1 of 9

AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

Acq: 1-FEB-2010 14:37:23  
User: MC Datafile: 100201P2-03



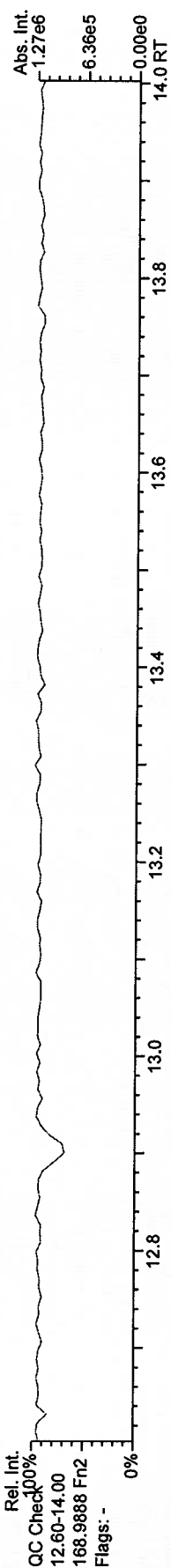
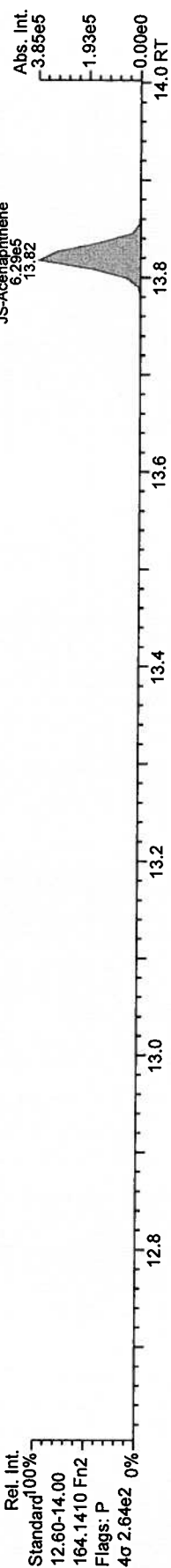
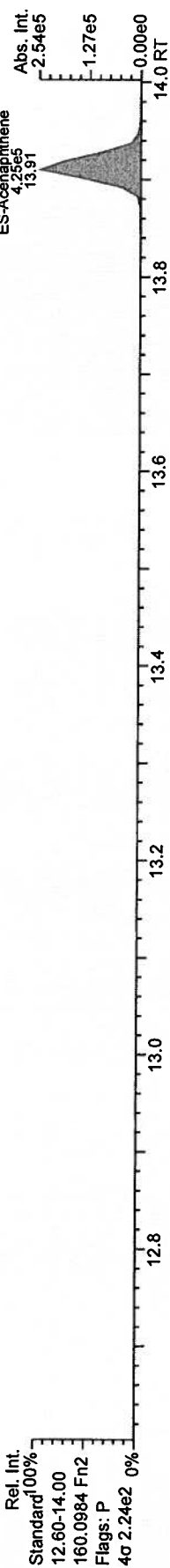
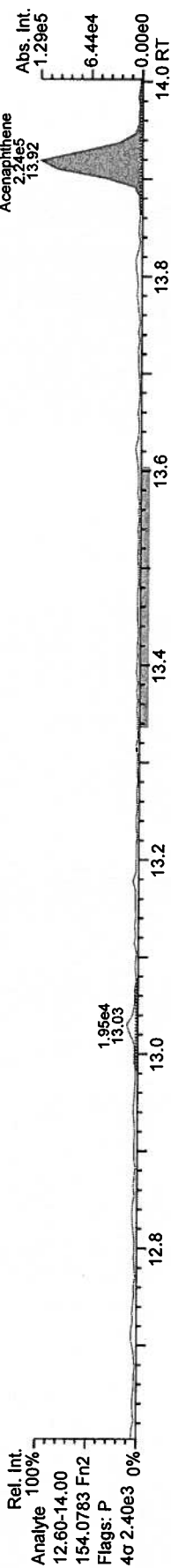
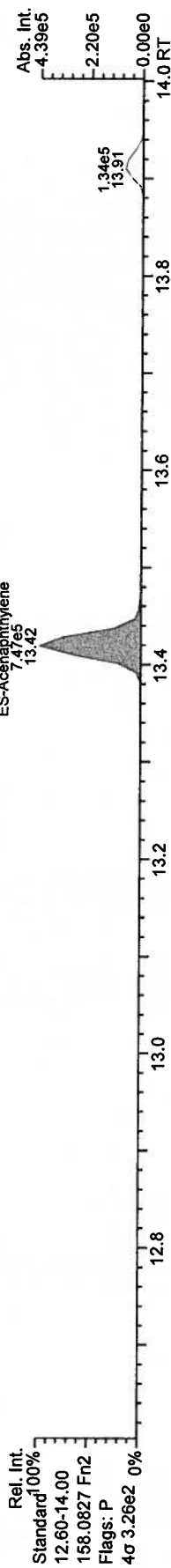
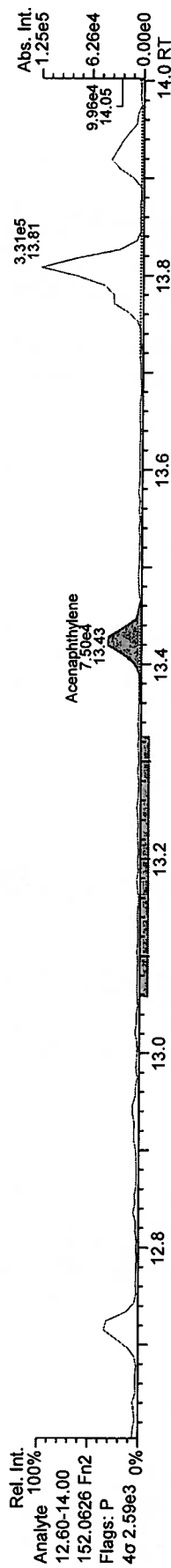
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Revised: 01-Feb-2010 16:51:22 (MC) Printed: 02-Feb-2010 09:27:57 Page 2 of 9  
Peak annotation: Areas, Peak tops

AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS 60M PAH Vial: 77

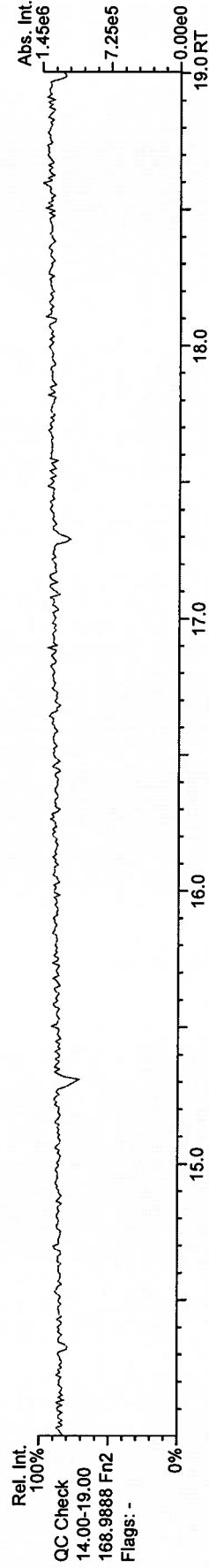
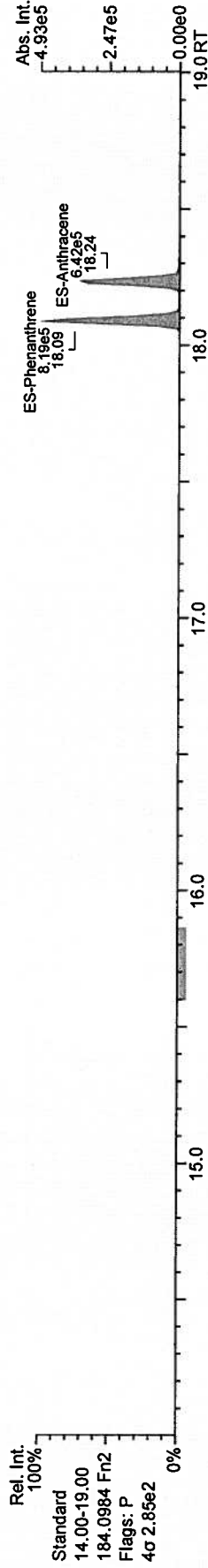
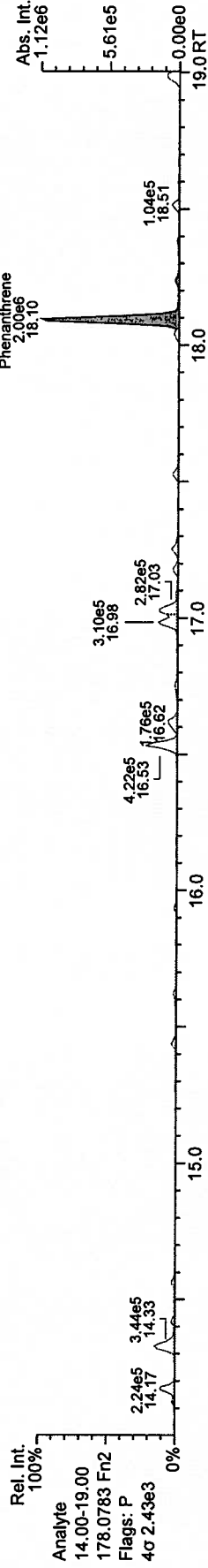
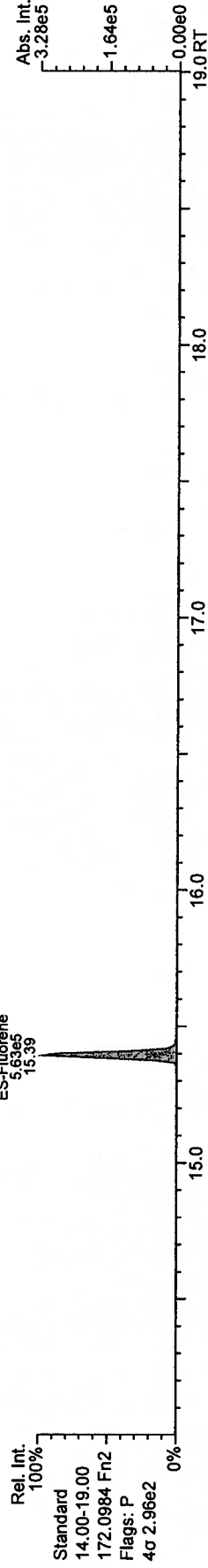
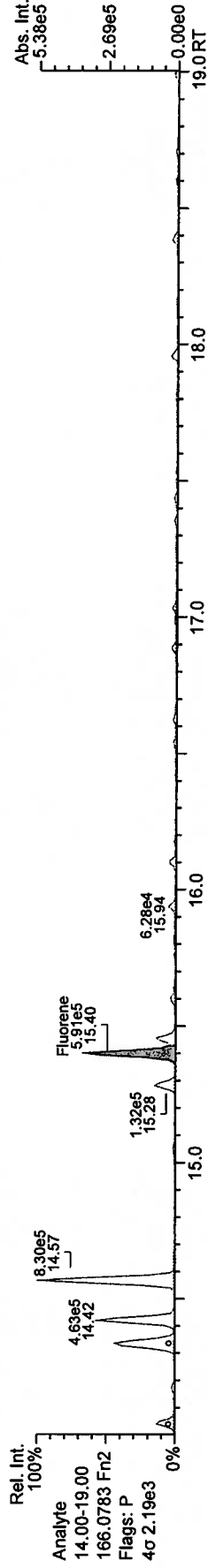
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AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

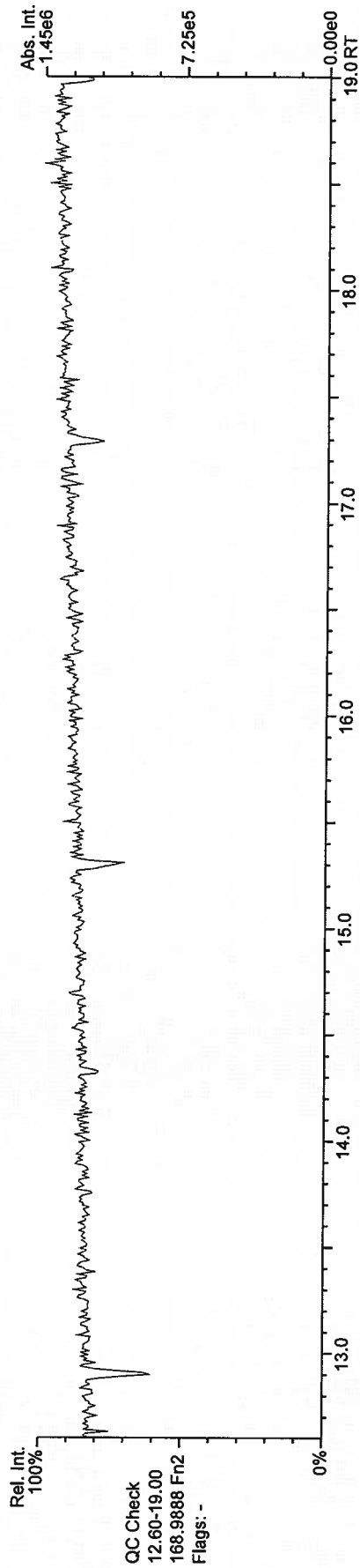
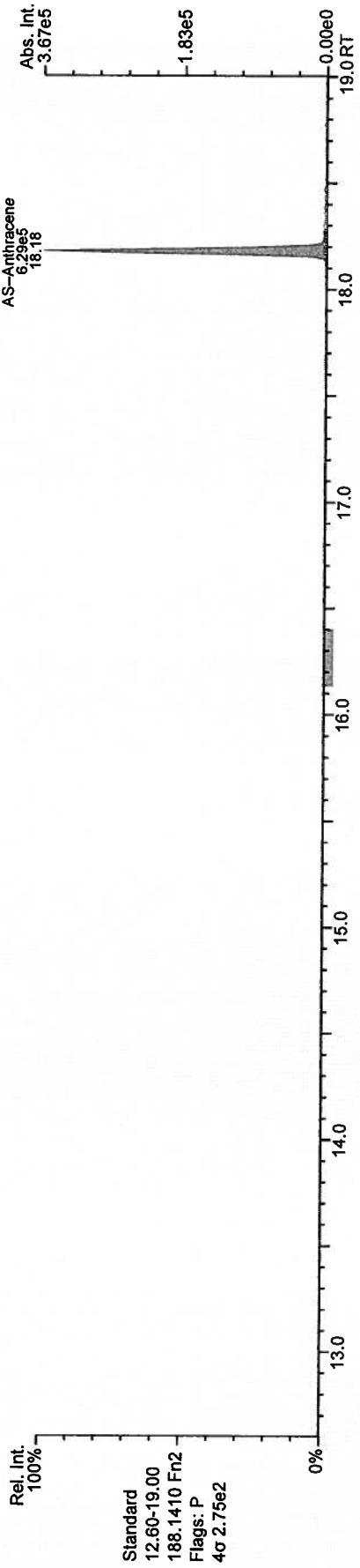
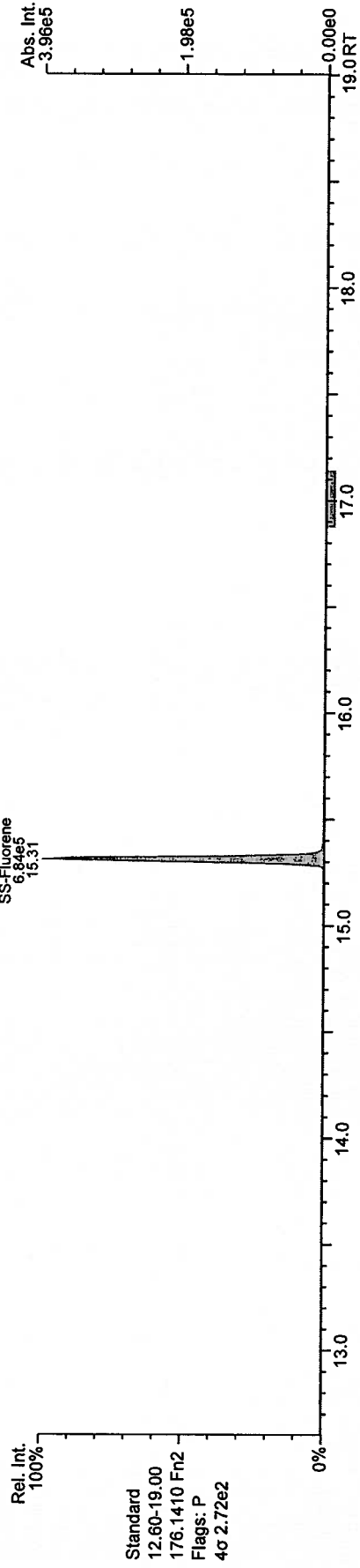
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AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

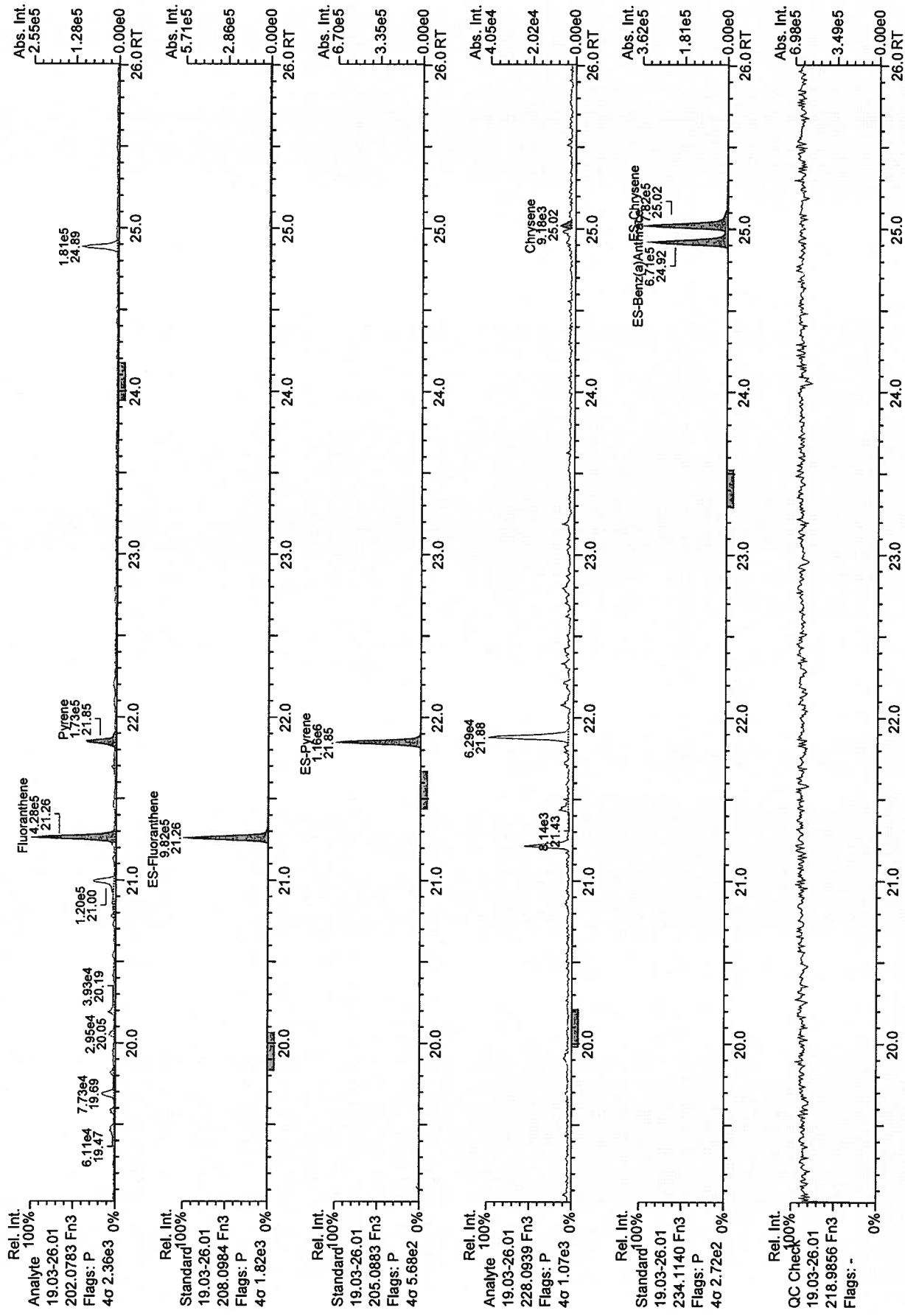
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AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

Acq: 1-FEB-2010 14:37:23  
User: MC Datafile: 100201P2-03

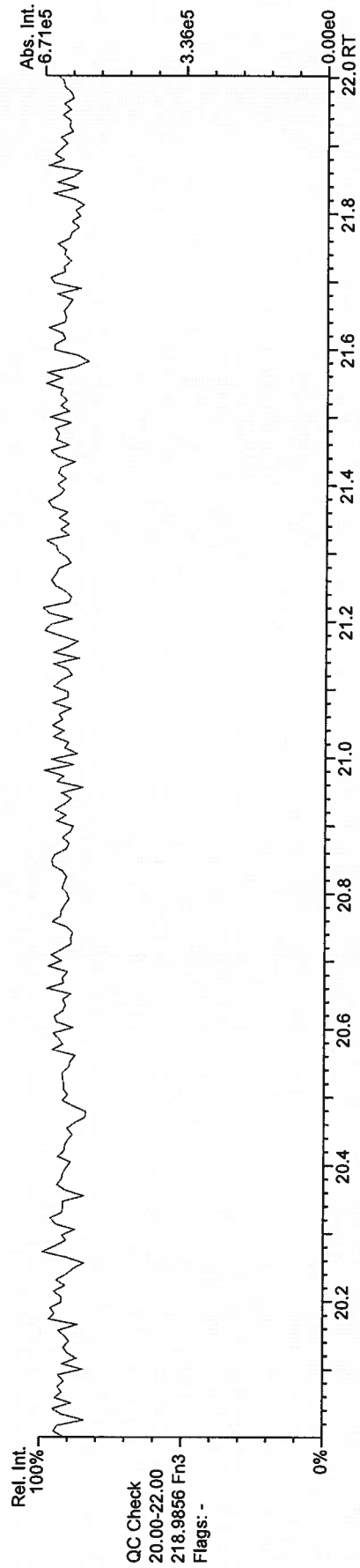
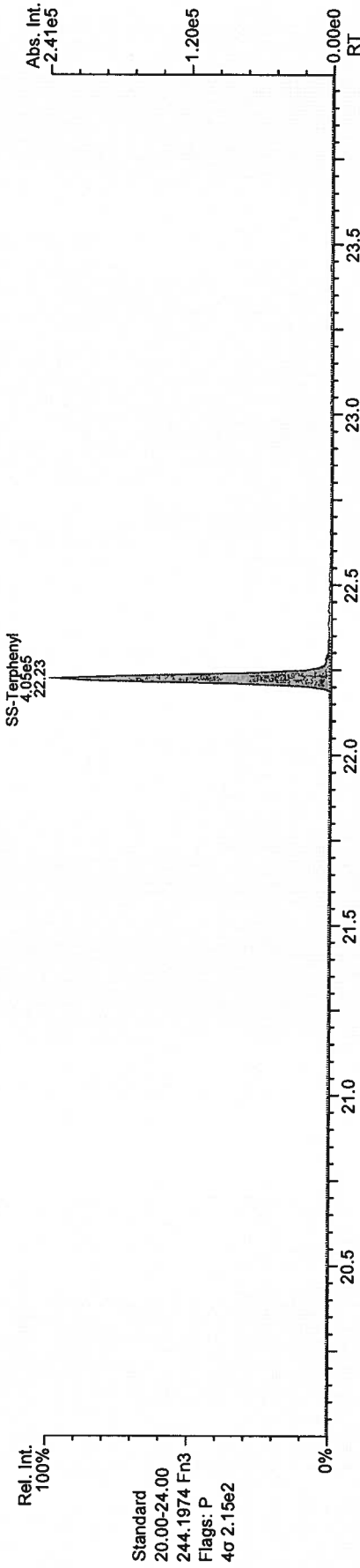
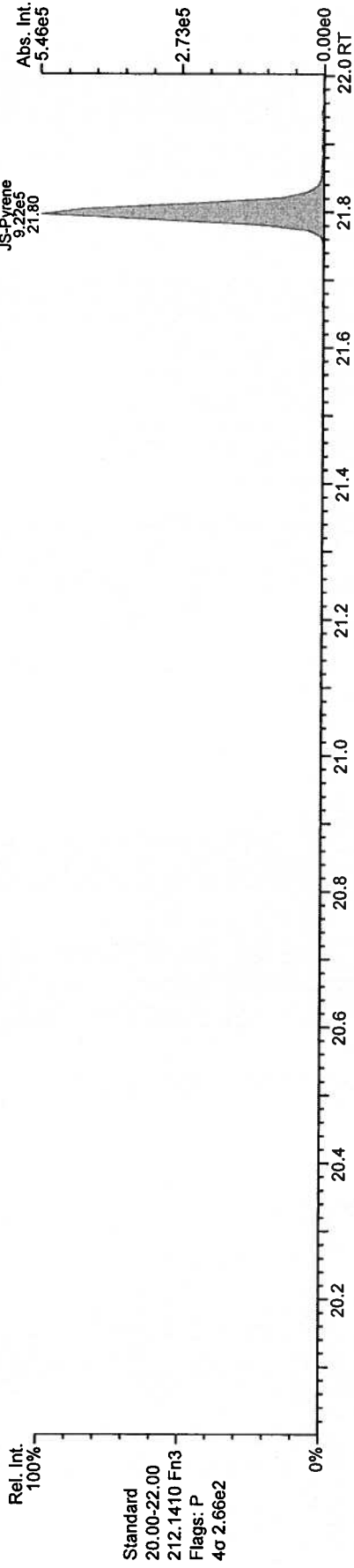




AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

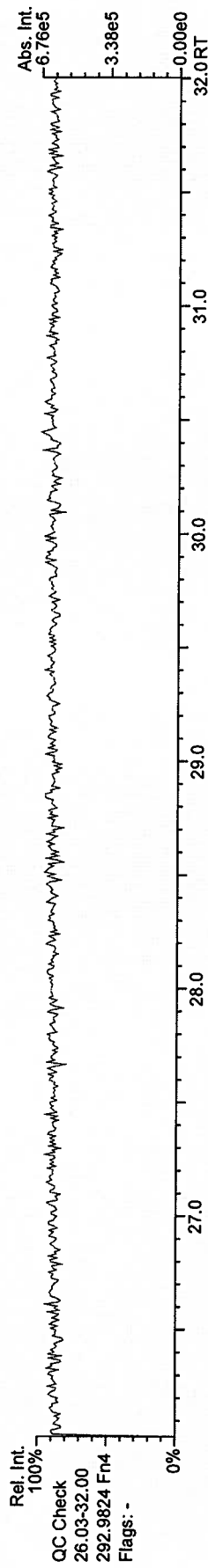
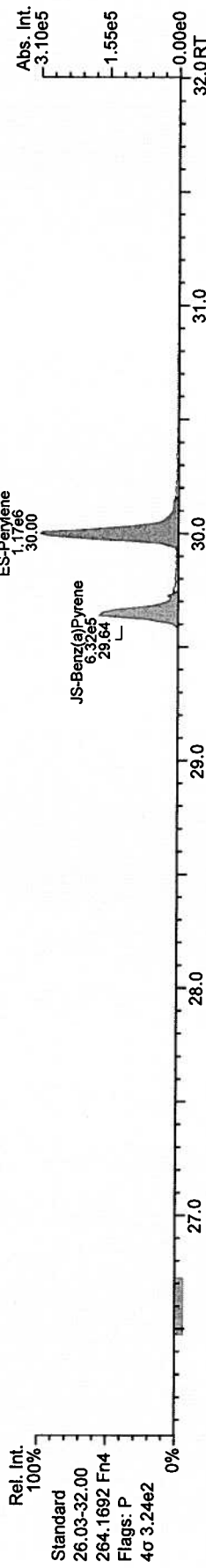
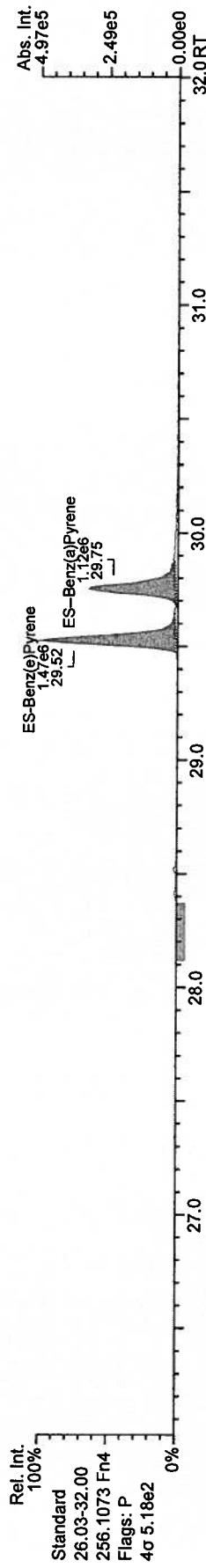
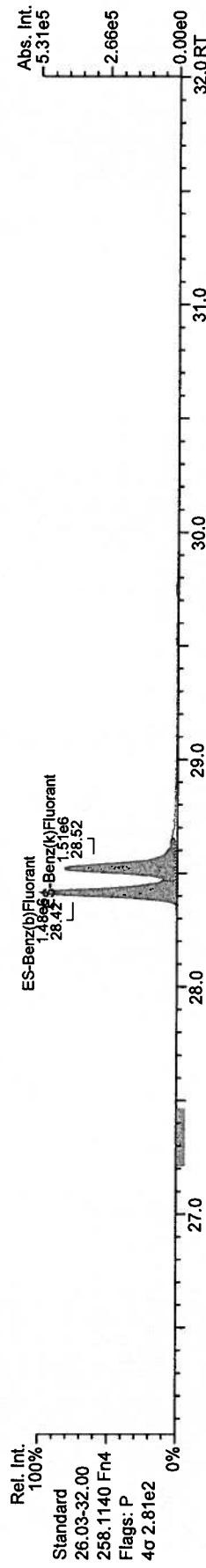
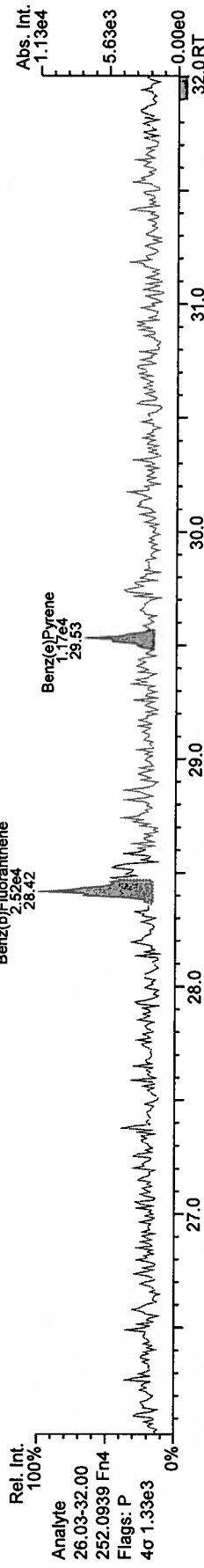
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AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

Acq: 1-FEB-2010 14:37:23  
User: MC Datafile: 100201P2-03



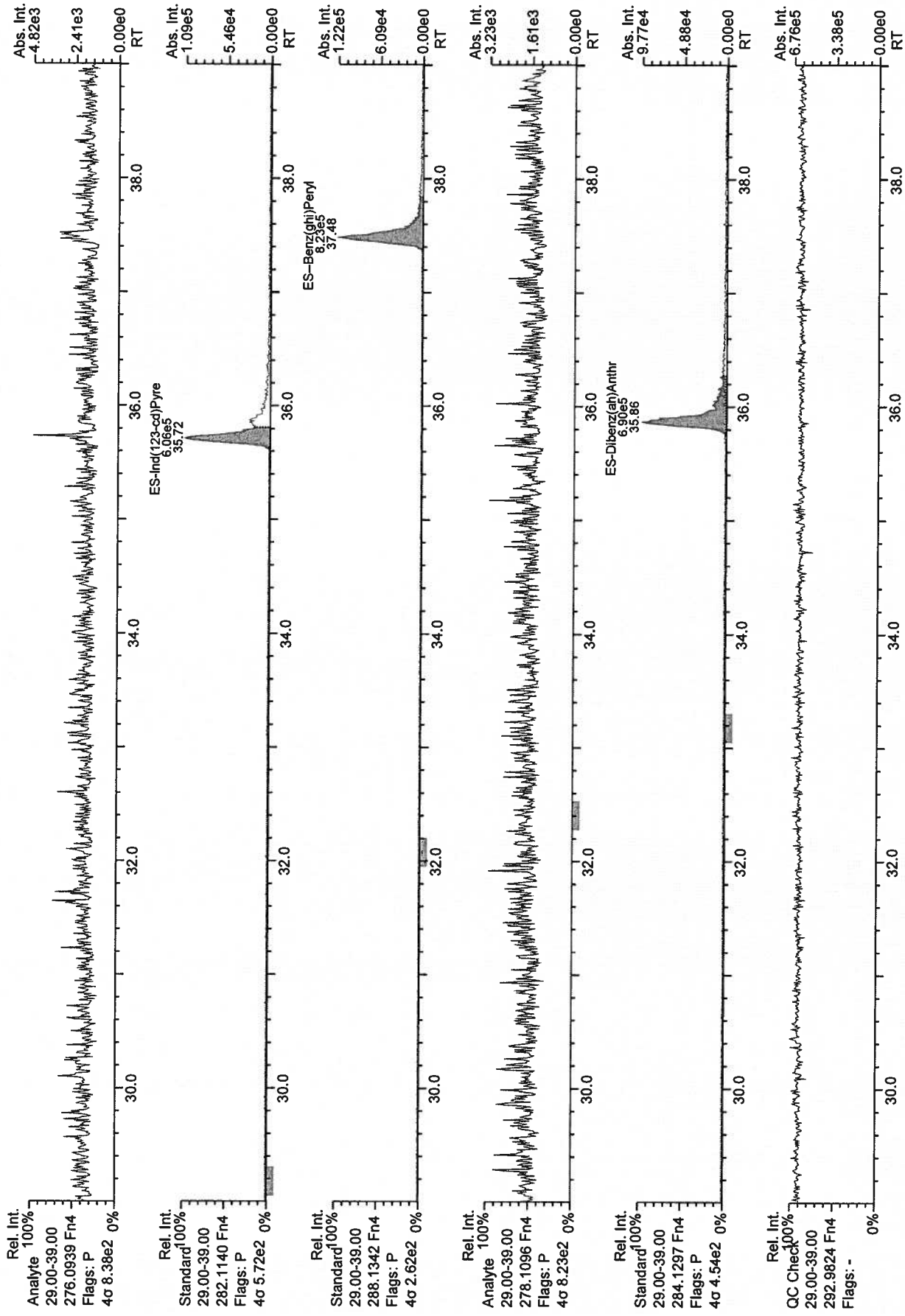
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Revised: 01-Feb-2010 16:52:31 (MC) Printed: 02-Feb-2010 09:28:43 Page 8 of 9

AP Lab ID: MB1\_7528\_PAH\_SDS  
Instr: AutoSpec-Ultima MM1

Sample ID: 0\_7528\_MB001  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 77

Acq: 1-FEB-2010 14:37:23  
User: MC Datafile: 100201P2-03



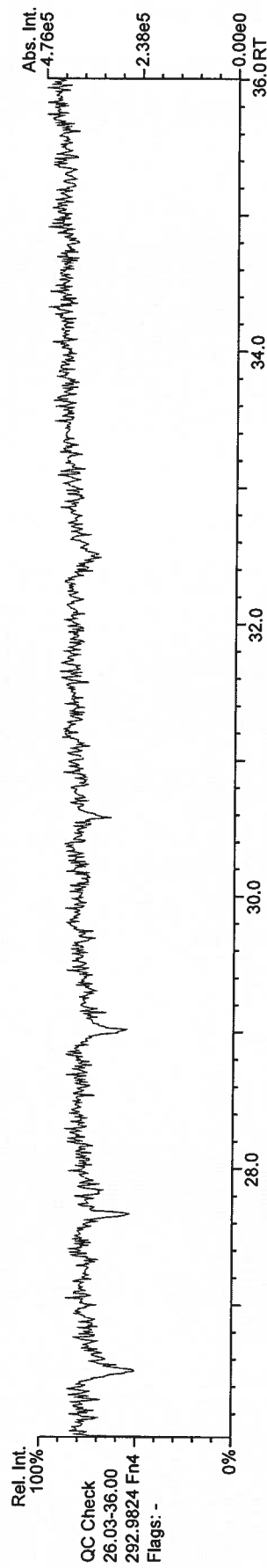
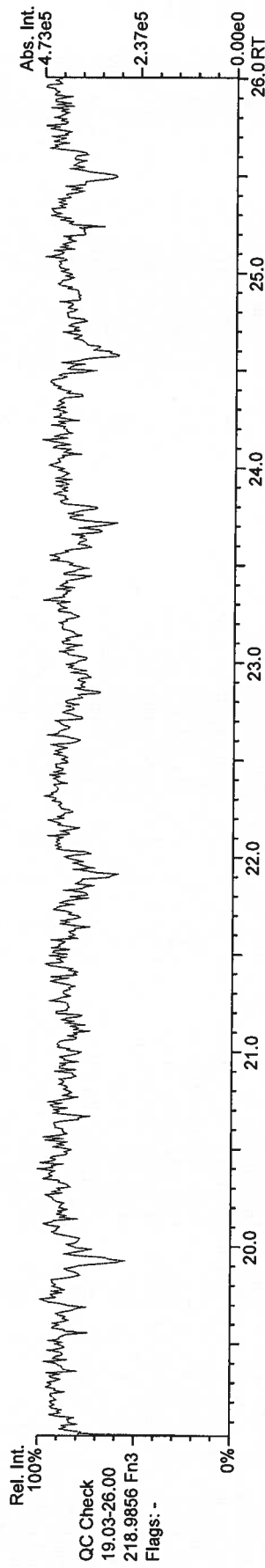
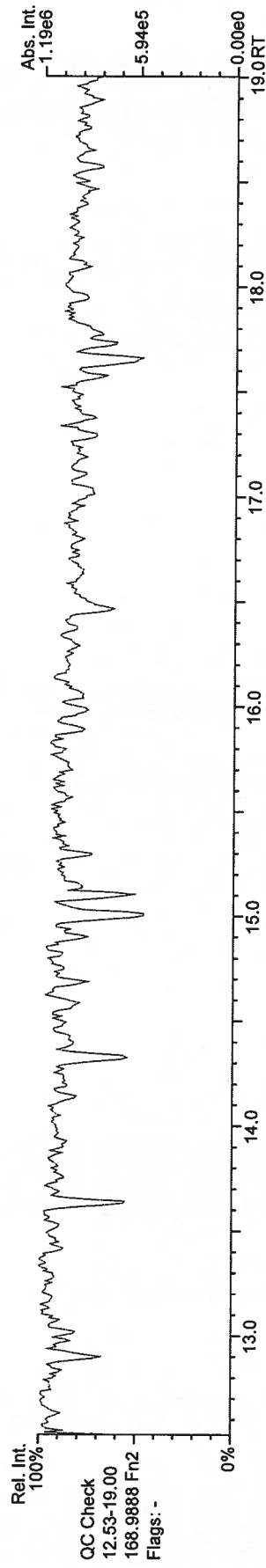
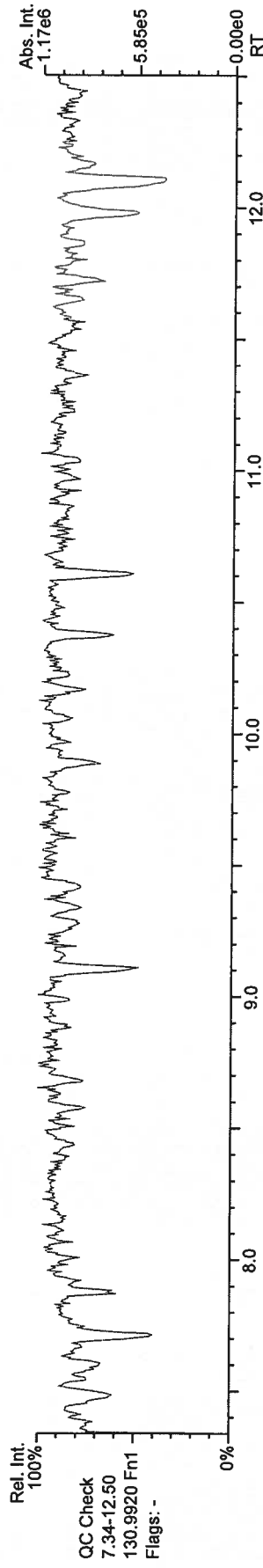
	Stats	PAH Ax	ES/SS	Checkcode:				DL								
				Largest +ve RT shift (secs)	Largest -ve RT shift (secs)	QC	Pred RRT		Actual RRT	Diff Secs	Response	Ra	RRF	Conc ng/Train	Noise	
				0.7	3.7											
				-2.6	-0.5											
Name	Actual RT															
Naphthalene	9.34		1.0006	1.0006	1.0006	0	2.38E+08	-	1.04	5,050	5.17E+03	0.42400				
2-Methylnaphthalene	10.97		1.0005	1.0000	1.0000	-0.3	1.25E+08	-	1.25	3,780	3.22E+03	0.36200				
Acenaphthylene	13.42		1.0007	1.0007	1.0007	0	6.25E+06	-	1.04	124	2.16E+04	1.76000				
Acenaphthene	13.91		1.0007	1.0007	1.0007	0	1.92E+07	-	1.31	579	7.01E+03	0.88200				
Fluorene	15.39		1.0006	1.0006	1.0006	0	2.91E+07	-	1.11	801	3.96E+03	0.49900				
Phenanthrene	18.09		1.0000	1.0000	1.0000	0	1.12E+08	-	1.01	2,610	3.51E+03	0.39200				
Anthracene	18.23		1.0000	1.0000	1.0000	0	4.89E+06	-	1.06	117	3.51E+03	0.40600				
Fluoranthene	21.26		1.0000	1.0000	1.0000	0	2.72E+07	-	1.00	508	7.49E+03	0.66600				
Pyrene	21.85		1.0000	1.0000	1.0000	0	1.36E+07	-	1.01	256	7.49E+03	0.61500				
Benzo(a)Anthracene	24.93		1.0003	1.0000	1.0000	-0.4	1.16E+06	-	1.07	27.2	2.02E+03	0.23500				
Chrysene	25.03		1.0000	1.0003	1.0003	+0.5	4.09E+06	-	1.00	89.8	2.02E+03	0.24100				
Benzo(b)Fluoranthene	28.45		1.0003	1.0003	1.0003	0	4.16E+06	-	1.04	86.7	3.09E+03	0.44600				
Benzo(k)Fluoranthene	28.55		1.0015	1.0000	1.0000	-2.6	1.40E+06	-	1.07	26.5	3.09E+03	0.50500				
Benzo(e)Pyrene	29.57		1.0000	1.0000	1.0000	0	2.72E+06	-	1.08	51.4	3.09E+03	0.46000				
Benzo(a)Pyrene	29.79		1.0000	1.0000	1.0000	0	8.16E+05	-	1.05	18.8	3.09E+03	0.66000				
Perylene	30.16		1.0041	1.0041	1.0041	0	1.29E+05	-	1.00	3.47	3.09E+03	0.73900				
Indeno(1,2,3-cd)Pyrene	35.81		1.0002	1.0000	1.0000	-0.4	7.29E+05	-	1.05	27.6	2.04E+03	1.07000				
Dibenzo(a,h)Anthracene	35.96		1.0002	0.9998	1.0002	-0.9	2.03E+05	-	1.00	7.01	1.82E+03	1.02000				
Benzo(ghi)Perylene	37.61		1.0002	1.0005	1.0005	+0.7	8.93E+05	-	1.17	23.2	2.04E+03	0.93400				

Name	Actual RT	Stats		PAH Ax	ES/SS	Actual RRT	Diff Secs	Response	Ra	RRF	Recv.
		Largest +ve RT shift (secs)	Largest -ve RT shift (secs)								
				0.7	3.7						
				-2.6	-0.5						
13C6-Naphthalene	9.34				0.8577	0.8578	+0.1	1.82E+06	-	2.23	73.9
13C6-2-Methylnaphthalene	10.97				1.0075	1.0080	+0.3	1.05E+06	-	1.03	92.7
13C6-Acenaphthylene	13.41				0.9712	0.9712	0	1.94E+06	-	1.57	102.0
13C6-Acenaphthene	13.90				1.0067	1.0067	0	1.02E+06	-	0.83	102.0
13C6-Fluorene	15.38				1.1138	1.1140	+0.2	1.31E+06	-	1.00	109.0
13C6-Phenanthrene	18.09				1.3086	1.3099	+1.1	1.70E+06	-	1.31	107.0
13C6-Anthracene	18.23				1.3187	1.3200	+1.1	1.57E+06	-	1.12	116.0
13C6-Fluoranthene	21.26				0.9755	0.9754	-0.1	2.14E+06	-	1.21	116.0
13C3-Pyrene	21.85				1.0023	1.0023	0	2.12E+06	-	1.35	103.0
13C6-Benzo(a)Anthracene	24.93				1.1431	1.1436	+0.7	1.60E+06	-	0.82	128.0
13C6-Chrysene	25.02				1.1481	1.1481	0	1.83E+06	-	0.92	130.0
13C6-Benzo(b)Fluoranthene	28.44				0.9582	0.9582	0	3.70E+06	-	1.28	103.0
13C6-Benzo(k)Fluoranthene	28.55				0.9621	0.9618	-0.5	3.94E+06	-	1.40	101.0
13C4-Benzo(e)Pyrene	29.57				0.9961	0.9961	0	3.93E+06	-	1.33	105.0
13C4-Benzo(a)Pyrene	29.79				1.0039	1.0039	0	3.30E+06	-	1.14	103.0
d12-Perylene	30.04				1.0119	1.0121	+0.4	2.98E+06	-	1.26	84.2
13C6-Indeno(1,2,3-cd)Pyrene	35.81				1.2048	1.2065	+3.0	2.00E+06	-	0.60	119.0
13C6-Dibenzo(ah)Anthracene	35.97				1.2101	1.2119	+3.2	2.31E+06	-	0.69	119.0
13C12-Benzo(ghi)Perylene	37.59				1.2646	1.2667	+3.7	2.65E+06	-	0.79	119.0
AS--Anthracene	18.17				1.3147	1.3159	+1.0	1.56E+06	-	1.06	122.0
SS-Fluorene	15.30				0.9946	0.9946	0	1.38E+06	-	1.19	88.7
SS-Terphenyl	22.22				1.0453	1.0453	0	9.38E+05	-	0.39	111.0
JS-Methylnaphthalene	10.89				-	-	-	1.10E+06	-	-	-
JS-Acenaphthene	13.81				-	-	-	1.21E+06	-	-	-
JS-Pyrene	21.80				-	-	-	1.52E+06	-	-	-
JS-Benzo(a)Pyrene	29.68				-	-	-	1.40E+06	-	-	-

AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

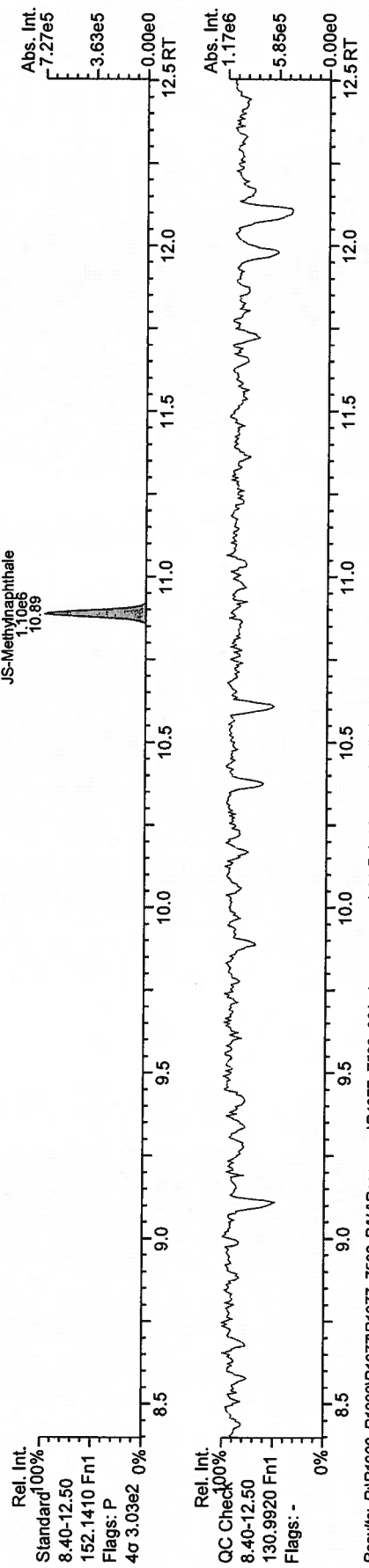
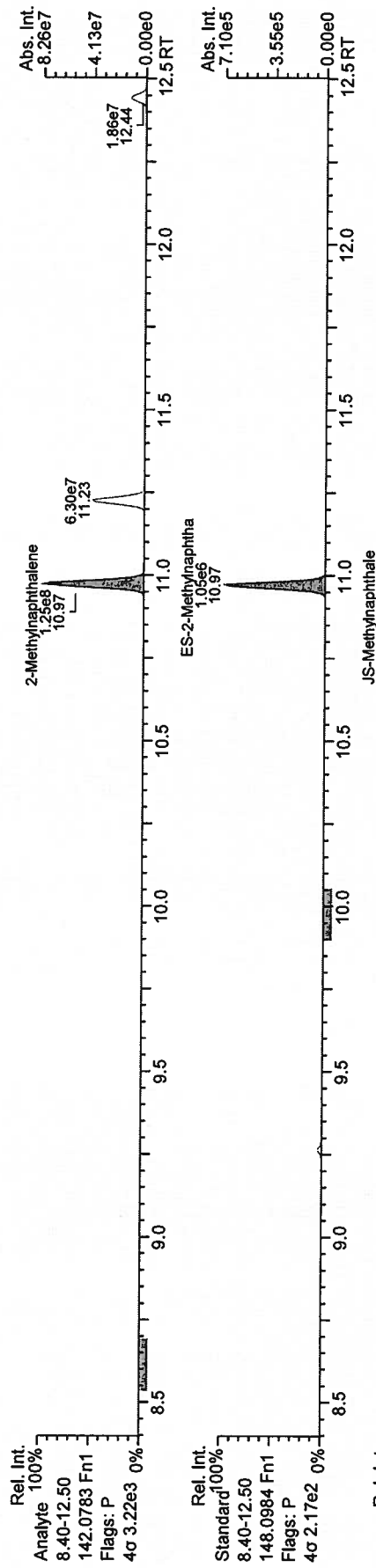
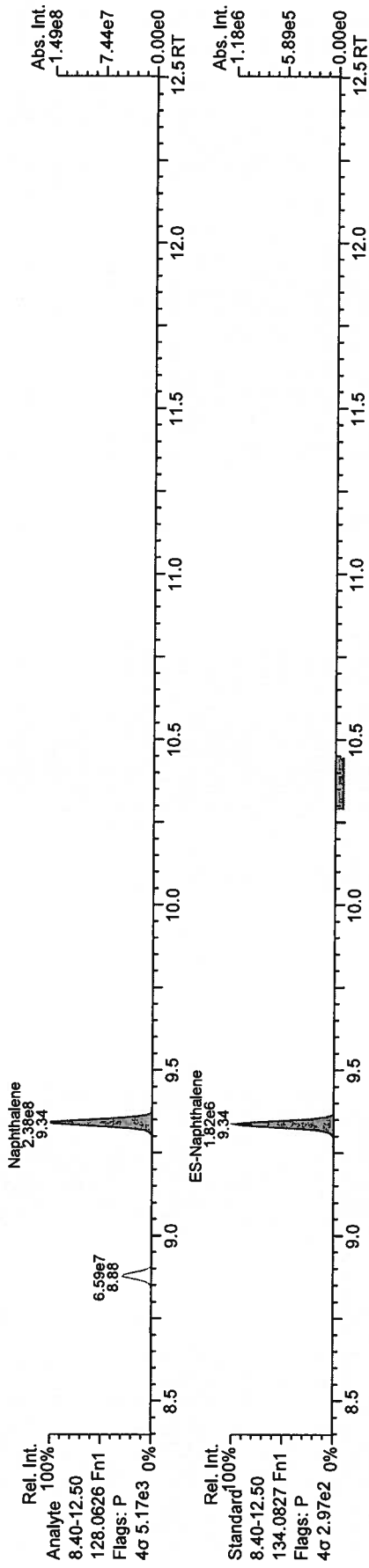
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User: MC Datafile: 100201P2-04



AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

Acq: 1-FEB-2010 15:22:53  
User: MC Datafile: 100201P2-04

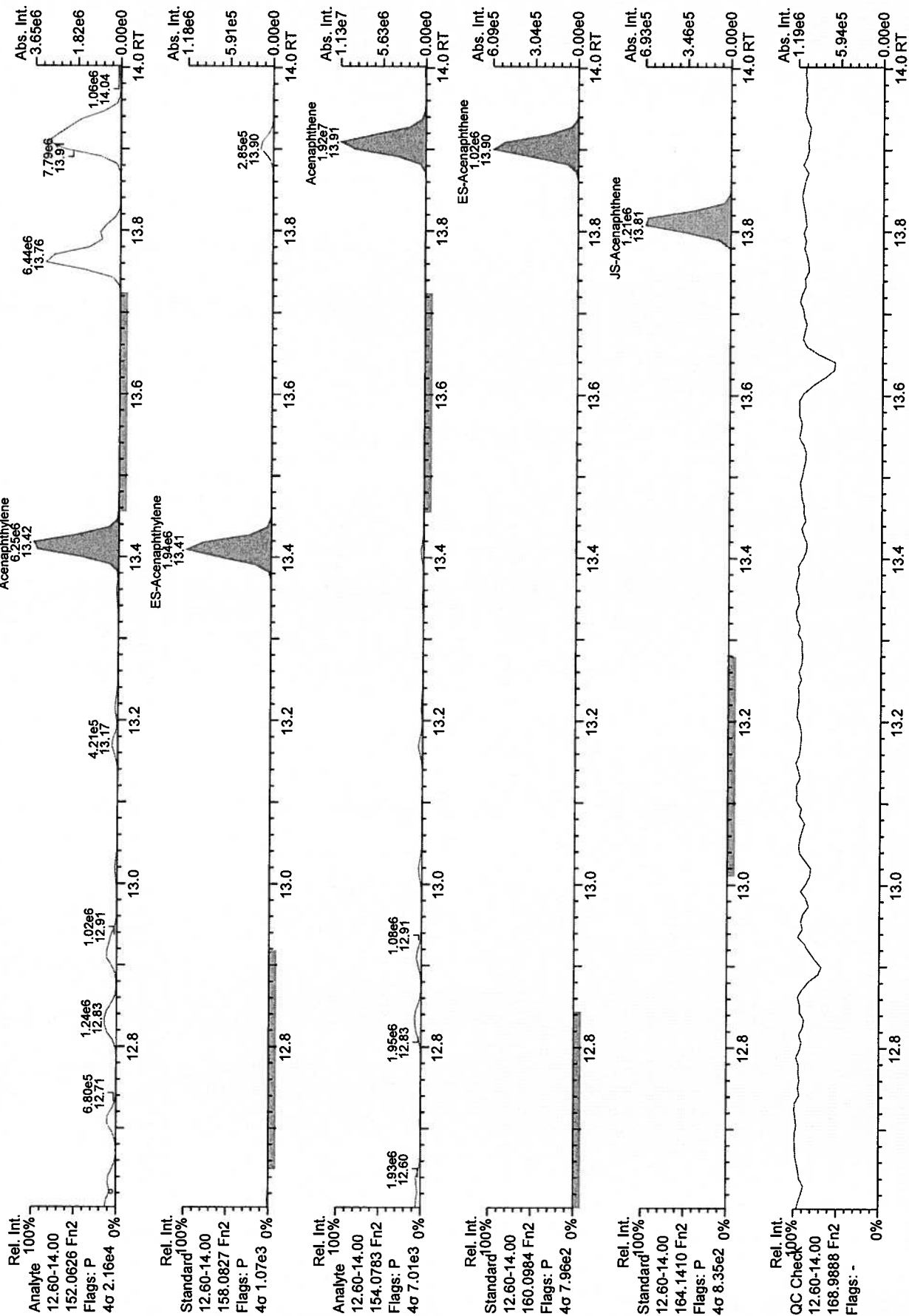


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AP UltraTrace-Pro V4.12 User/System: MC/MCI/7-047 cc: 3478, 5904, 0094, 3812, 2638 scc: 711-677  
Revised: 01-Feb-2010 16:53:28 (MC) Printed: 02-Feb-2010 09:29:24 Page 2 of 9

AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

Acq: 1-FEB-2010 15:22:53  
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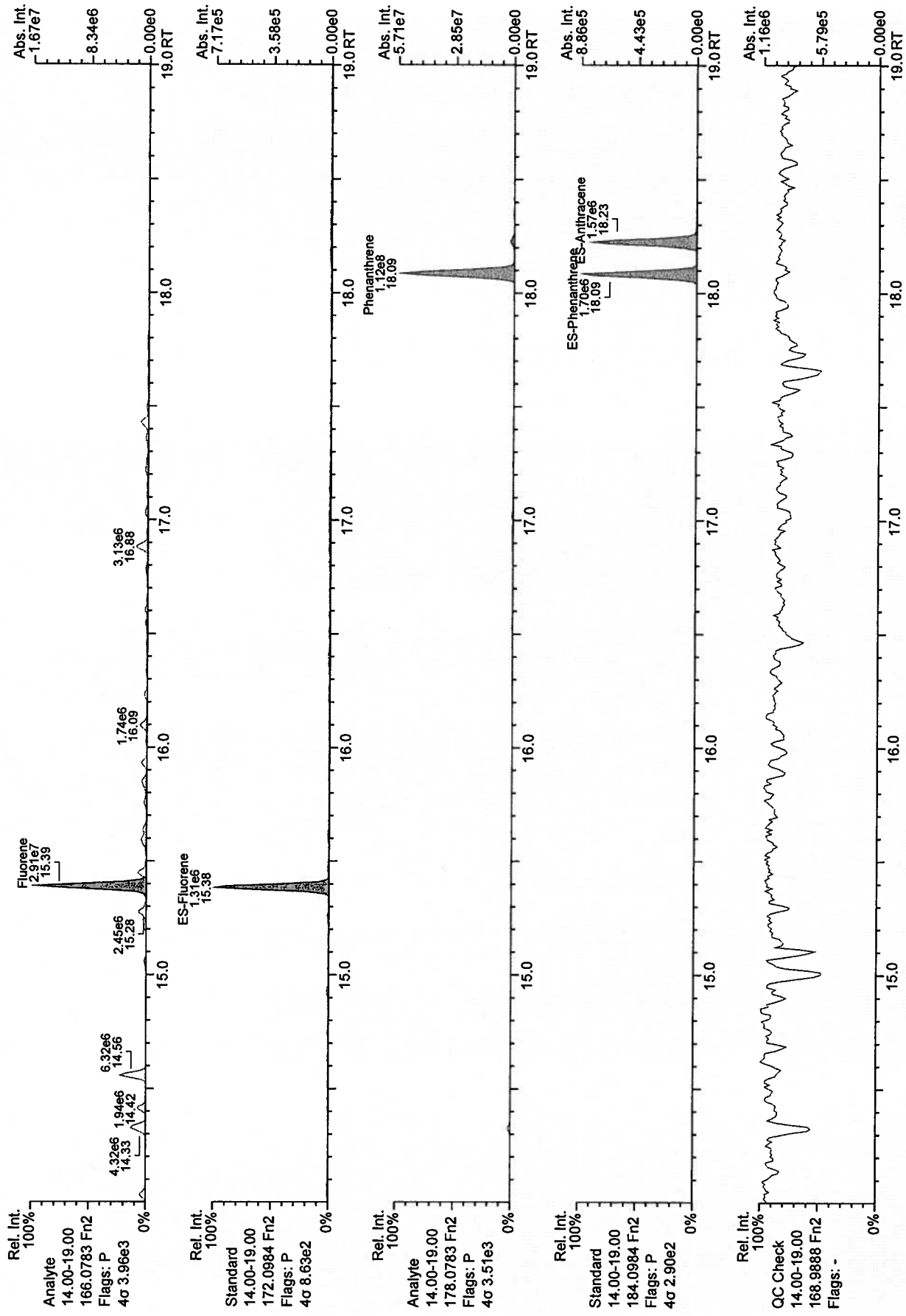




AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

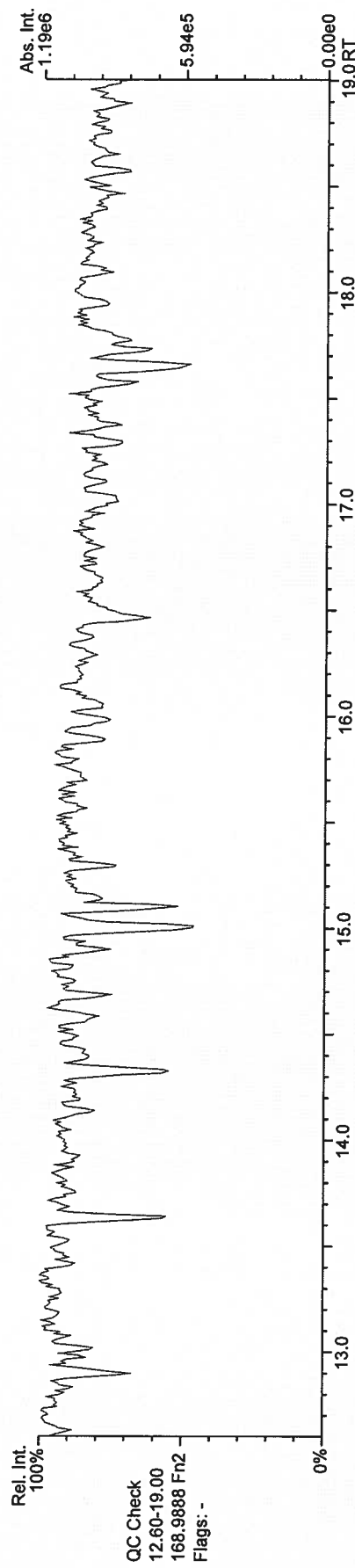
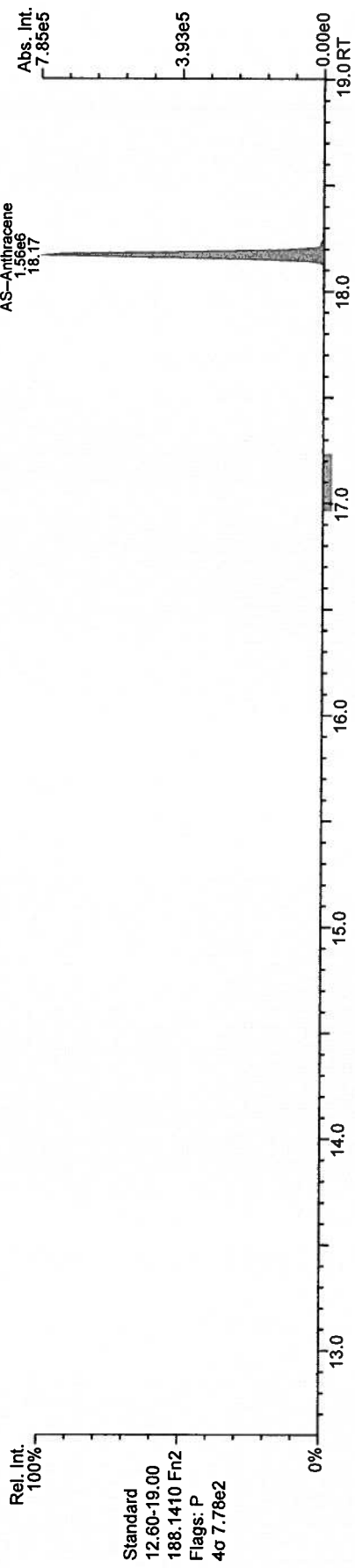
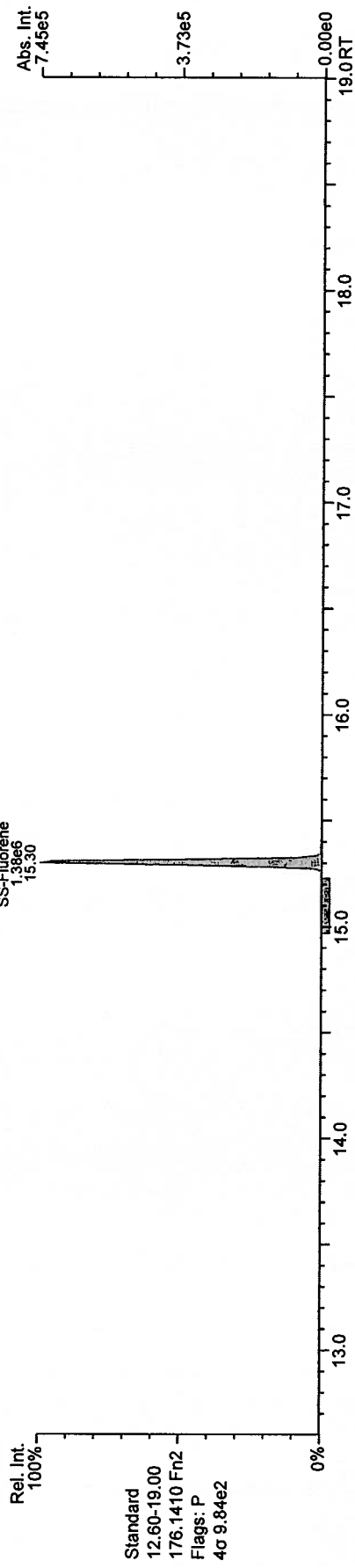
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AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

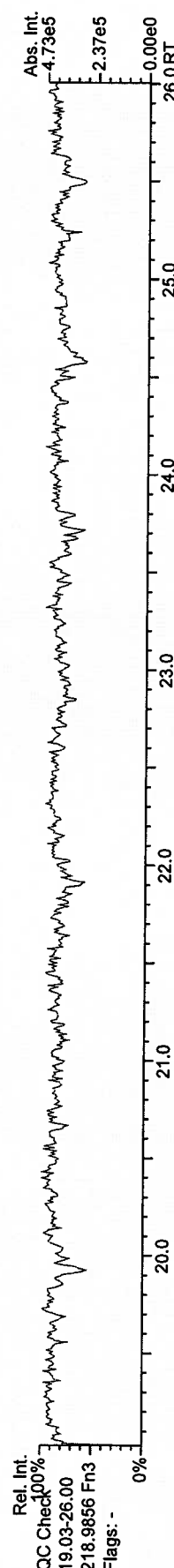
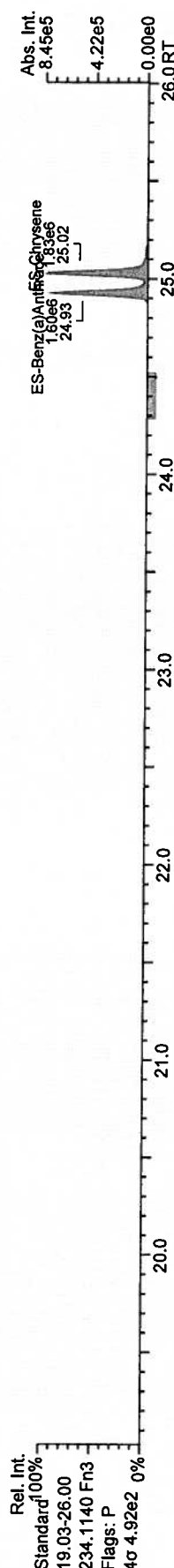
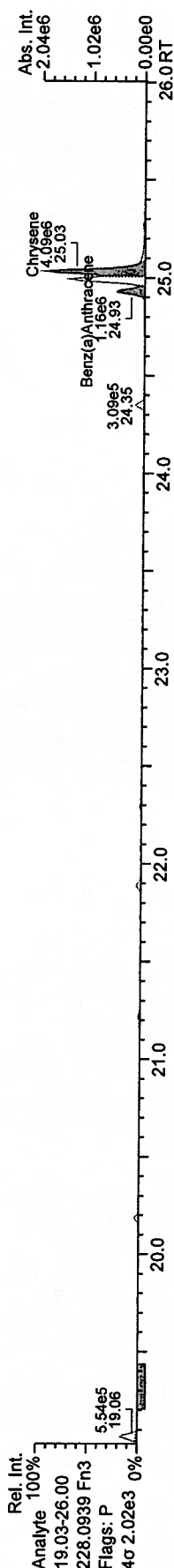
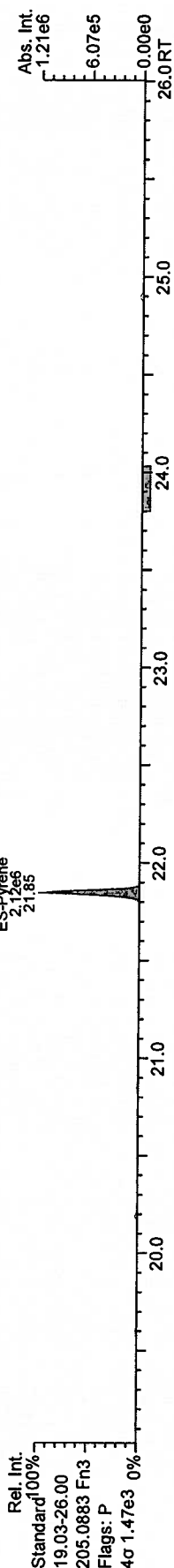
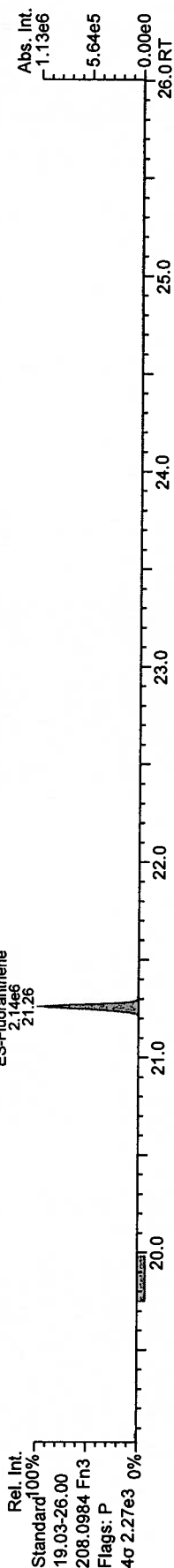
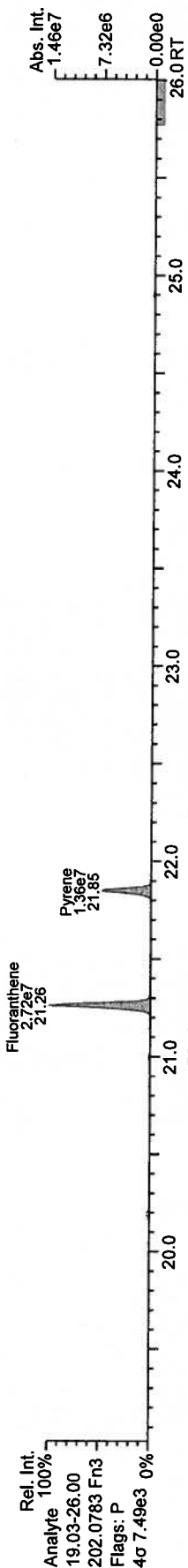
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AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

Acq: 1-FEB-2010 15:22:53  
User: MC Datafile: 100201P2-04



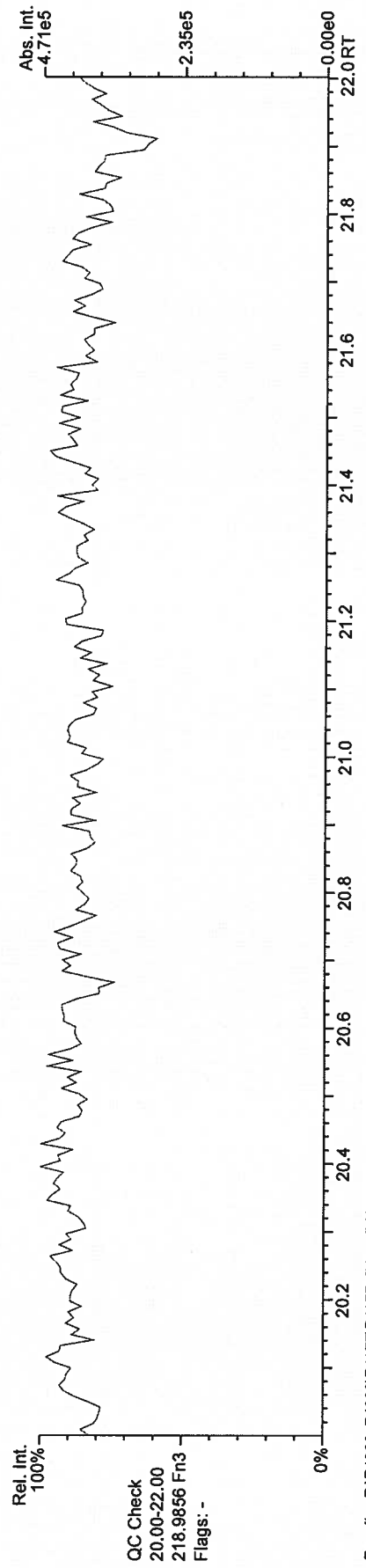
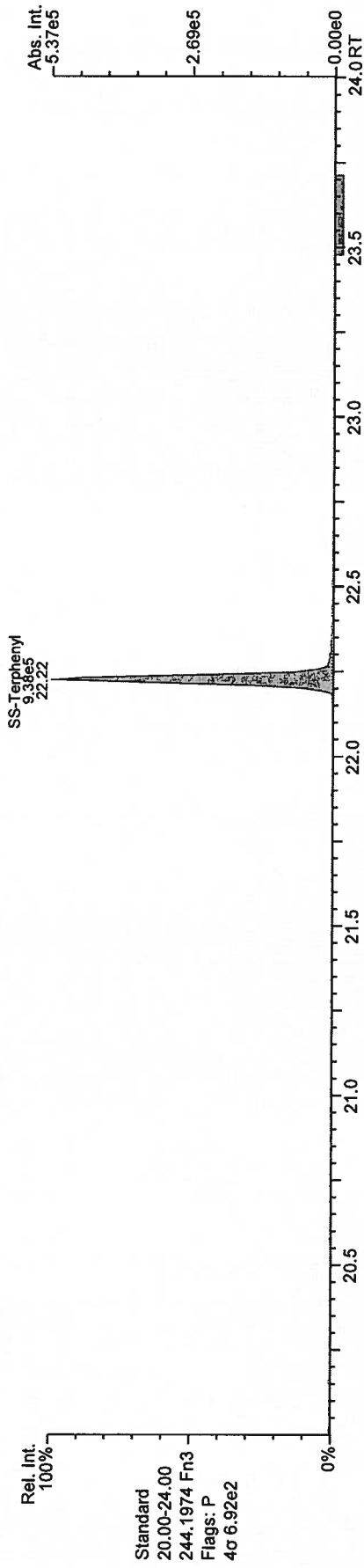
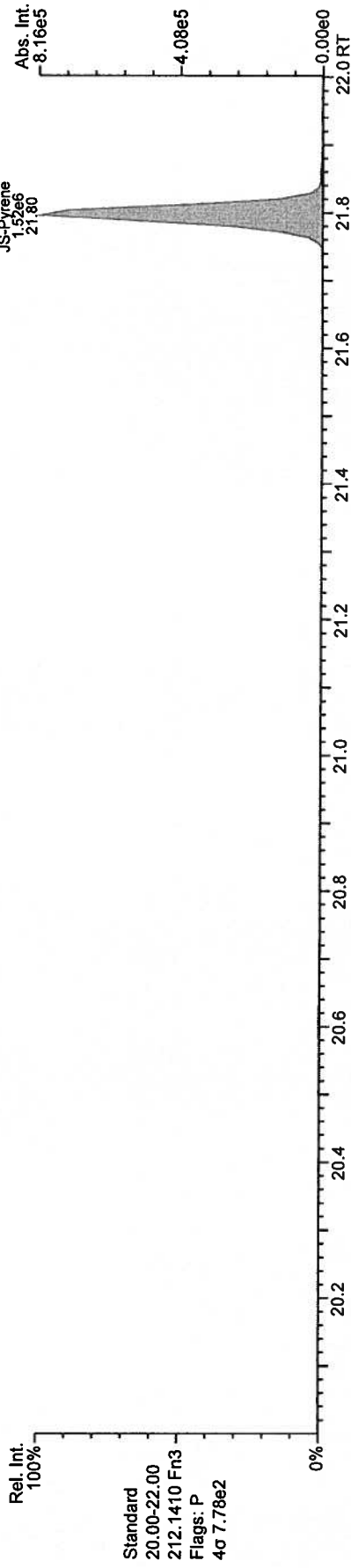
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Revised: 01-Feb-2010 16:54:01 (MC) Printed: 02-Feb-2010 09:29:57 Page 6 of 9

AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

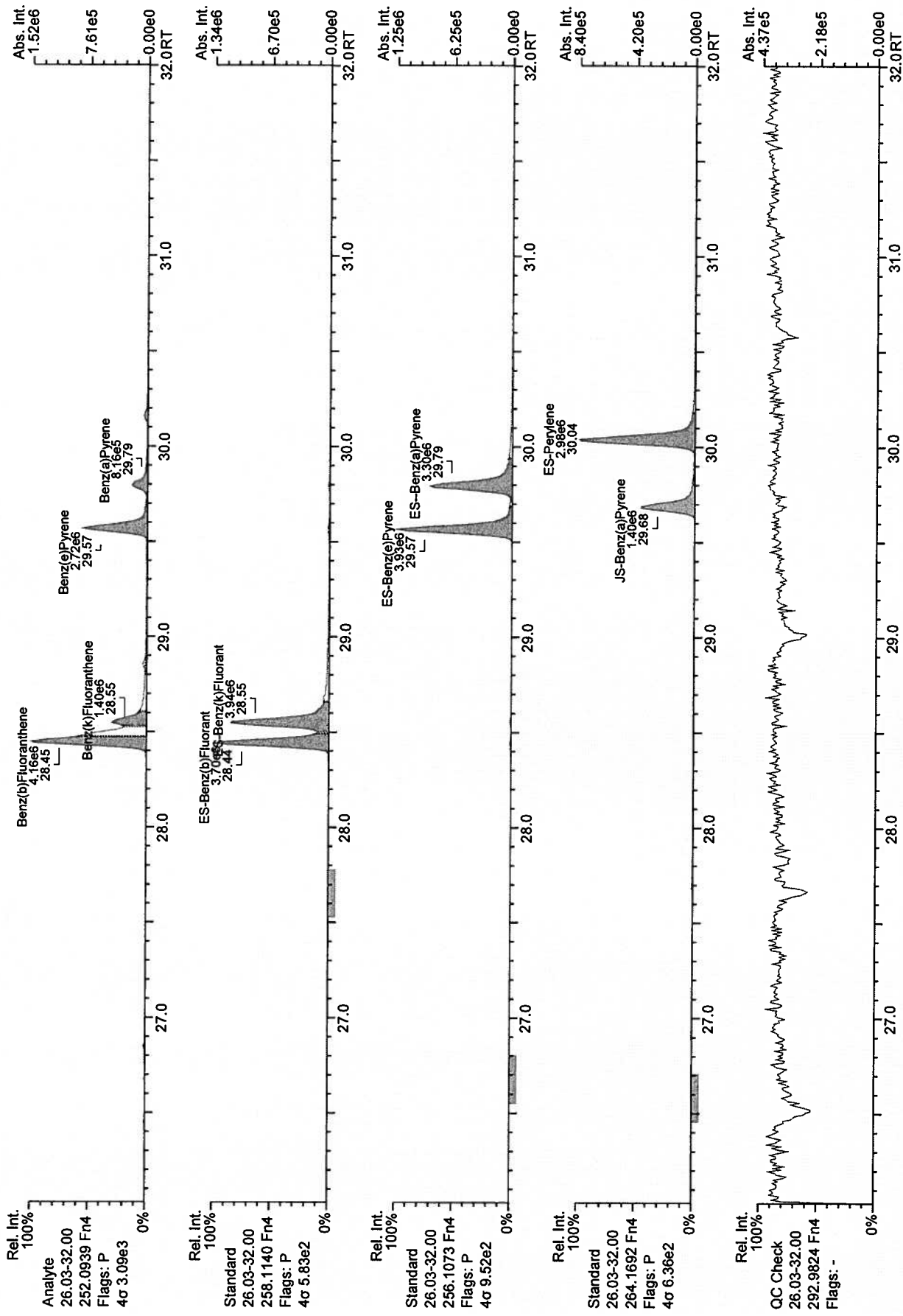
Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

Acq: 1-FEB-2010 15:22:53  
User: MC Datafile: 100201P2-04



Results: P:\P1900\_P1999P1977P1977\_7528\_PAHResources\1977\_7528\_001\utp\_res, saved 01-Feb-2010 16:56 (MC)  
AP UltraTrace-Pro V4.12 User/System: MC/MC17-047 cc: 1997, 7953 soc: 711-677

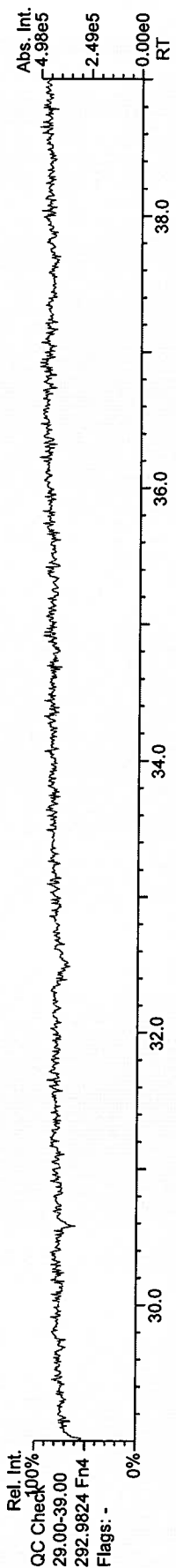
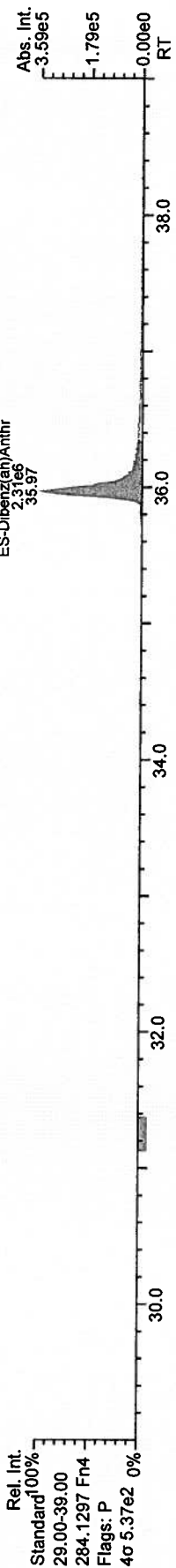
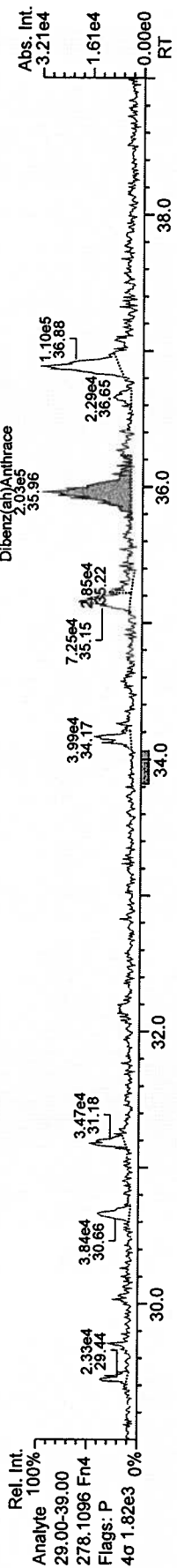
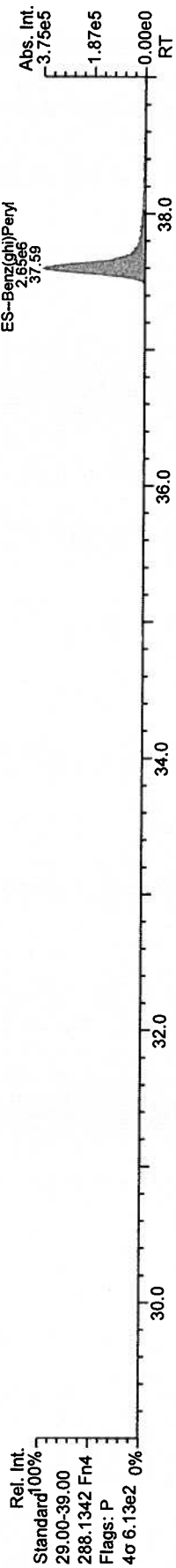
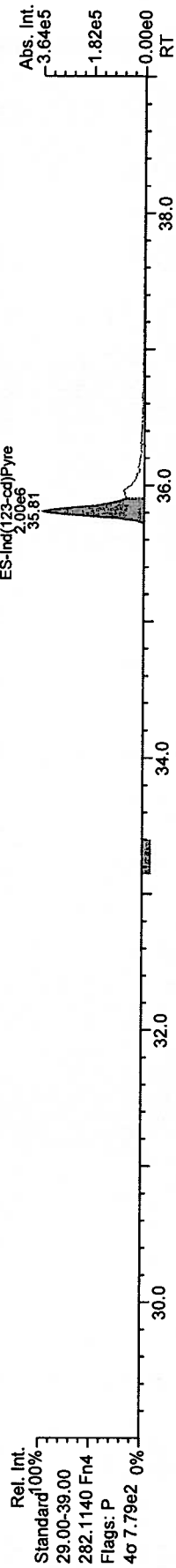
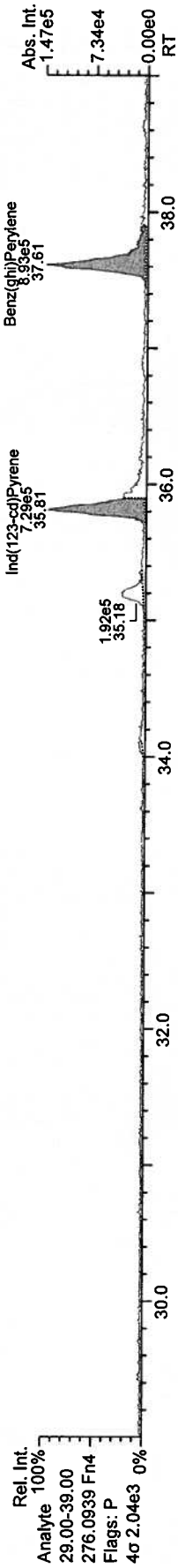
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PKD: 01-Feb-2010 16:53:05 Printed: 02-Feb-2010 09:30:01 Page 7 of 9



AP Lab ID: P1977\_7528\_001  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-Blank  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 78

Acq: 1-FEB-2010 15:22:53  
User: MC Datafile: 100201P2-04



Results: P1977\_7528\_001.res, saved 01-Feb-2010 16:56 (MC)  
AP UltraTrace-Pro V4.12 User/System: MC/MC17-047 cc: 8311, 6979, 6871, 7320, 6145 scc: 711-677

Revised: 01-Feb-2010 16:55:15 (MC) Printed: 02-Feb-2010 09:30:29 Page 9 of 9

Stats		PAH Ax	ES/SS	Checkcode: 06							
Largest +ve RT shift (secs)		0.7	2.8								
Largest -ve RT shift (secs)		-3.0	-0.5								
Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc ng/Train	Noise	DL
Naphthalene	9.33		1.0006	1.0000	-0.3	2.29E+08	-	1.04	4,650	7.38E+03	0.59200
2-Methylnaphthalene	10.97		1.0005	1.0000	-0.3	6.80E+07	-	1.25	2,050	4.20E+03	0.46000
Acenaphthylene	13.41		1.0007	1.0000	-0.6	7.88E+06	-	1.04	151	2.38E+04	2.00000
Acenaphthene	13.90		1.0007	1.0000	-0.6	1.20E+07	-	1.31	337	1.77E+04	2.01000
Fluorene	15.38		1.0006	1.0000	-0.6	1.89E+07	-	1.11	514	4.43E+03	0.49200
Phenanthrene	18.08		1.0000	1.0000	0	9.28E+07	-	1.01	2,040	3.82E+03	0.43000
Anthracene	18.23		1.0000	1.0005	+0.5	3.68E+06	-	1.06	85.9	3.82E+03	0.45700
Fluoranthene	21.25		1.0000	1.0000	0	2.62E+07	-	1.00	426	8.27E+03	0.68100
Pyrene	21.85		1.0000	1.0004	+0.5	1.05E+07	-	1.01	165	8.27E+03	0.66800
Benzo(a)Anthracene	24.93		1.0003	1.0003	0	6.33E+05	-	1.07	13.7	3.15E+03	0.33500
Chrysene	25.03		1.0000	1.0003	+0.5	3.00E+06	-	1.00	61	3.15E+03	0.35700
Benzo(b)Fluoranthene	28.43		1.0003	1.0000	-0.5	3.13E+06	-	1.04	54.4	3.08E+03	0.36900
Benzo(k)Fluoranthene	28.54		1.0015	1.0000	-2.6	9.61E+05	-	1.07	15.2	3.08E+03	0.40700
Benzo(e)Pyrene	29.56		1.0000	1.0003	+0.5	1.64E+06	-	1.08	26.9	3.08E+03	0.39400
Benzo(a)Pyrene	29.78		1.0000	1.0000	0	3.50E+05	-	1.05	7.23	3.08E+03	0.57100
Perylene	30.15		1.0041	1.0041	0	7.21E+04	-	1.00	2.05	3.08E+03	0.75200
Indeno(1,2,3-cd)Pyrene	35.78		1.0002	1.0002	0	3.64E+05	-	1.05	12.6	1.89E+03	0.87200
Dibenzo(a,h)Anthracene	35.91		1.0002	0.9988	-3.0	4.90E+04	-	1.00	1.82	2.02E+03	1.09000
Benzo(ghi)Perylene	37.59		1.0002	1.0005	+0.7	3.75E+05	-	1.17	9	1.89E+03	0.82400

Lab ID: P1977\_7528\_002

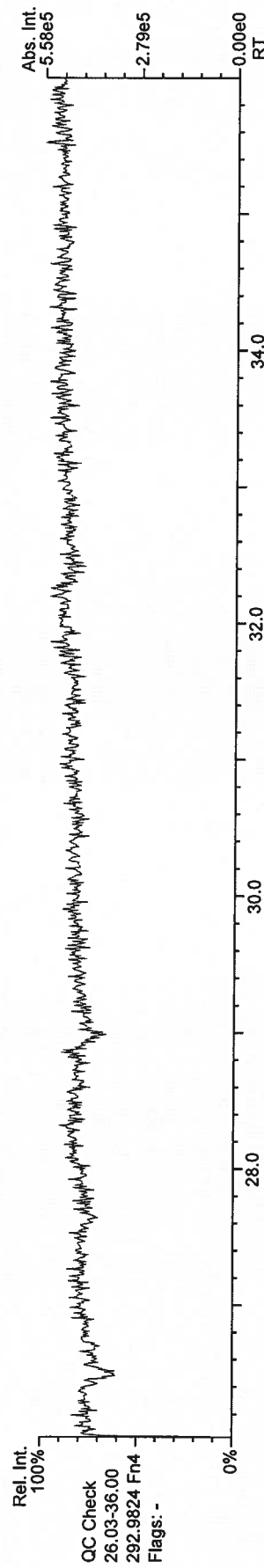
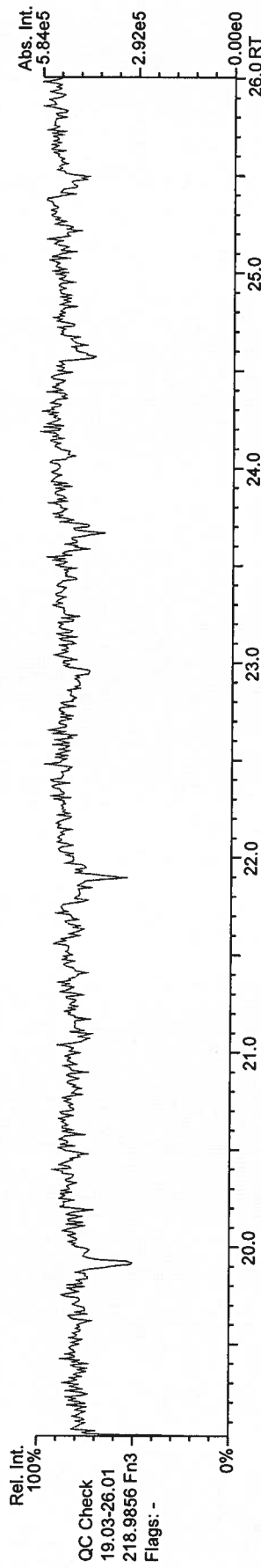
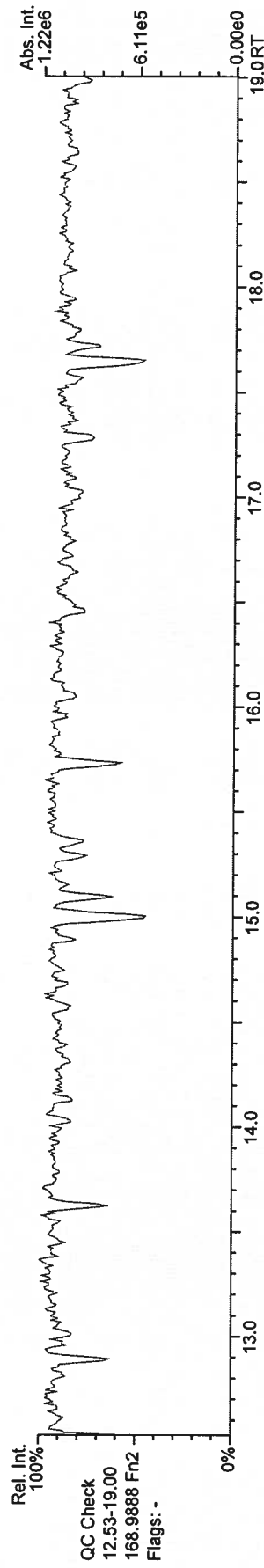
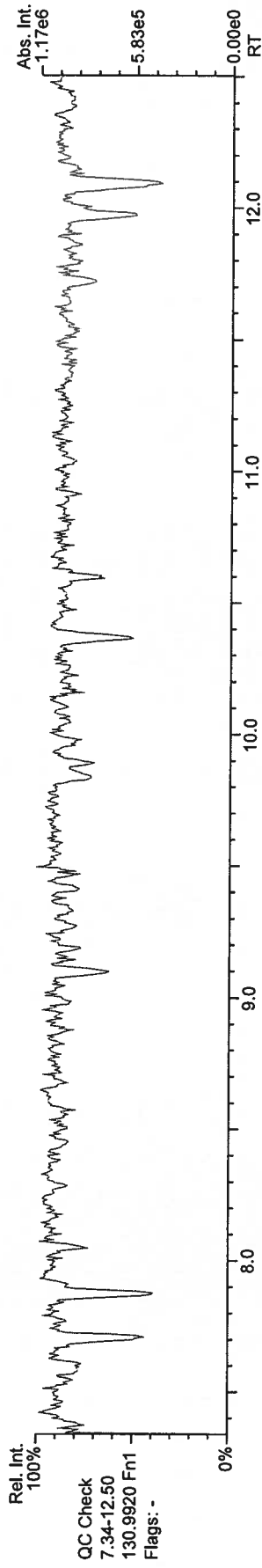
Name	Actual RT	Stats		PAH Ax	ES/SS	Actual RRT	Pred RRT	Diff Secs	Response	Ra	RRF	Recv.
		Largest +ve RT shift (secs)	Largest -ve RT shift (secs)									
13C6-Naphthalene	9.33			0.7	2.8	0.8577	0.8577	-0.3	1.90E+06	-	2.23	71.1
13C6-2-Methylnaphthalene	10.97			-3.0	-0.5	1.0075	1.0075	0	1.06E+06	-	1.03	85.8
13C6-Acenaphthylene	13.41					0.9712	0.9712	0	2.01E+06	-	1.57	86.7
13C6-Acenaphthene	13.90					1.0067	1.0067	0	1.09E+06	-	0.83	89.1
13C6-Fluorene	15.38					1.1138	1.1140	+0.2	1.33E+06	-	1.00	90.2
13C6-Phenanthrene	18.08					1.3086	1.3092	+0.5	1.79E+06	-	1.31	92.3
13C6-Anthracene	18.22					1.3187	1.3193	+0.5	1.61E+06	-	1.12	97.1
13C6-Fluoranthene	21.25					0.9755	0.9754	-0.1	2.46E+06	-	1.21	103.0
13C3-Pyrene	21.84					1.0023	1.0023	0	2.53E+06	-	1.35	95.6
13C6-Benzo(a) Anthracene	24.92					1.1431	1.1437	+0.8	1.73E+06	-	0.82	107.0
13C6-Chrysene	25.02					1.1481	1.1482	+0.1	1.97E+06	-	0.92	108.0
13C6-Benzo(b) Fluoranthene	28.43					0.9582	0.9582	0	4.43E+06	-	1.28	90.0
13C6-Benzo(k) Fluoranthene	28.54					0.9621	0.9618	-0.5	4.72E+06	-	1.40	87.8
13C4-Benzo(e) Pyrene	29.55					0.9961	0.9959	-0.4	4.54E+06	-	1.33	88.4
13C4-Benzo(a) Pyrene	29.78					1.0039	1.0036	-0.5	3.68E+06	-	1.14	83.4
dl2-Perylene	30.02					1.0119	1.0119	0	2.82E+06	-	1.26	58.0
13C6-Indeno(1,2,3-cd) Pyrene	35.78					1.2048	1.2057	+1.6	2.19E+06	-	0.60	94.4
13C6-Dibenzo(ah) Anthracene	35.95					1.2101	1.2116	+2.7	2.15E+06	-	0.69	81.1
13C12-Benzo(ghi) Perylene	37.57					1.2646	1.2662	+2.8	2.86E+06	-	0.79	93.3
AS--Anthracene	18.17					1.3147	1.3159	+1.0	1.57E+06	-	1.06	99.7
SS-Fluorene	15.30					0.9946	0.9946	0	1.49E+06	-	1.19	94.4
SS-Terphenyl	22.22					1.0453	1.0457	+0.5	1.02E+06	-	0.39	106.0
JS-Methylnaphthalene	10.89					-	-	-	1.20E+06	-	-	-
JS-Acenaphthene	13.81					-	-	-	1.48E+06	-	-	-
JS-Pyrene	21.79					-	-	-	1.96E+06	-	-	-
JS-Benzo(a) Pyrene	29.67					-	-	-	1.93E+06	-	-	-

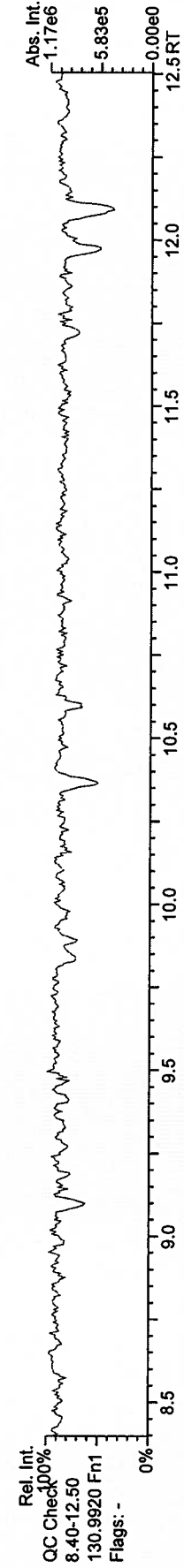
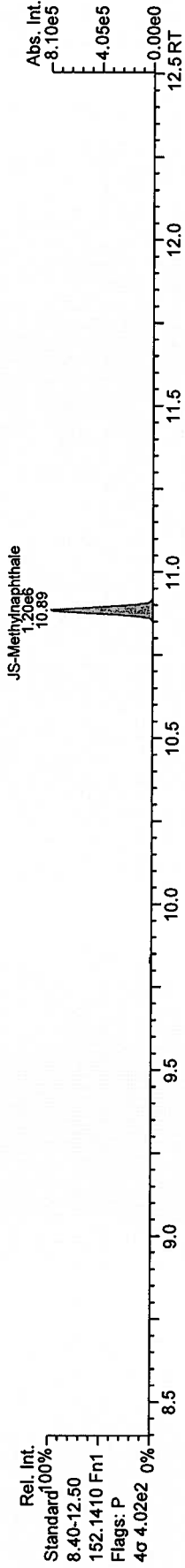
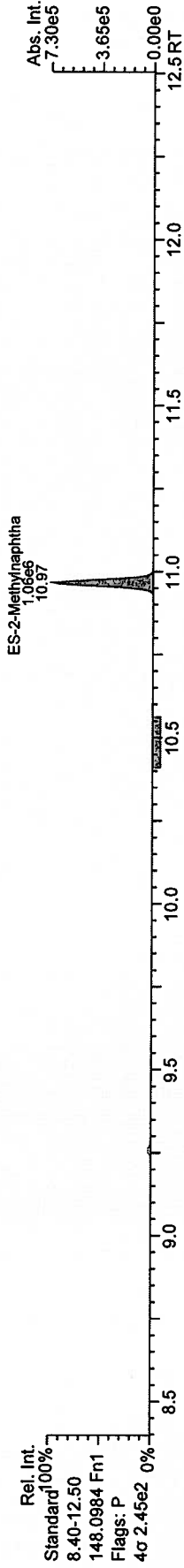
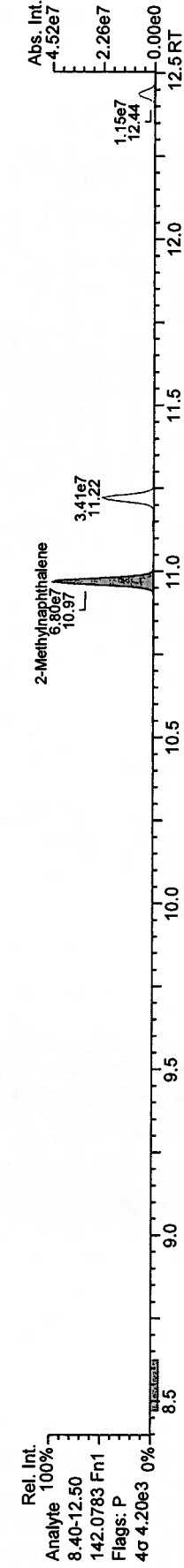
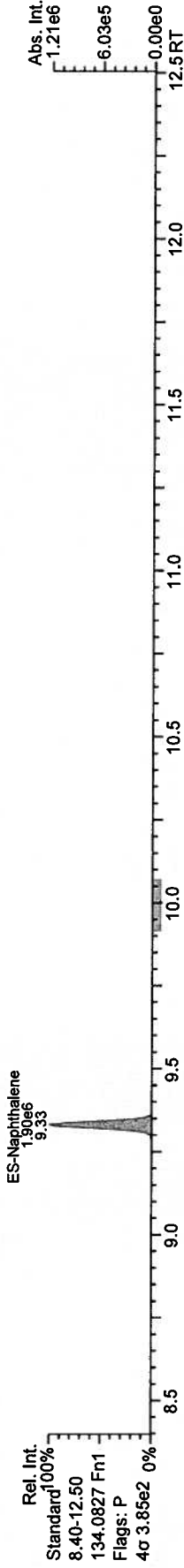
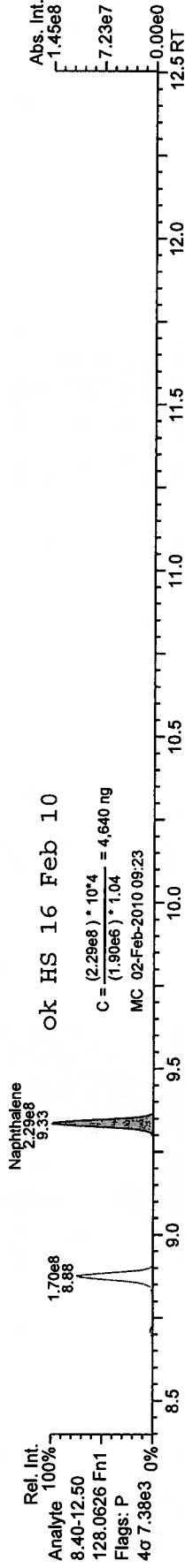


AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 79

Acq: 1-FEB-2010 16:08:28  
User: MC Datafile: 100201P2-05

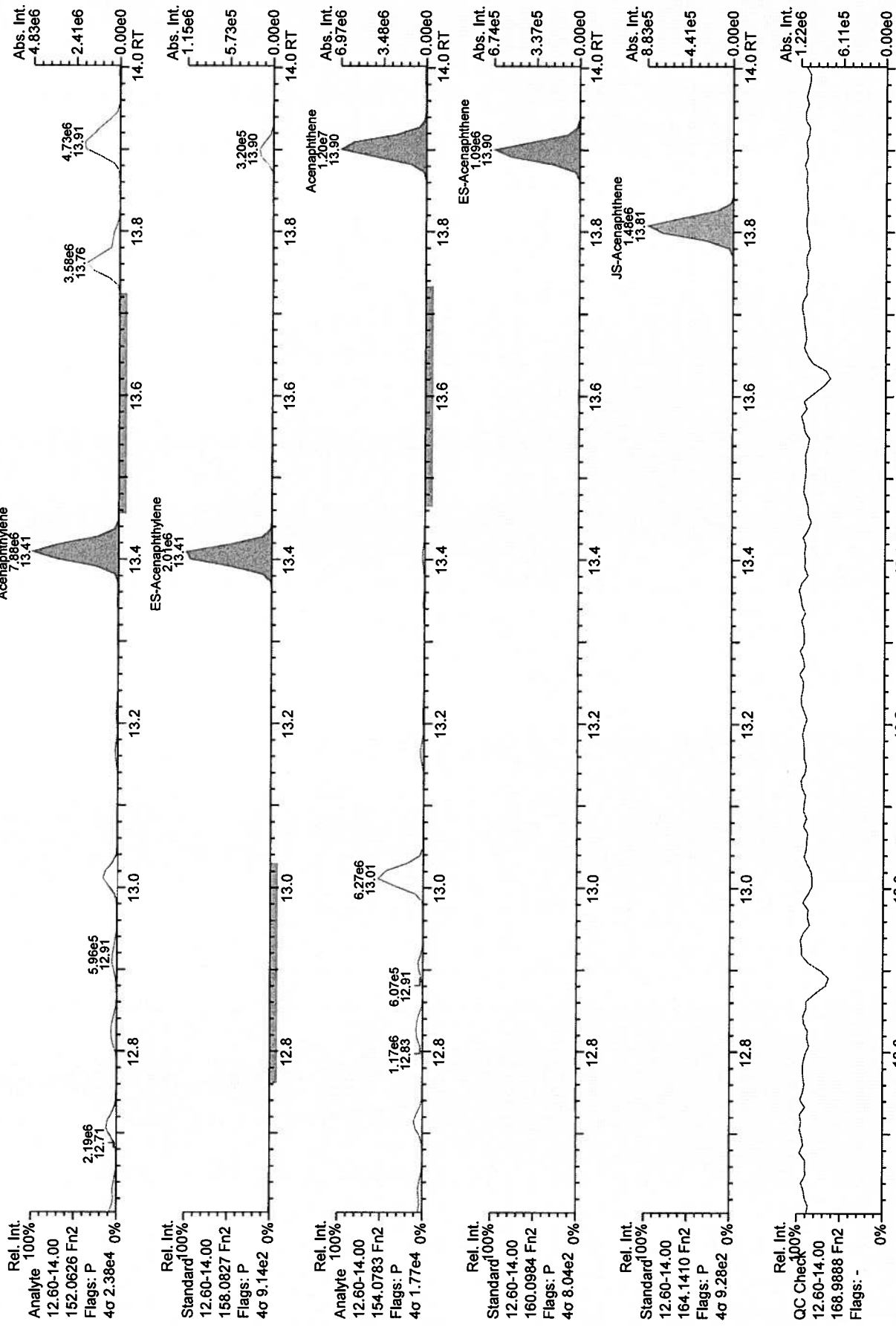




AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
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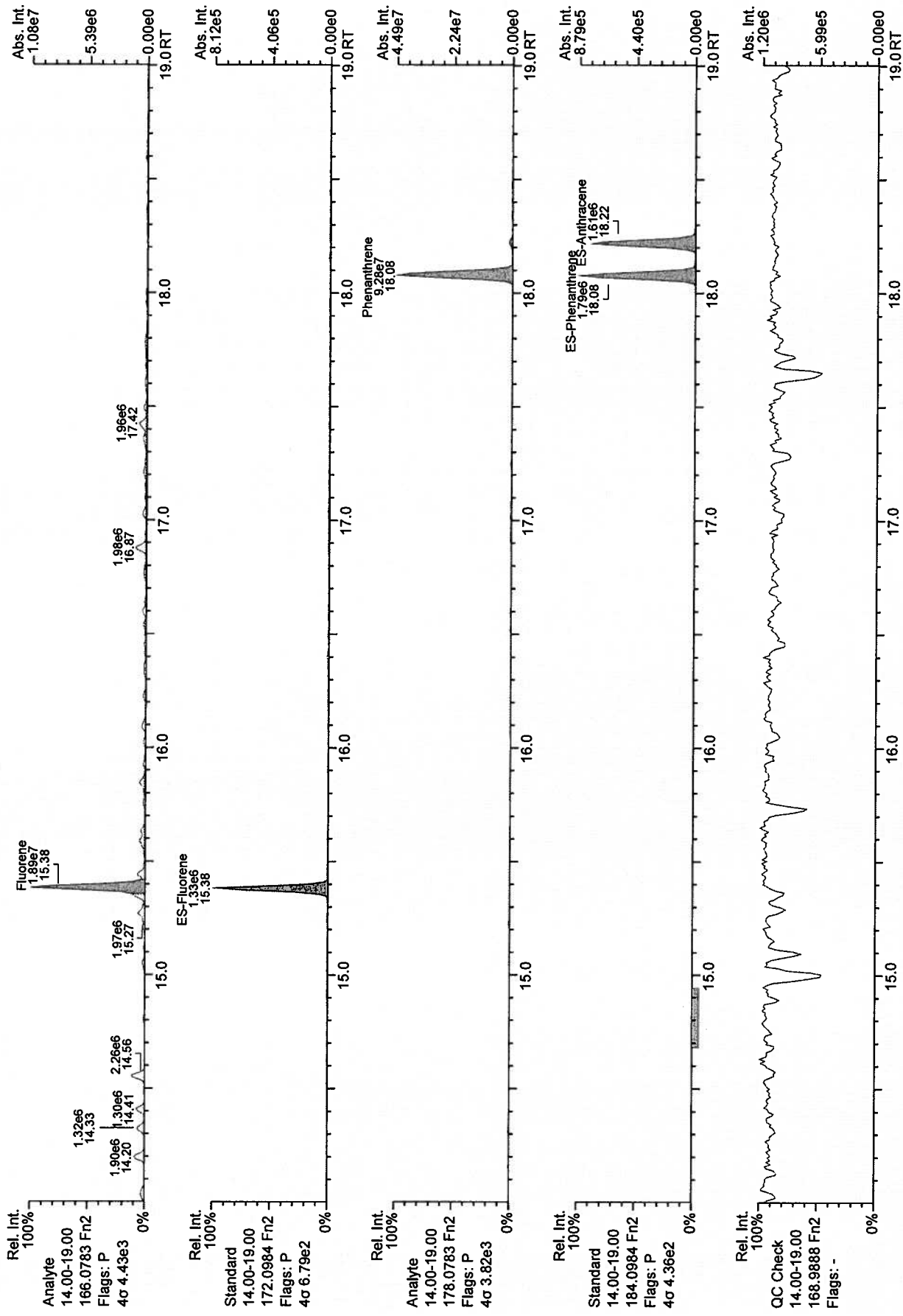
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AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

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SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 79

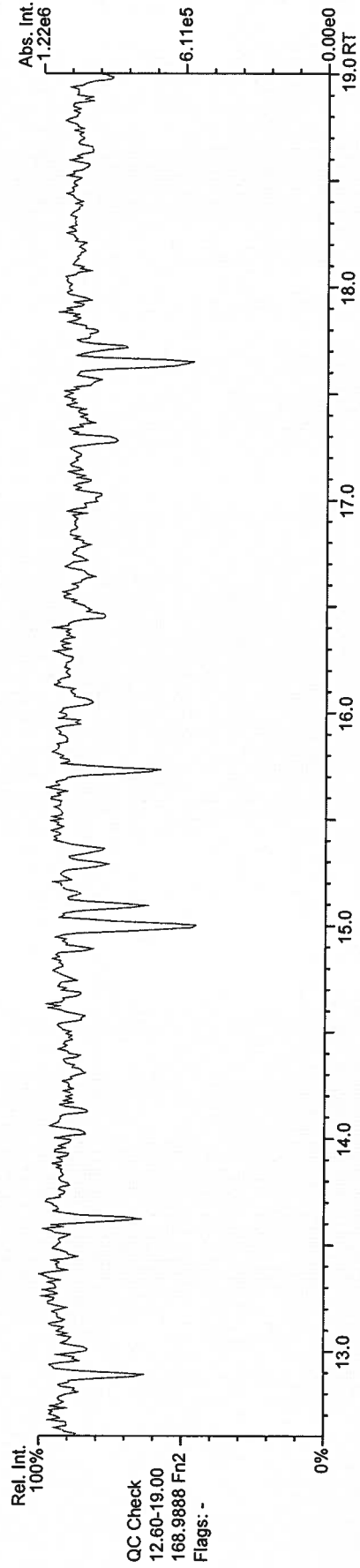
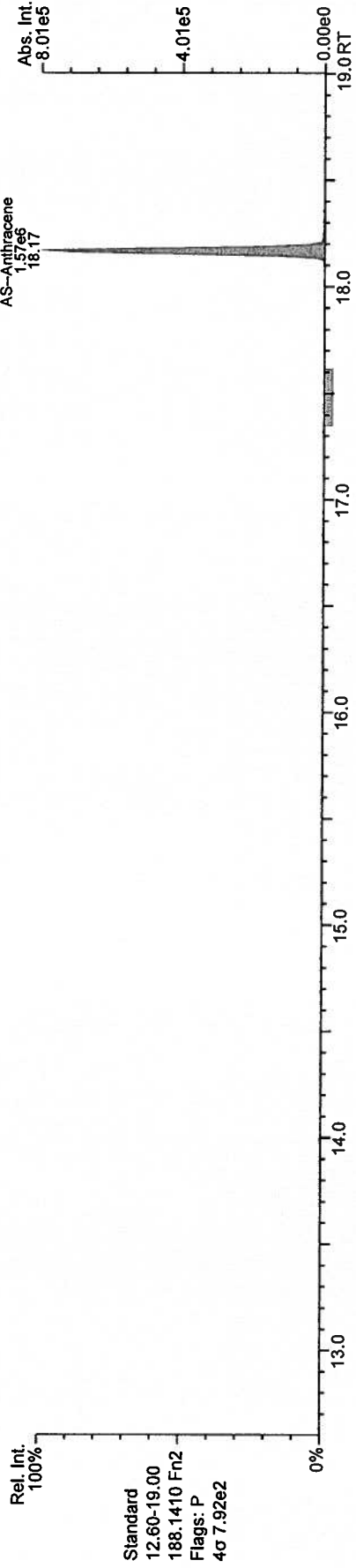
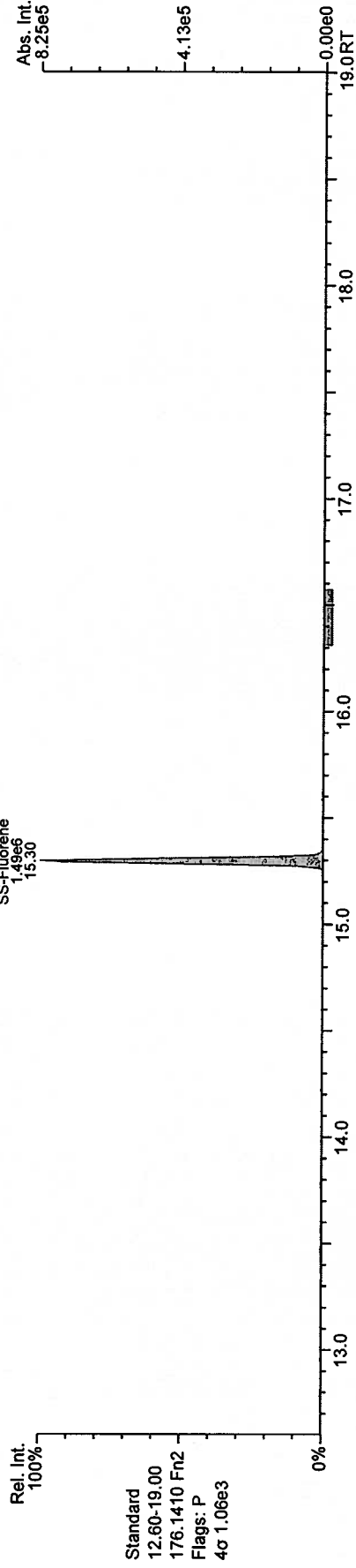
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AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 79

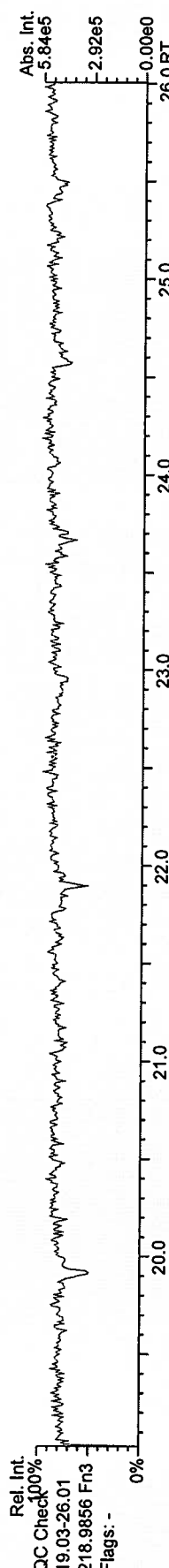
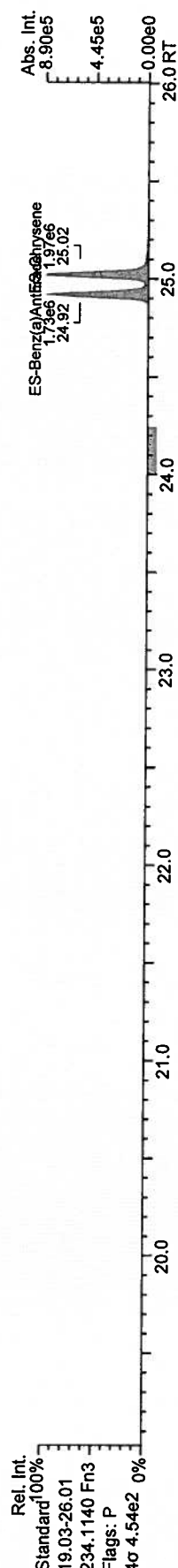
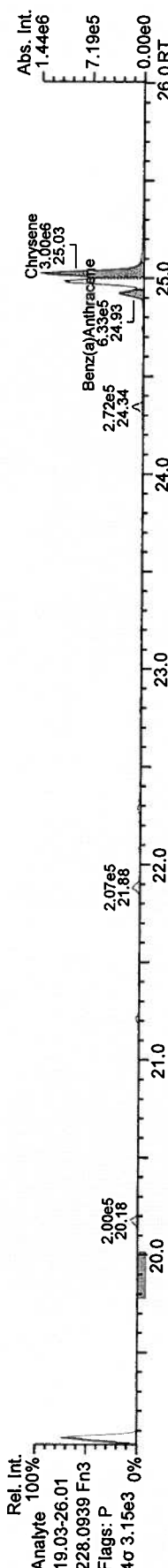
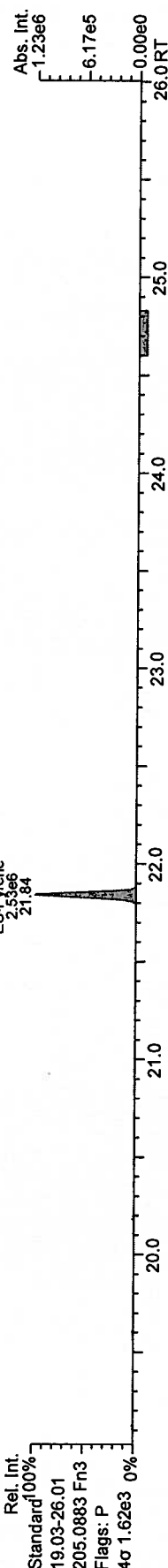
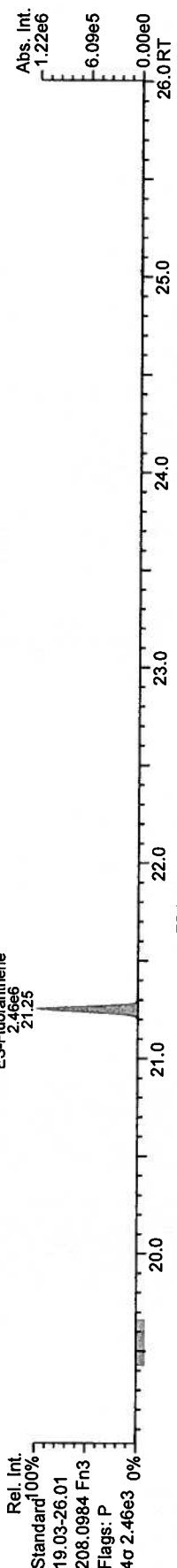
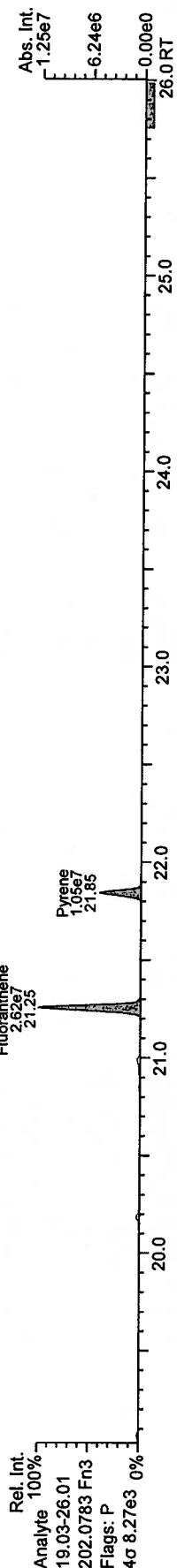
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AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-1  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 79

Acq: 1-FEB-2010 16:08:28  
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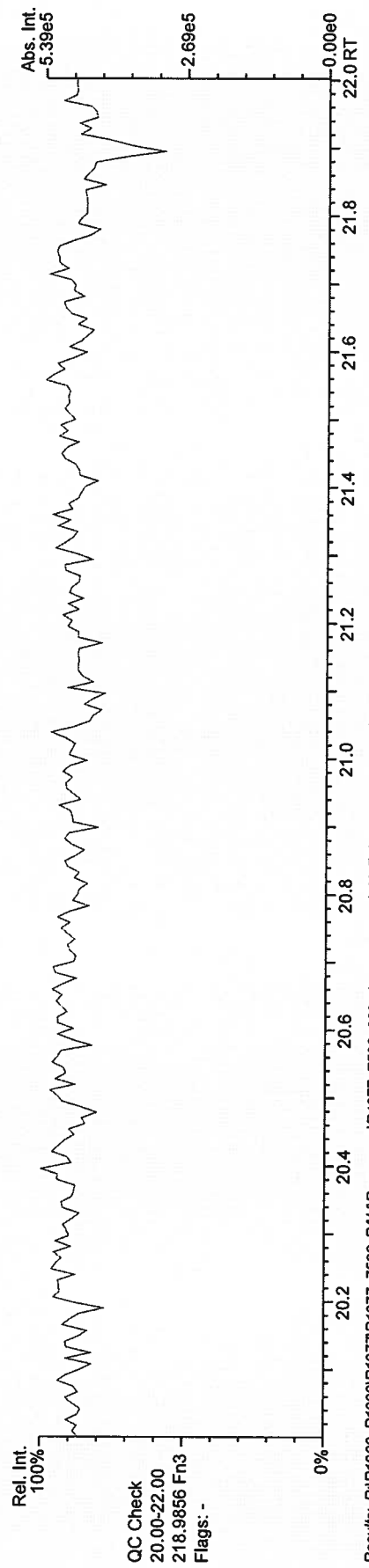
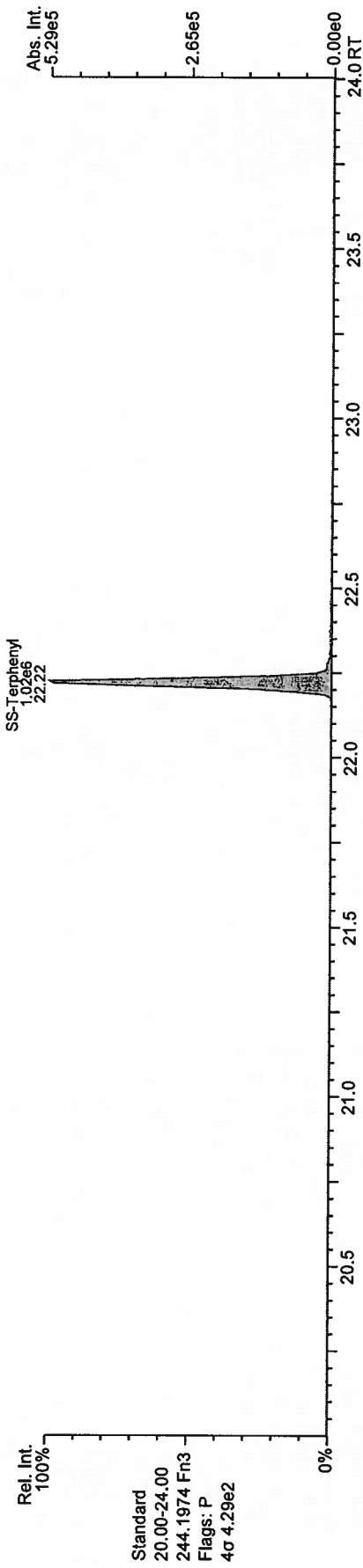
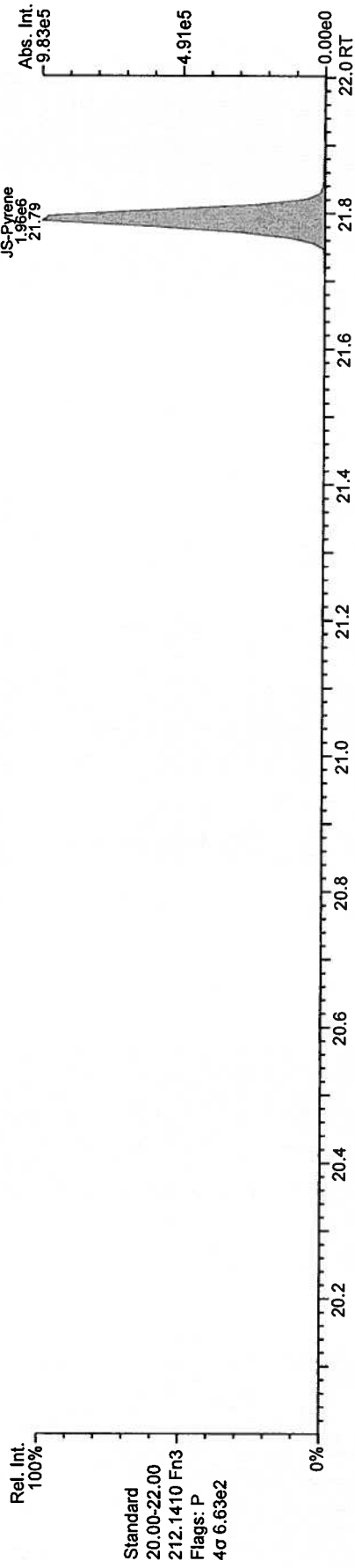
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AP UltraTrace-Pro V4.12 User/System: MC/MC17-047 cc: 4907, 7340, 4072, 0130, 2570 scc: 403-540

Revised: 02-Feb-2010 08:32:23 (MC) Printed: 02-Feb-2010 09:31:25 Page 6 of 9

AP Lab ID: P1977\_7528\_002  
Instr: AutoSpec-Ultima MM1

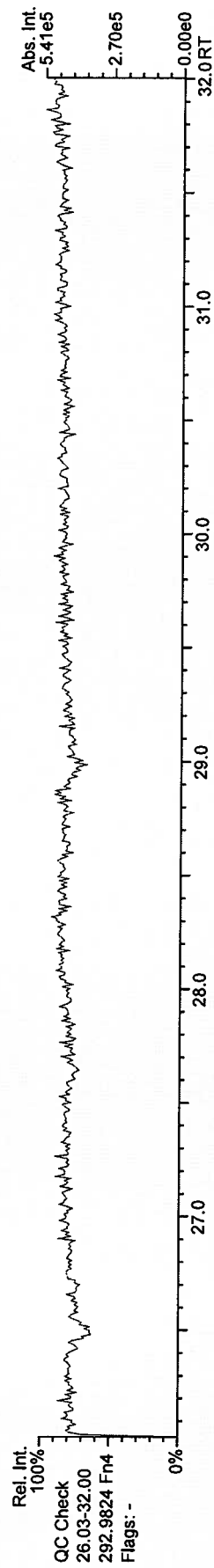
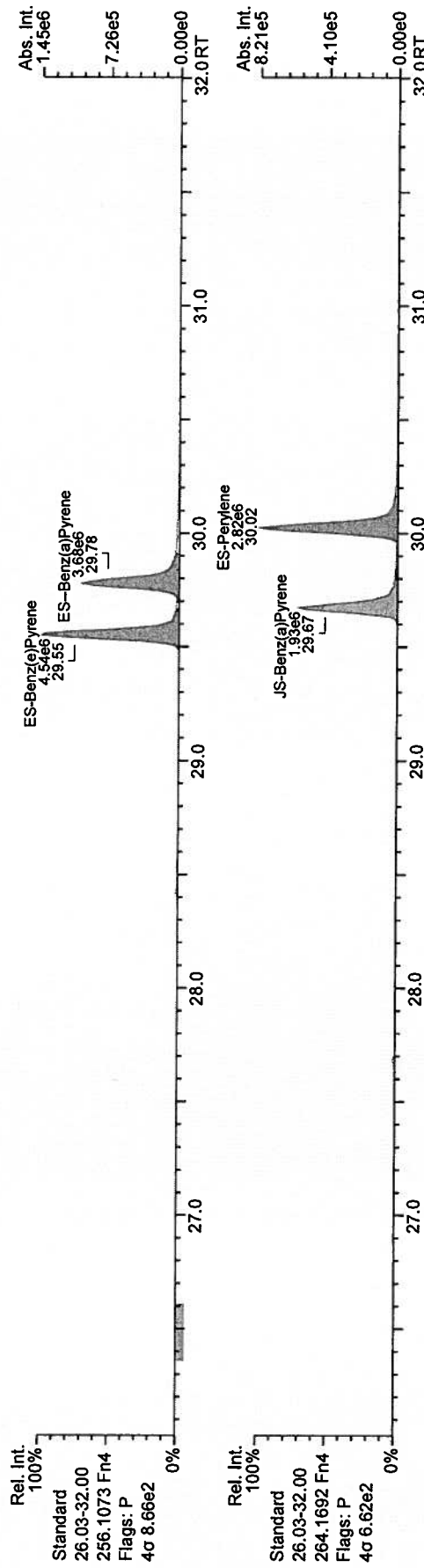
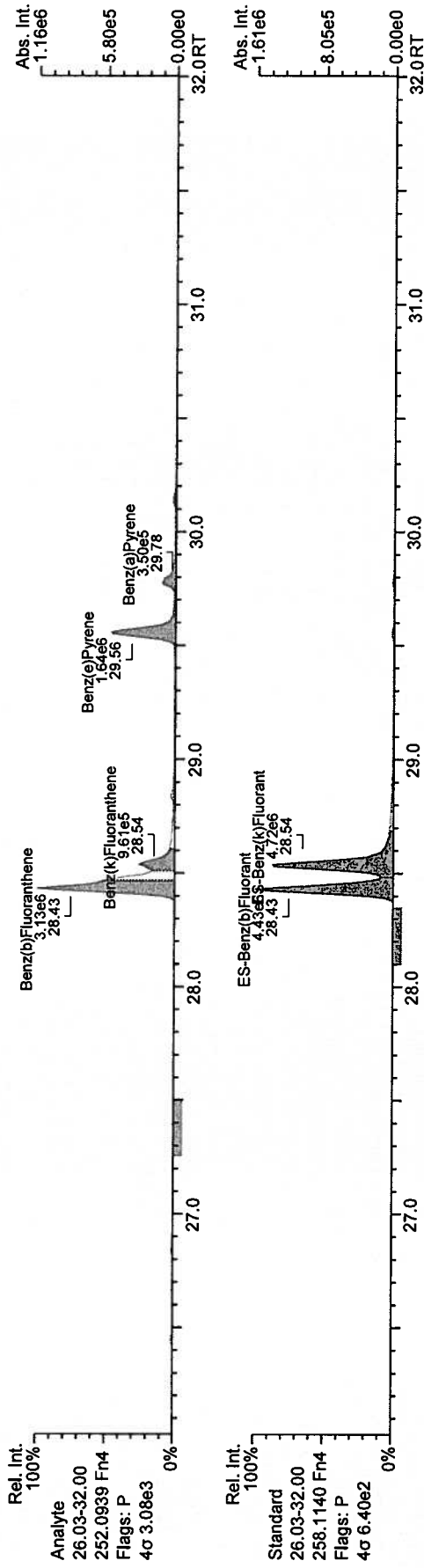
Sample ID: SSI #1-R-1  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 79

Acq: 1-FEB-2010 16:08:28  
User: MC Datafile: 100201P2-05

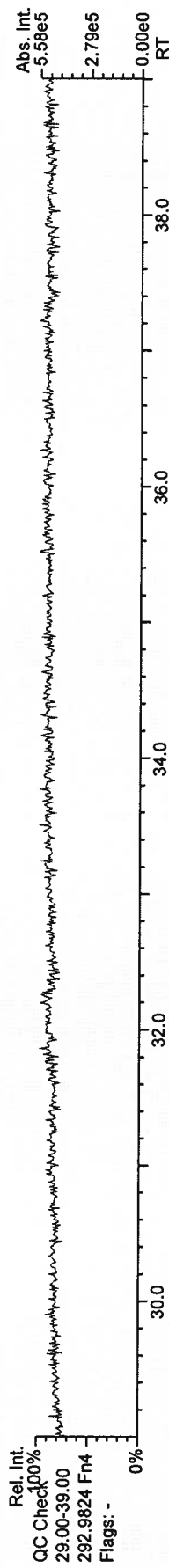
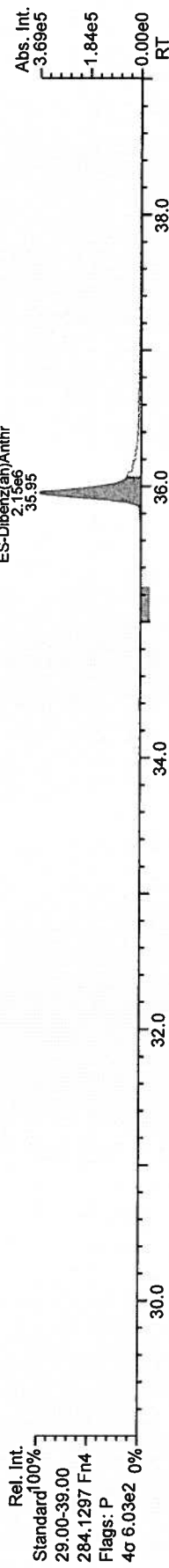
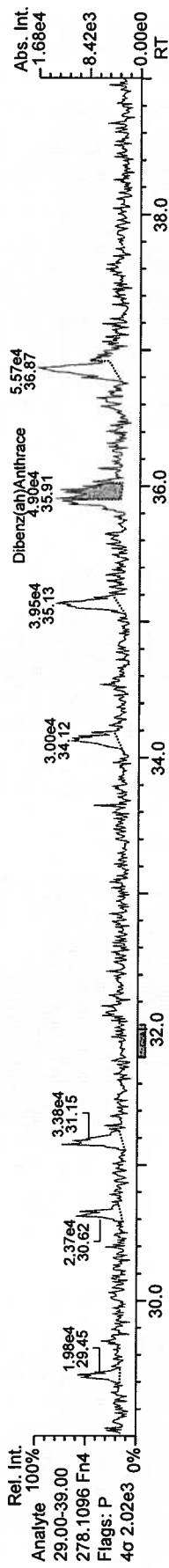
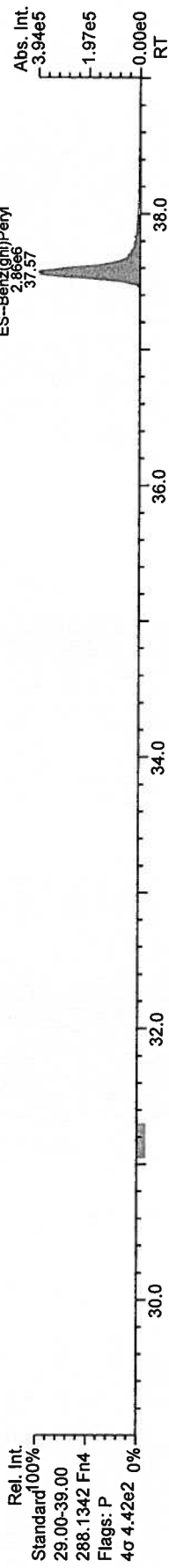
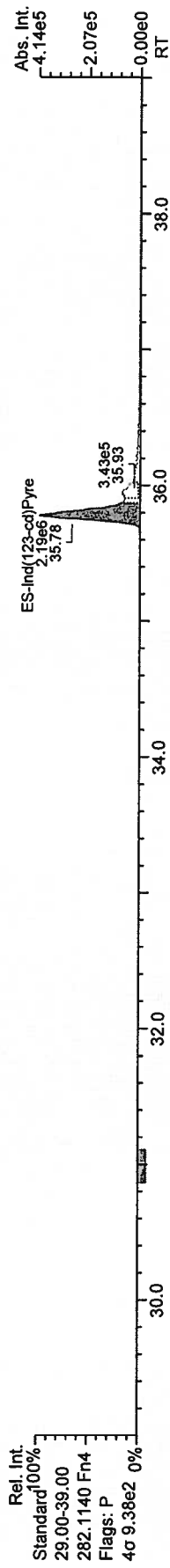
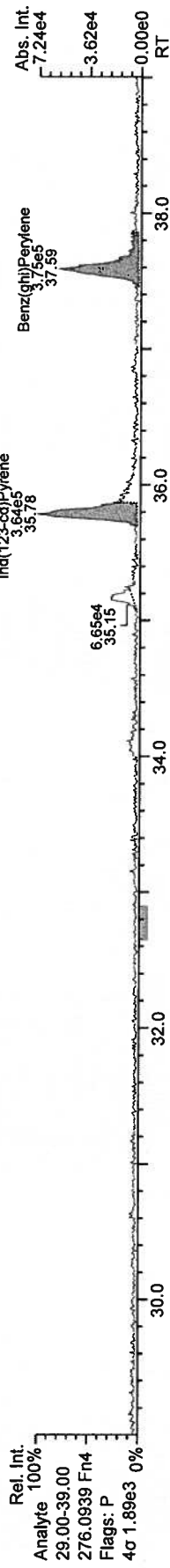


Results: P:\P1900\_P1999\P1977P1977\_7528 PAHResources\P1977\_7528\_002.utp\_res, saved 02-Feb-2010 09:24 (MC)  
AP UltraTrace-Pro V4.12 User/System: MCMCI7-047 cc: 2695, 3801 scc: 403-540

Peak annotation: Areas, Peak tops  
PKD: 02-Feb-2010 08:30:46 Printed: 02-Feb-2010 09:31:29 Page 7 of 9







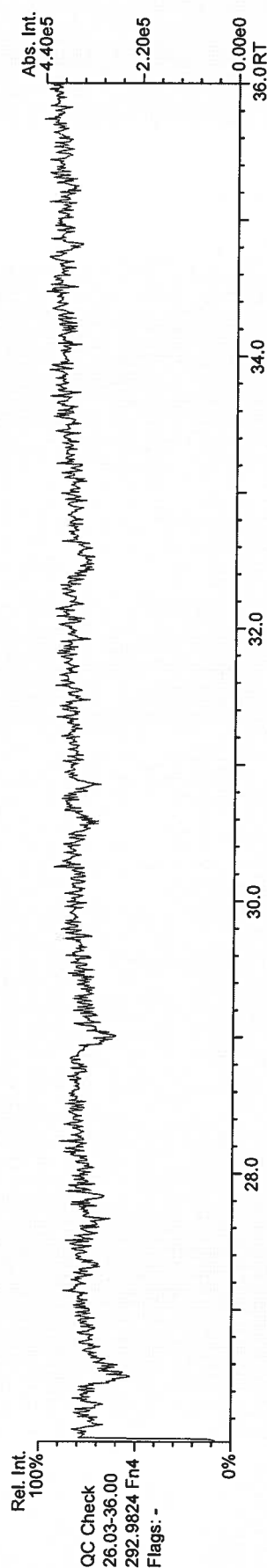
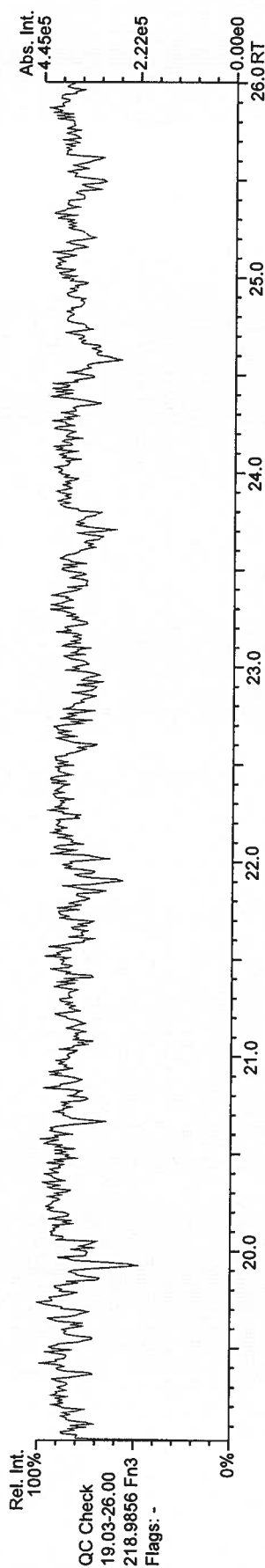
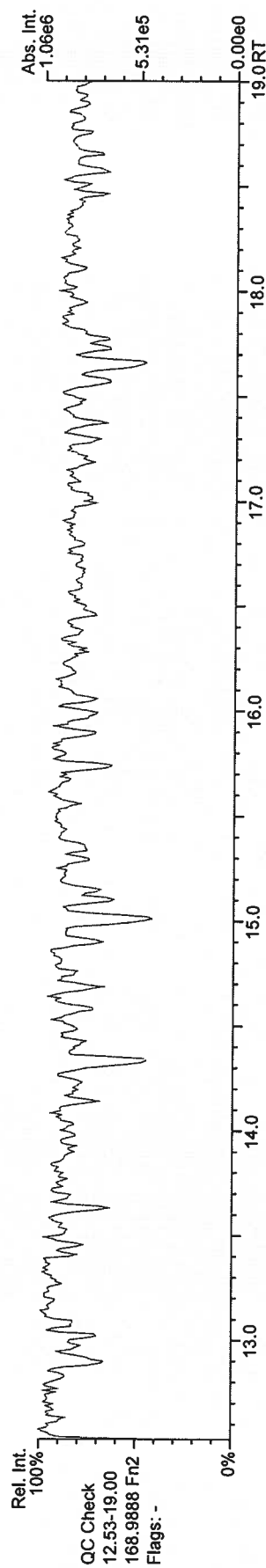
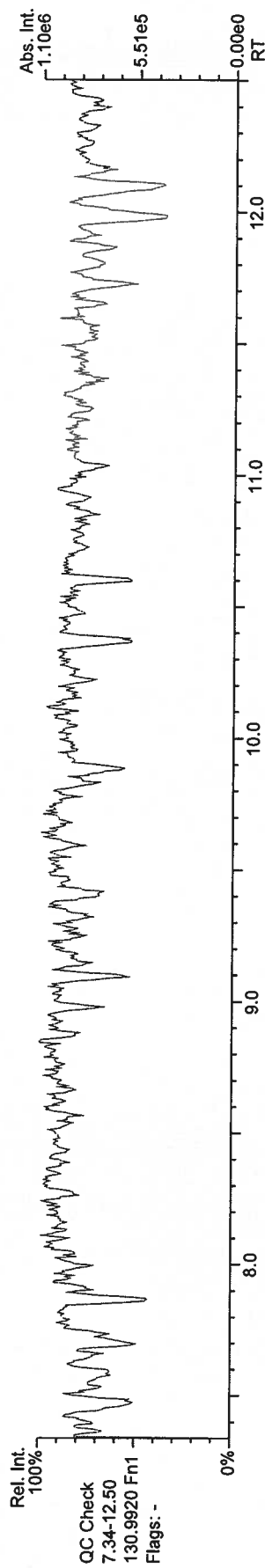
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				Largest +ve RT shift (secs)	Largest -ve RT shift (secs)	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc ng/Train	Noise	DL
						9.33		1.0006	1.0006	0	1.42E+08	-	1.04	3,550	1.07E+04	1.07000
						10.97		1.0005	1.0000	-0.3	4.33E+07	-	1.25	1,570	3.72E+03	0.50800
						13.41		1.0007	1.0000	-0.6	4.13E+06	-	1.04	110	1.78E+04	1.97000
						13.91		1.0007	1.0007	0	5.91E+06	-	1.31	219	1.22E+04	1.89000
						15.39		1.0006	1.0006	0	1.05E+07	-	1.11	367	4.42E+03	0.70800
						18.09		1.0000	1.0000	0	4.93E+07	-	1.01	1,400	3.86E+03	0.51000
						18.23		1.0000	1.0005	+0.5	1.59E+06	-	1.06	49.2	3.86E+03	0.59300
						21.26		1.0000	1.0000	0	1.43E+07	-	1.00	341	8.25E+03	0.83000
						21.84		1.0000	1.0000	0	1.38E+07	-	1.01	343	8.25E+03	0.87900
						24.92		1.0003	1.0000	-0.4	4.02E+05	-	1.07	12	2.75E+03	0.37200
						25.03		1.0000	1.0003	+0.5	3.01E+06	-	1.00	84.9	2.75E+03	0.39500
						28.45		1.0003	1.0003	0	6.63E+06	-	1.04	161	2.64E+03	0.44200
						28.55		1.0015	1.0003	-2.1	1.42E+06	-	1.07	31.9	2.64E+03	0.48300
						29.56		1.0000	1.0000	0	4.47E+06	-	1.08	99.7	2.64E+03	0.46700
						29.79		1.0000	1.0000	0	2.93E+05	-	1.05	8.14	2.64E+03	0.64400
						30.16		1.0041	1.0041	0	3.72E+04	-	1.00	1.34	2.64E+03	0.80500
						35.82		1.0002	1.0005	+0.6	8.60E+05	-	1.05	34.5	2.26E+03	1.22000
						35.97		1.0002	1.0000	-0.4	1.64E+05	-	1.00	6.72	2.12E+03	1.35000
						37.59		1.0002	0.9998	-0.9	7.70E+05	-	1.17	23	2.26E+03	1.10000

Name	Actual RT	Stats		PAH Ax	ES/SS	Actual RRT	Pred RRT	Diff Secs	Response	Ra	RRF	Recv.
		Largest +ve RT shift (secs)	Largest -ve RT shift (secs)									
13C6-Naphthalene	9.33			0.6	4.3	0.8577	0.8577	-0.6	1.54E+06	-	2.23	68.7
13C6-2-Methylnaphthalene	10.97			-2.1	-0.6	1.0075	1.0075	0	8.84E+05	-	1.03	85.3
13C6-Acenaphthylene	13.41					0.9712	0.9712	0	1.45E+06	-	1.57	78.2
13C6-Acenaphthene	13.90					1.0067	1.0067	0	8.26E+05	-	0.83	85.0
13C6-Fluorene	15.38					1.1138	1.1140	+0.2	1.03E+06	-	1.00	87.6
13C6-Phenanthrene	18.09					1.3086	1.3099	+1.1	1.39E+06	-	1.31	90.3
13C6-Anthracene	18.22					1.3187	1.3200	+1.1	1.22E+06	-	1.12	92.2
13C6-Fluoranthene	21.26					0.9755	0.9754	-0.1	1.68E+06	-	1.21	101.0
13C3-Pyrene	21.84					1.0023	1.0023	0	1.59E+06	-	1.35	86.4
13C6-Benzo (a) Anthracene	24.92					1.1431	1.1436	+0.7	1.26E+06	-	0.82	112.0
13C6-Chrysene	25.02					1.1481	1.1481	0	1.42E+06	-	0.92	112.0
13C6-Benzo (b) Fluoranthene	28.44					0.9582	0.9582	0	3.17E+06	-	1.28	91.4
13C6-Benzo (k) Fluoranthene	28.54					0.9621	0.9618	-0.5	3.34E+06	-	1.40	88.2
13C4-Benzo (e) Pyrene	29.56					0.9961	0.9961	0	3.33E+06	-	1.33	92.1
13C4-Benzo (a) Pyrene	29.79					1.0039	1.0039	0	2.73E+06	-	1.14	88.1
dl2-Perylene	30.04					1.0119	1.0121	+0.4	2.23E+06	-	1.26	65.1
13C6-Indeno (1,2,3-cd) Pyrene	35.80					1.2048	1.2062	+2.5	1.89E+06	-	0.60	116.0
13C6-Dibenzo (ah) Anthracene	35.97					1.2101	1.2121	+3.6	1.94E+06	-	0.69	104.0
13C12-Benzo (ghi) Perylene	37.60					1.2646	1.2670	+4.3	2.29E+06	-	0.79	106.0
AS--Anthracene	18.17					1.3147	1.3160	+1.1	1.34E+06	-	1.06	107.0
SS-Fluorene	15.30					0.9946	0.9946	0	1.16E+06	-	1.19	94.8
SS-Terphenyl	22.22					1.0453	1.0453	0	7.71E+05	-	0.39	117.0
JS-Methylnaphthalene	10.88					-	-	-	1.00E+06	-	-	-
JS-Acenaphthene	13.81					-	-	-	1.18E+06	-	-	-
JS-Pyrene	21.79					-	-	-	1.37E+06	-	-	-
JS-Benzo (a) Pyrene	29.68					-	-	-	1.36E+06	-	-	-

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06



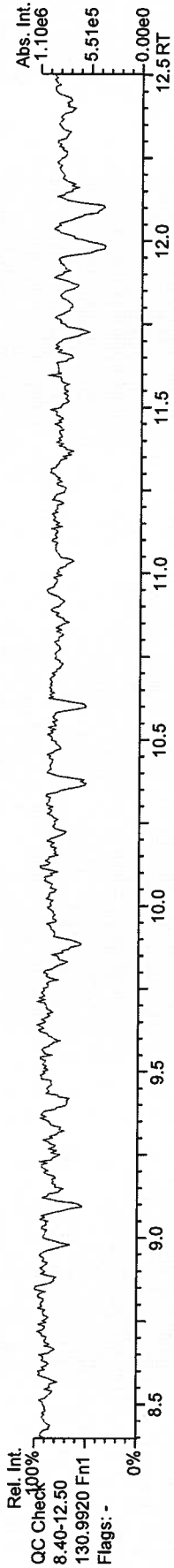
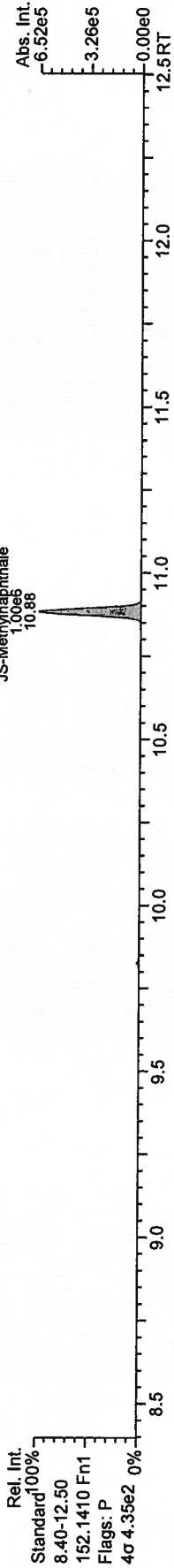
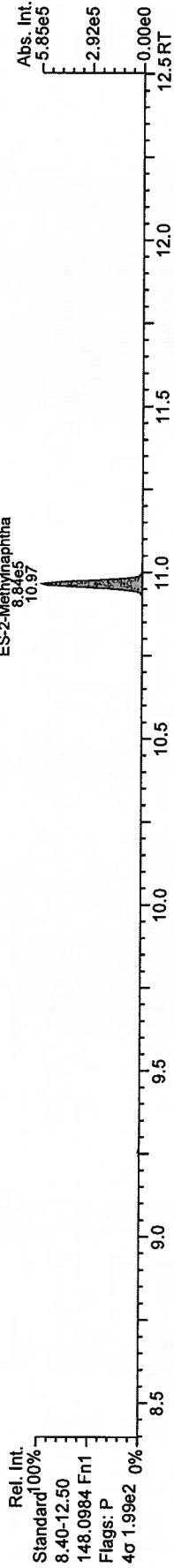
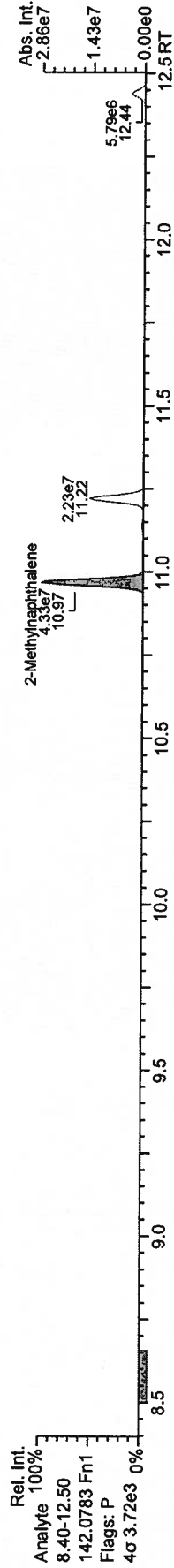
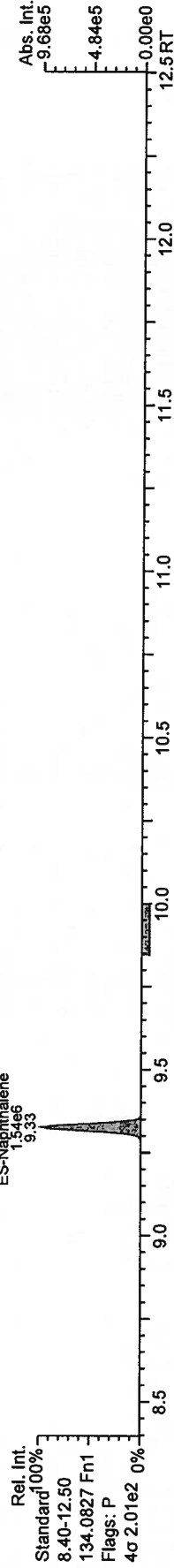
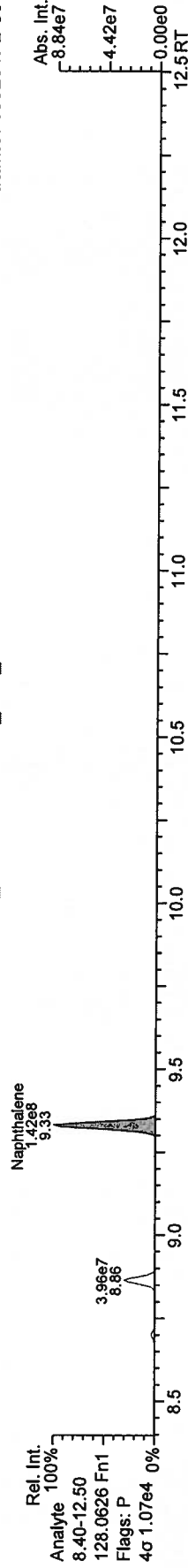
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AP Ultra Trace-Pro V4.12 User\System.MCMC17-047 sec: 713.543

PKD: n/a Printed: 02-Feb-2010 09:32:07 Page 1 of 9  
Peak annotation: Areas, Peak tops

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06



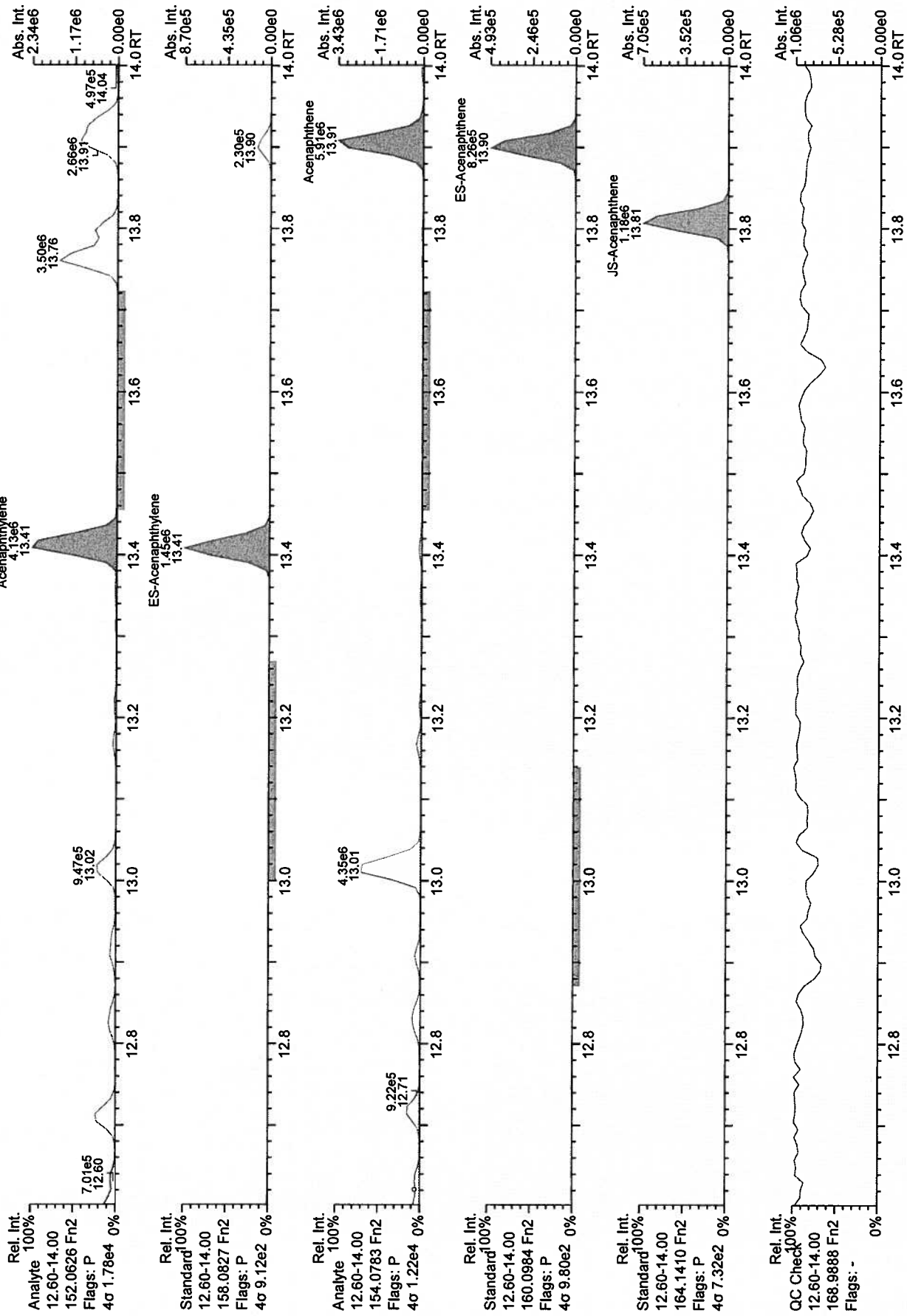
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PKD: 02-Feb-2010 08:34:13 Printed: 02-Feb-2010 09:32:21 Page 2 of 9

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

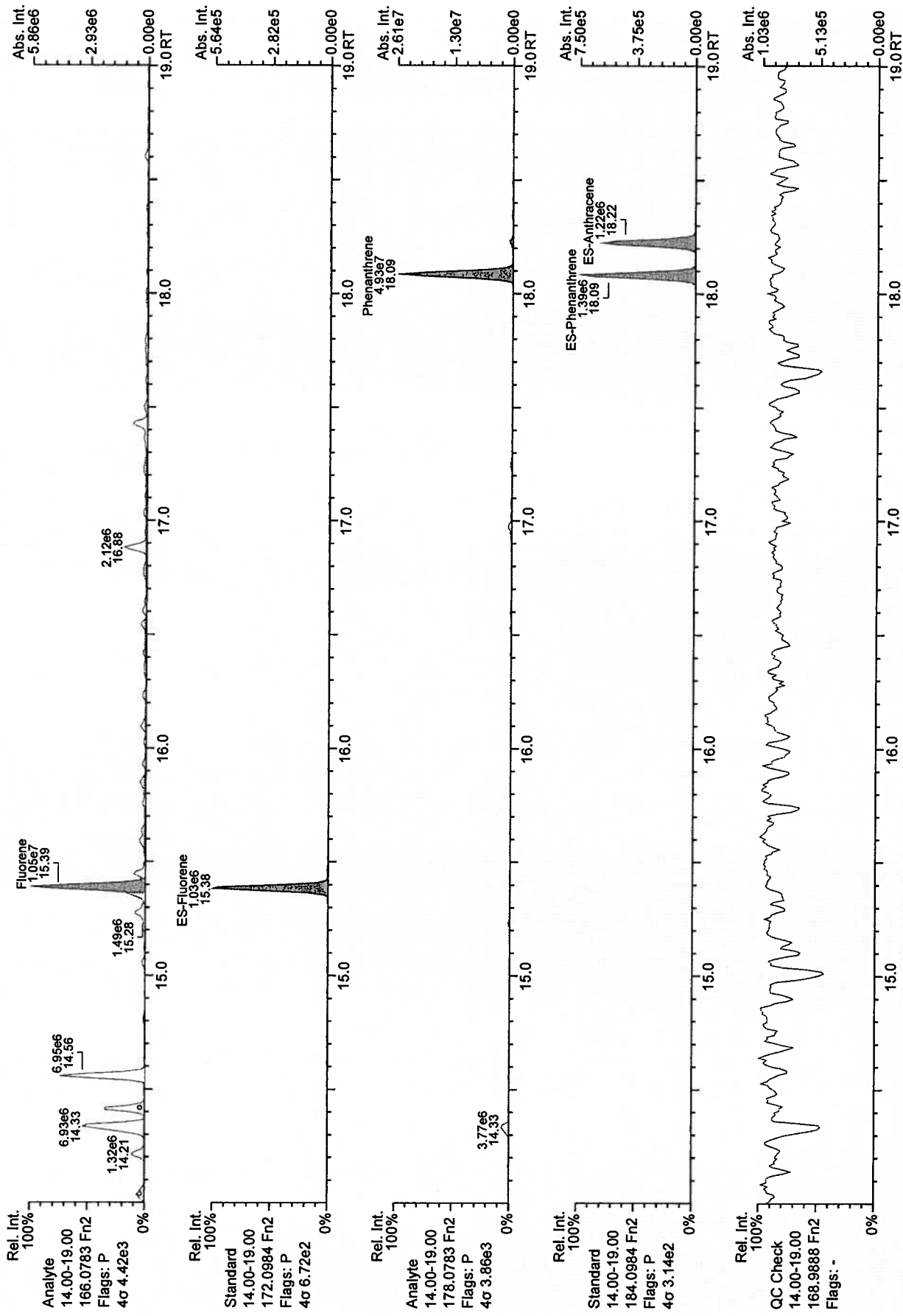
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User: MC Datafile: 100201P2-06



AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06



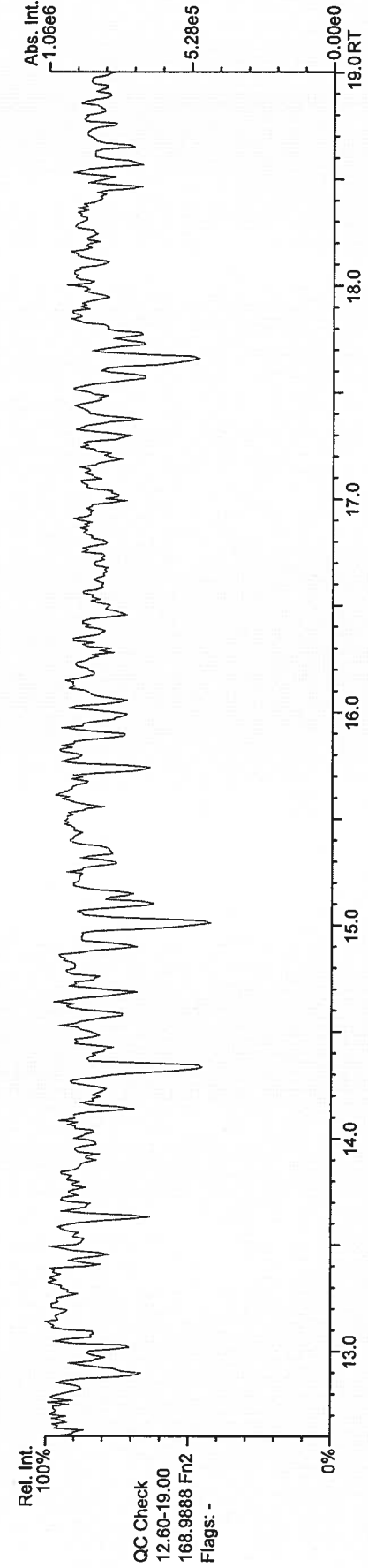
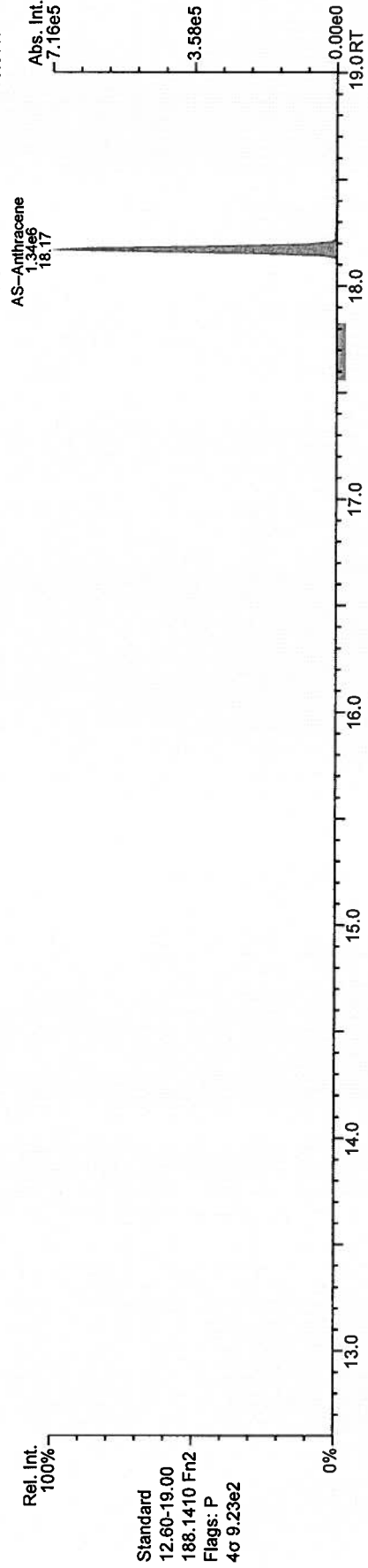
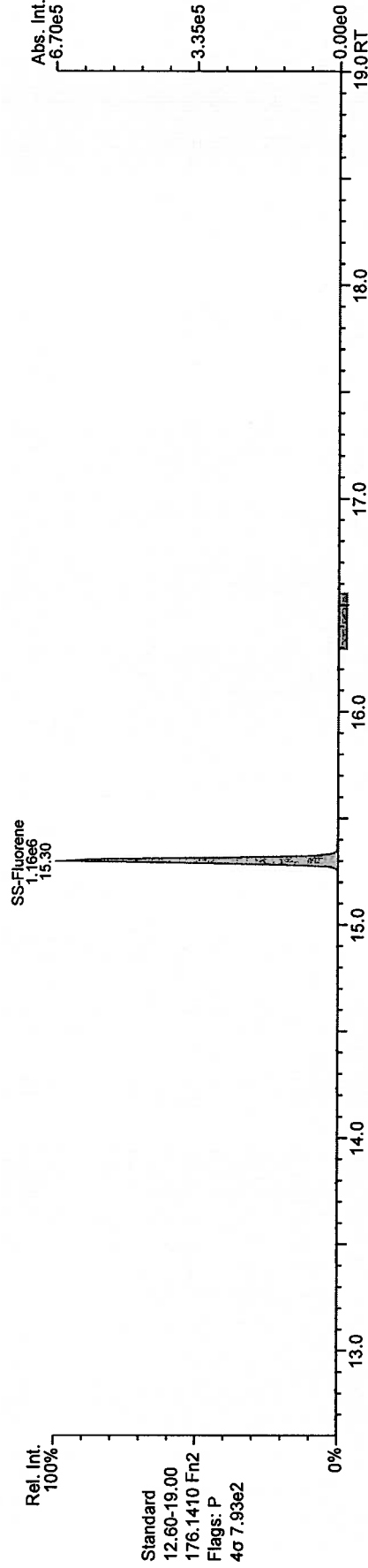
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Revised: 02-Feb-2010 08:35:01 (MC) Printed: 02-Feb-2010 09:32:33 Page 4 of 9

AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06

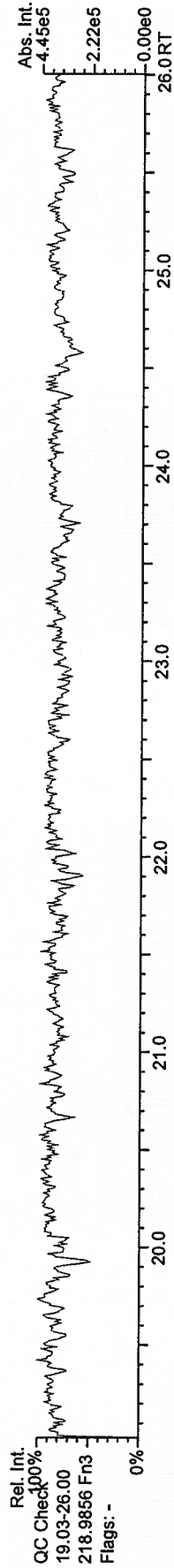
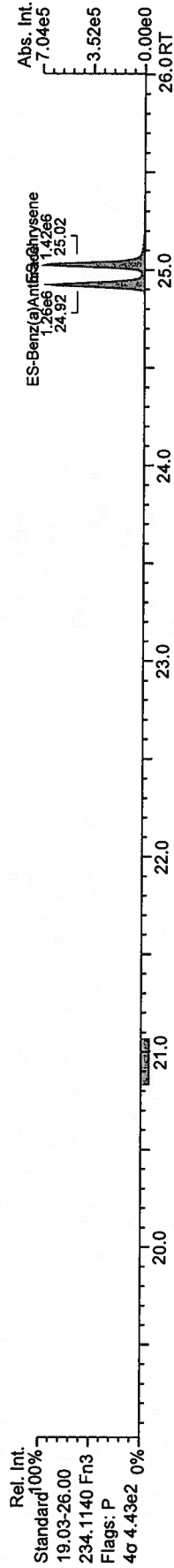
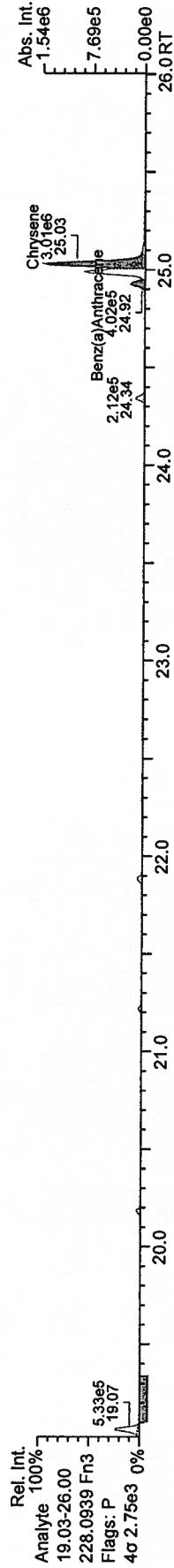
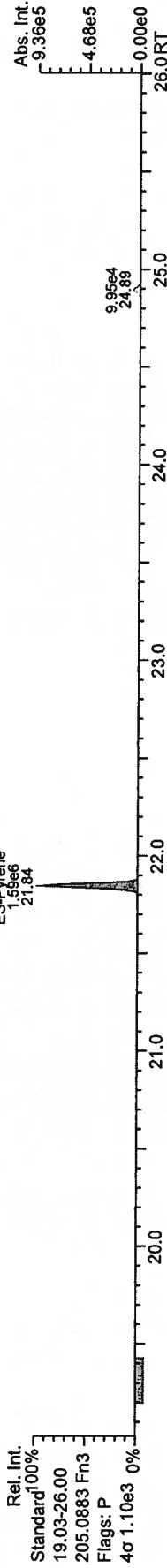
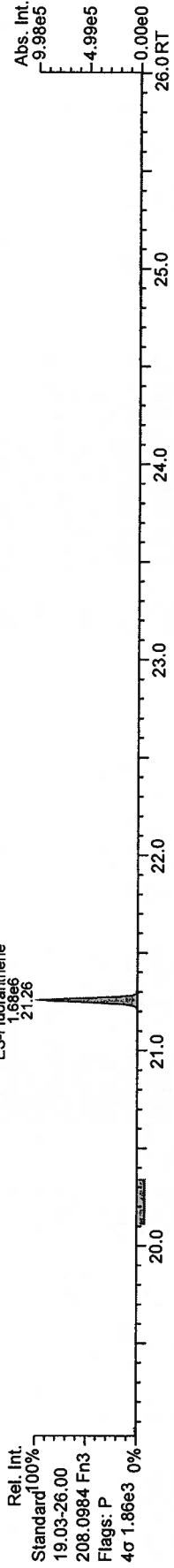
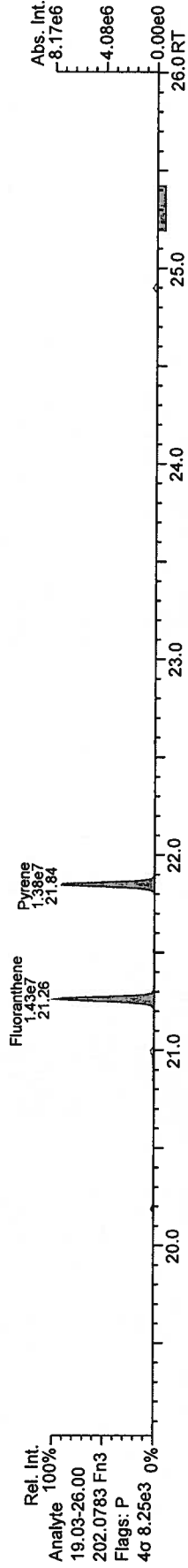




AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

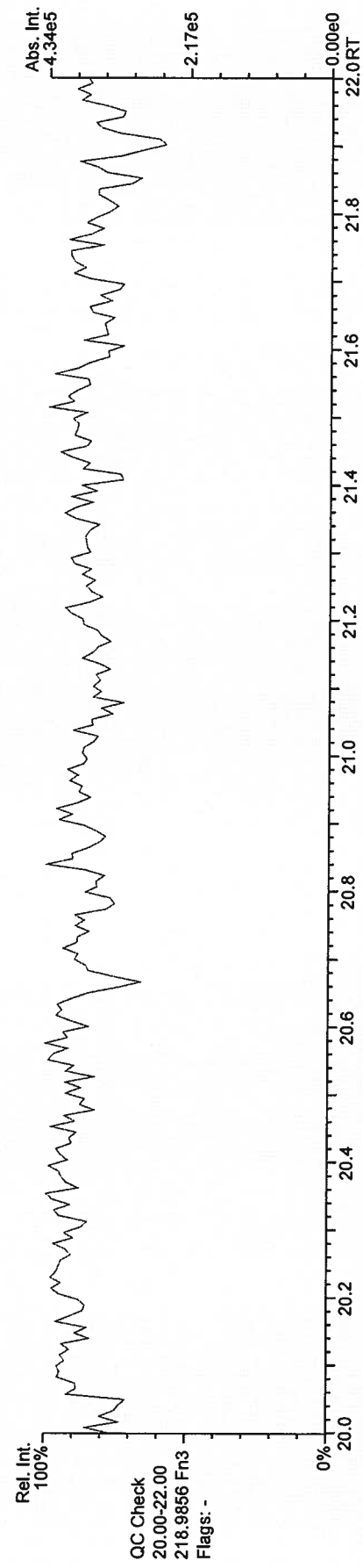
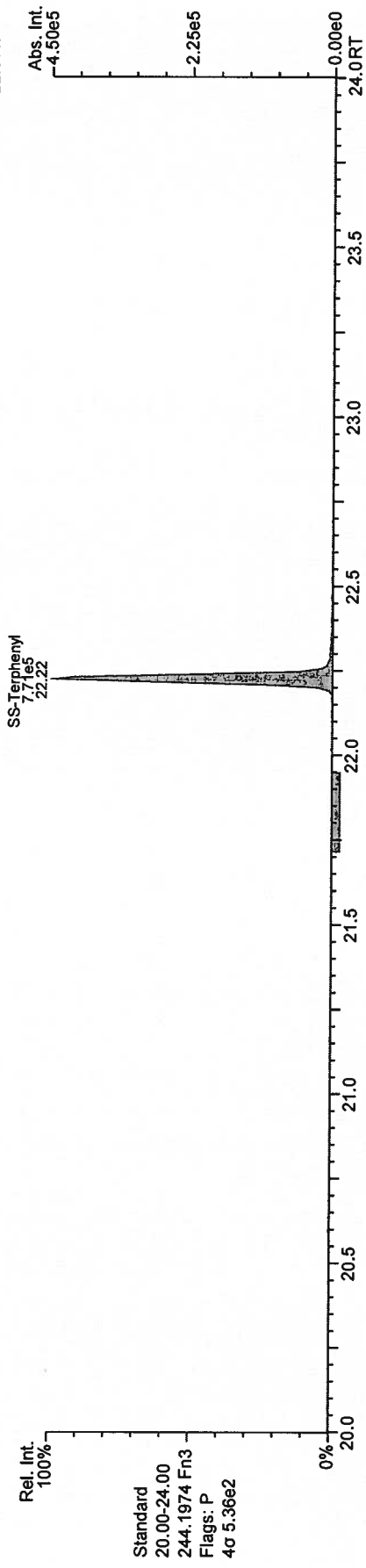
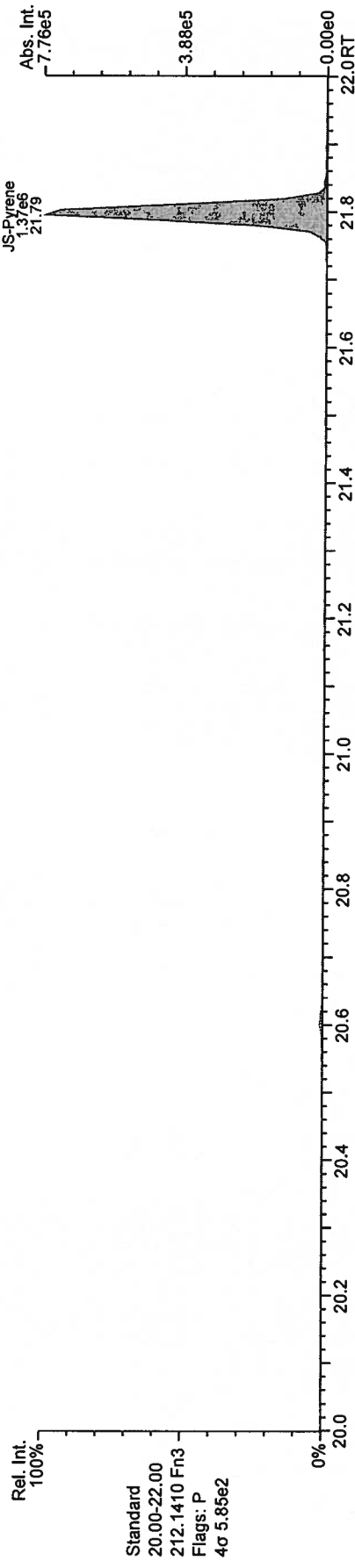
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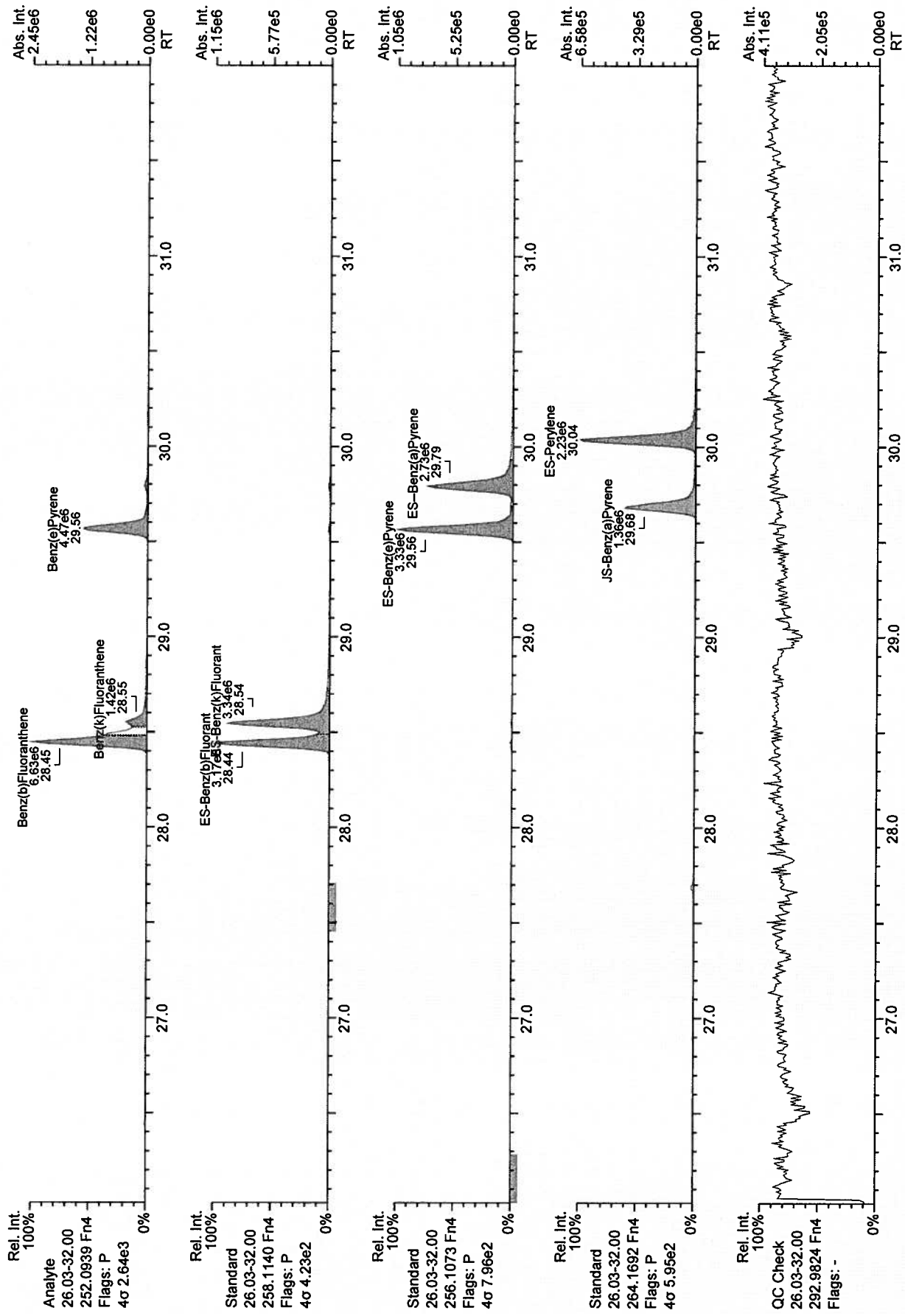


AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06

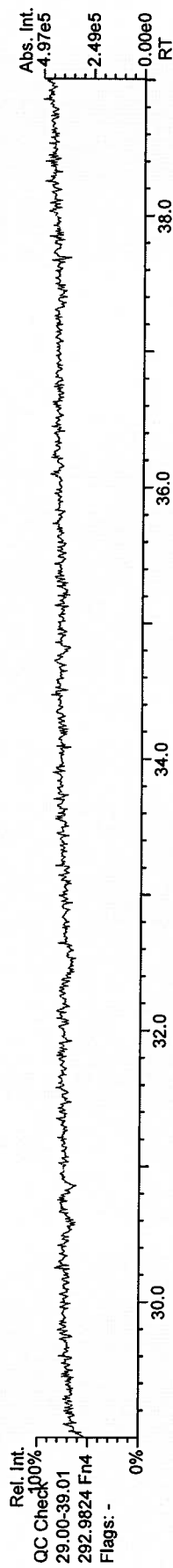
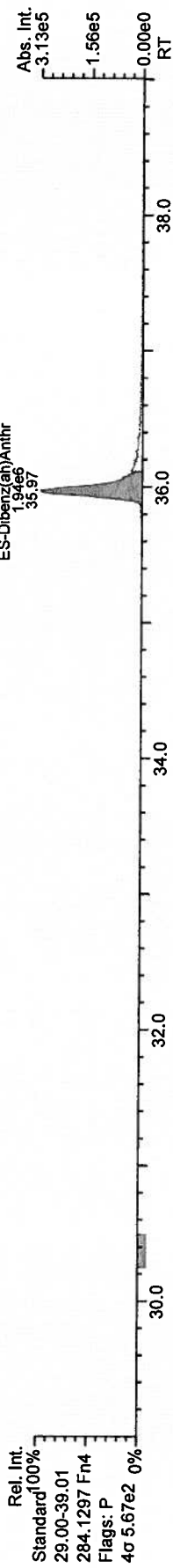
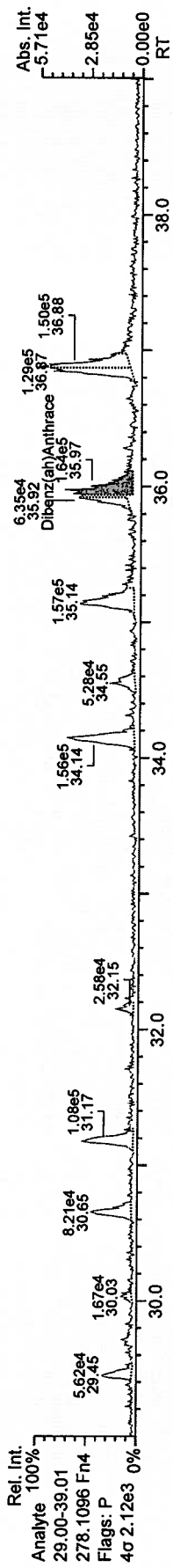
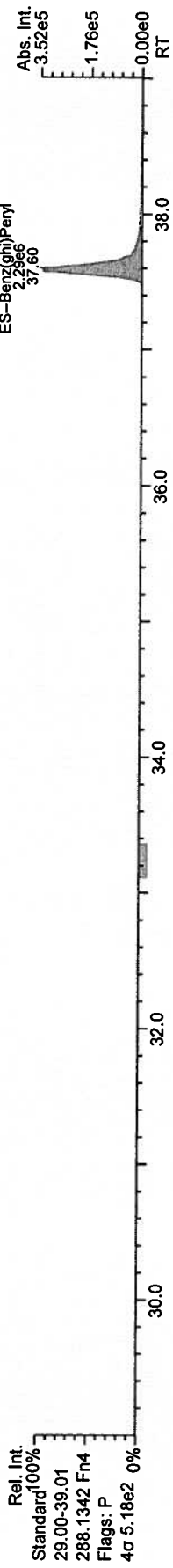
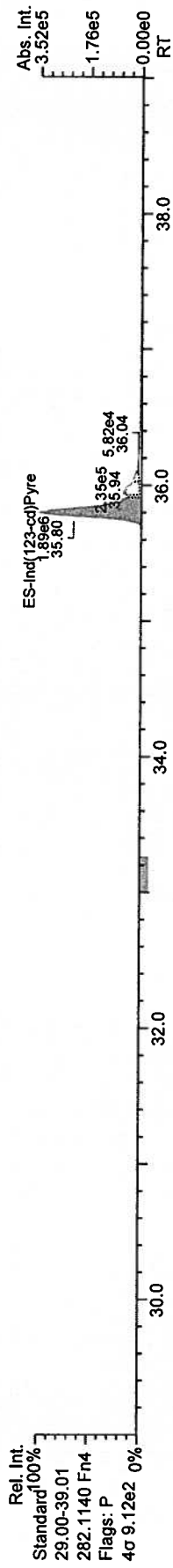
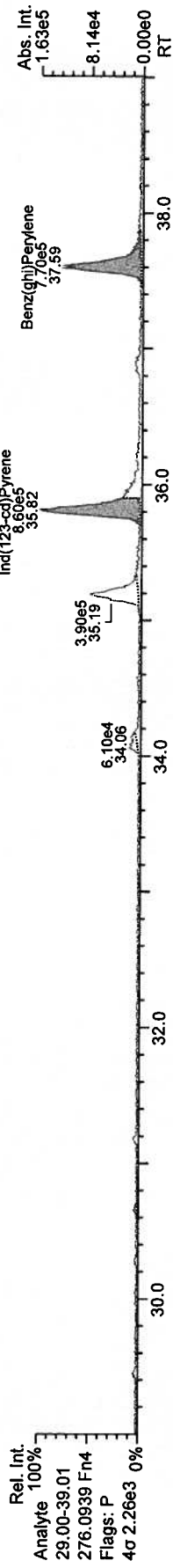




AP Lab ID: P1977\_7528\_003  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-2  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 80

Acq: 1-FEB-2010 16:54:08  
User: MC Datafile: 100201P2-06



Results: P1977\_7528\_003\_uhp\_res, saved 02-Feb-2010 08:35 (MC)  
AP UltraTrace-Pro V4.12 User/System: MC/MCI7-047 cc: 1890, 9279, 9897, 6469 scc: 713-543

Peak annotation: Areas, Peak tops  
Revised: 02-Feb-2010 08:36:39 (MC) Printed: 02-Feb-2010 08:33:25 Page 9 of 9

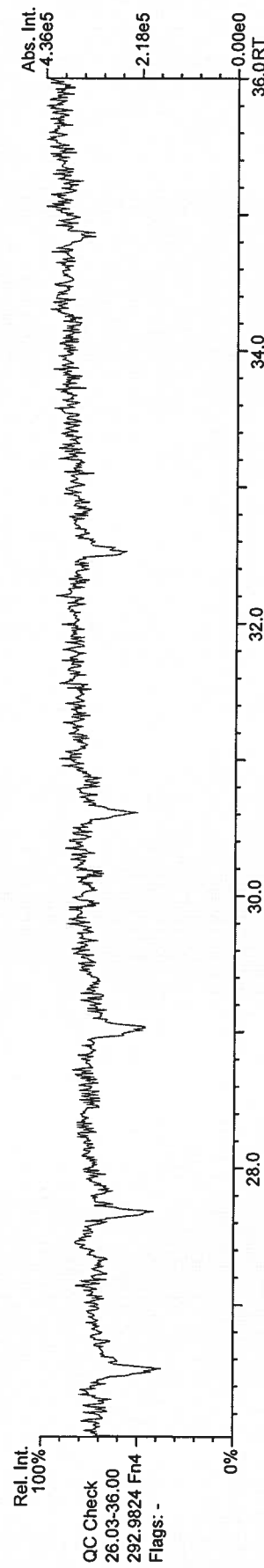
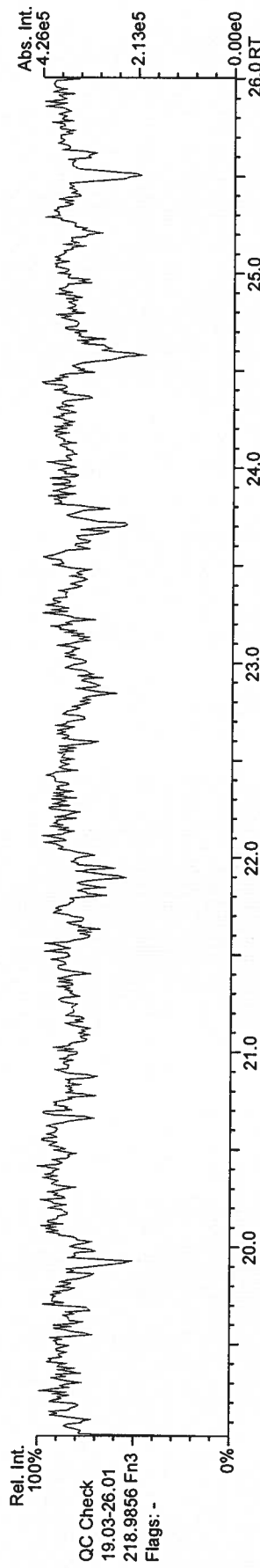
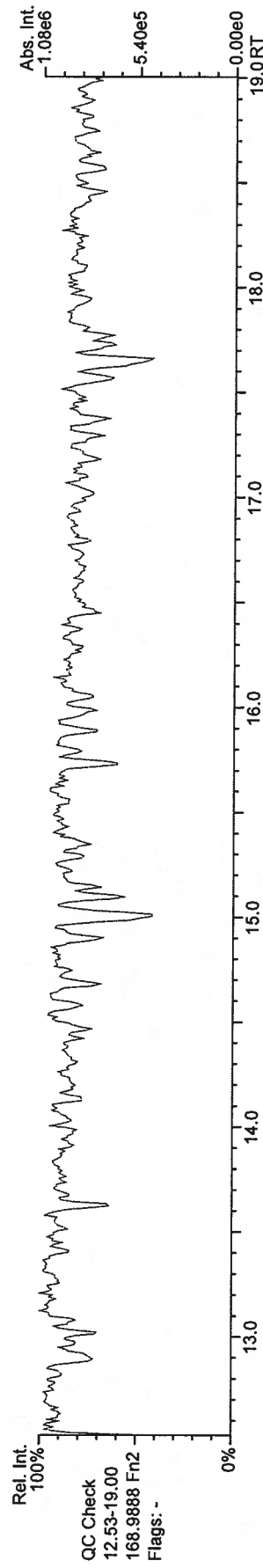
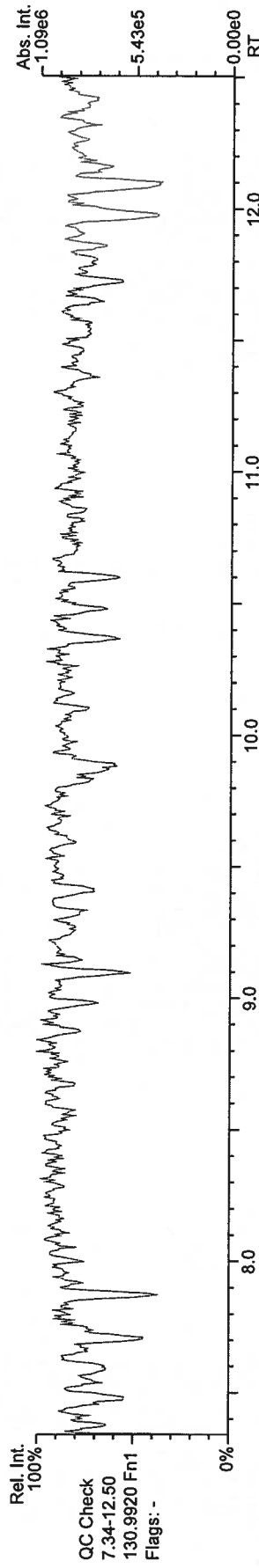
	Stats	PAH Ax	ES/SS	Checkcode: ξξ												
				Largest +ve RT shift (secs)	Largest -ve RT shift (secs)	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc ng/Train	Noise	DL
	Naphthalene					9.33		1.0006	1.0006	0	1.82E+08	-	1.04	3,880	9.48E+03	0.77200
	2-Methylnaphthalene					10.97		1.0005	1.0005	0	6.31E+07	-	1.25	1,950	4.33E+03	0.49700
	Acenaphthylene					13.41		1.0007	1.0007	0	5.94E+06	-	1.04	116	2.07E+04	1.72000
	Acenaphthene					13.90		1.0007	1.0000	-0.6	9.33E+06	-	1.31	279	1.58E+04	1.94000
	Fluorene					15.38		1.0006	1.0000	-0.6	1.58E+07	-	1.11	441	4.42E+03	0.56200
	Phenanthrene					18.08		1.0000	1.0000	0	7.36E+07	-	1.01	1,740	4.17E+03	0.49300
	Anthracene					18.22		1.0000	1.0000	0	2.88E+06	-	1.06	71.7	4.17E+03	0.51600
	Fluoranthene					21.25		1.0000	1.0000	0	1.82E+07	-	1.00	338	6.65E+03	0.55400
	Pyrene					21.85		1.0000	1.0004	+0.5	8.05E+06	-	1.01	158	6.65E+03	0.62100
	Benzo(a)Anthracene					24.92		1.0003	1.0000	-0.4	5.87E+05	-	1.07	14.1	2.60E+03	0.28600
	Chrysene					25.03		1.0000	1.0003	+0.5	2.24E+06	-	1.00	51.5	2.60E+03	0.31700
	Benzo(b)Fluoranthene					28.45		1.0003	1.0003	0	2.19E+06	-	1.04	45.6	2.95E+03	0.39900
	Benzo(k)Fluoranthene					28.55		1.0015	1.0003	-2.1	6.70E+05	-	1.07	12.6	2.95E+03	0.45300
	Benzo(e)Pyrene					29.56		1.0000	1.0000	0	1.41E+06	-	1.08	26.9	2.95E+03	0.44800
	Benzo(a)Pyrene					29.80		1.0000	1.0003	+0.5	2.64E+05	-	1.05	6.28	2.95E+03	0.61200
	Perylene					30.17		1.0041	1.0047	+1.1	5.09E+04	-	1.00	1.55	2.95E+03	0.76000
Indeno(1,2,3-cd)Pyrene					35.82		1.0002	0.9998	-0.9	4.39E+05	-	1.05	16.6	2.35E+03	1.19000	
Dibenzo(a,h)Anthracene					35.97		1.0002	1.0000	-0.4	1.30E+05	-	1.00	4.43	2.28E+03	1.34000	
Benzo(ghi)Perylene					37.62		1.0002	1.0005	+0.7	5.07E+05	-	1.17	15.3	2.35E+03	1.11000	

Name	Actual RT	Stats Largest +ve RT shift (secs) Largest -ve RT shift (secs)	PAH Ax 1.1 -2.1	ES/SS 3.4 -1.1	Actual RRT	Pred RRT	Diff Secs	Response	Ra	RRF	Recv.
13C6-Naphthalene	9.33				0.8573	0.8577	-0.3	1.81E+06	-	2.23	71.2
13C6-2-Methylnaphthalene	10.96				1.0075	1.0075	0	1.03E+06	-	1.03	87.9
13C6-Acenaphthylene	13.40				0.9705	0.9712	-0.6	1.98E+06	-	1.57	94.0
13C6-Acenaphthene	13.90				1.0067	1.0067	0	1.02E+06	-	0.83	92.7
13C6-Fluorene	15.38				1.1138	1.1138	+0.2	1.29E+06	-	1.00	96.9
13C6-Phenanthrene	18.08				1.3086	1.3086	+0.5	1.67E+06	-	1.31	95.1
13C6-Anthracene	18.22				1.3187	1.3187	+0.5	1.51E+06	-	1.12	100.0
13C6-Fluoranthene	21.25				0.9755	0.9755	-0.1	2.15E+06	-	1.21	108.0
13C3-Pyrene	21.84				1.0023	1.0023	0	2.03E+06	-	1.35	92.2
13C6-Benzo (a) Anthracene	24.92				1.1431	1.1431	+0.7	1.57E+06	-	0.82	117.0
13C6-Chrysene	25.02				1.1481	1.1481	+0.1	1.74E+06	-	0.92	115.0
13C6-Benzo (b) Fluoranthene	28.44				0.9582	0.9582	-0.5	3.70E+06	-	1.28	93.9
13C6-Benzo (k) Fluoranthene	28.55				0.9621	0.9621	-1.1	3.97E+06	-	1.40	92.1
13C4-Benzo (e) Pyrene	29.56				0.9961	0.9961	-0.4	3.87E+06	-	1.33	94.2
13C4-Benzo (a) Pyrene	29.79				1.0039	1.0039	-0.5	3.19E+06	-	1.14	90.4
dl2-Perylene	30.03				1.0119	1.0119	-0.5	2.64E+06	-	1.26	67.8
13C6-Indeno (1,2,3-cd) Pyrene	35.82				1.2048	1.2048	+3.4	2.01E+06	-	0.60	108.0
13C6-Dibenzo (ah) Anthracene	35.97				1.2101	1.2101	+2.5	2.34E+06	-	0.69	110.0
13C12-Benzo (ghi) Perylene	37.60				1.2646	1.2646	+3.4	2.28E+06	-	0.79	92.8
AS--Anthracene	18.17				1.3147	1.3147	+1.0	1.35E+06	-	1.06	95.3
SS-Fluorene	15.30				0.9946	0.9946	0	1.45E+06	-	1.19	93.9
SS-Terphenyl	22.22				1.0453	1.0453	0	9.22E+05	-	0.39	109.0
JS-Methylnaphthalene	10.88				-	-	-	1.14E+06	-	-	-
JS-Acenaphthene	13.81				-	-	-	1.34E+06	-	-	-
JS-Pyrene	21.79				-	-	-	1.63E+06	-	-	-
JS-Benzo (a) Pyrene	29.69				-	-	-	1.54E+06	-	-	-

AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

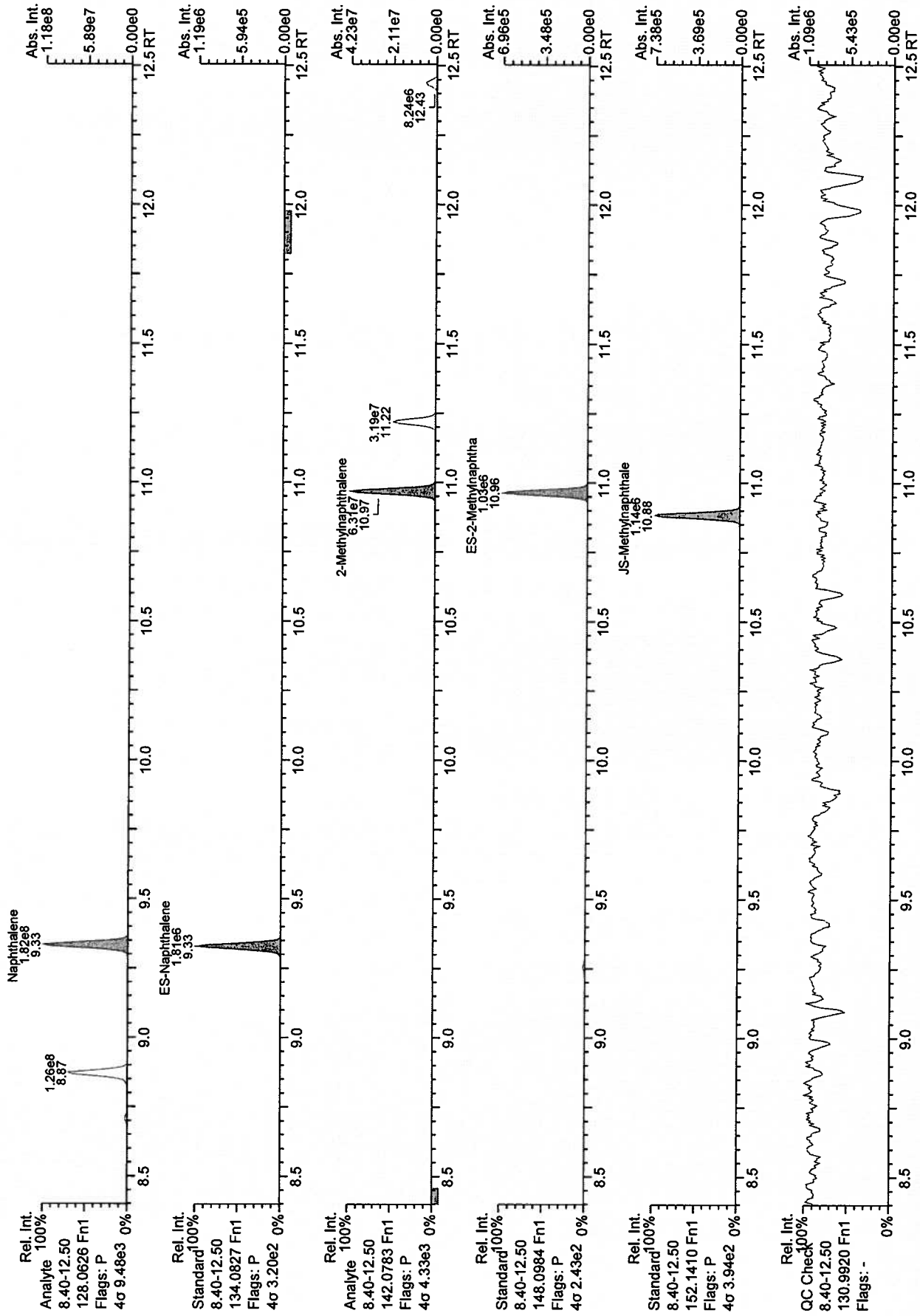
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AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

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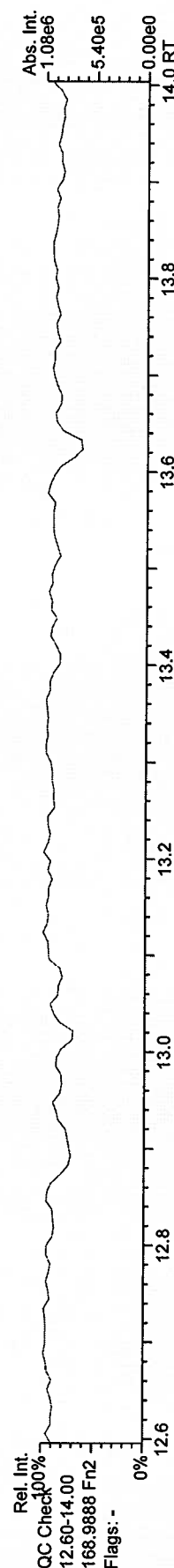
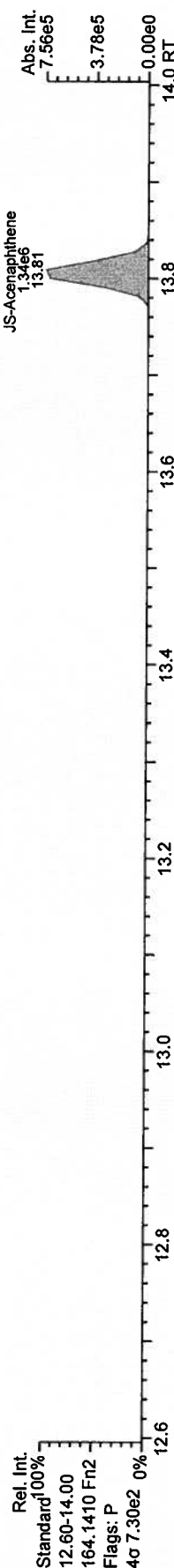
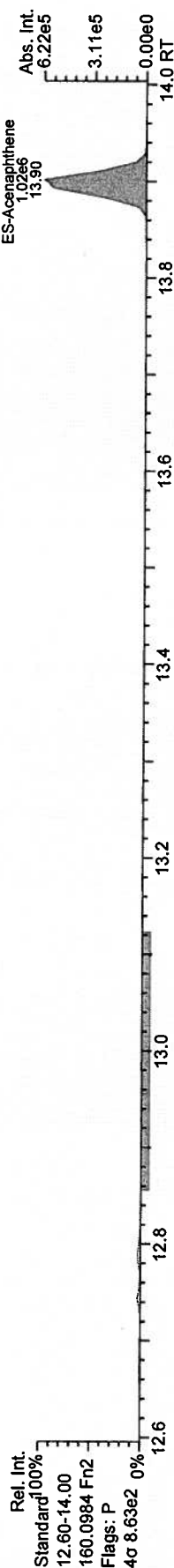
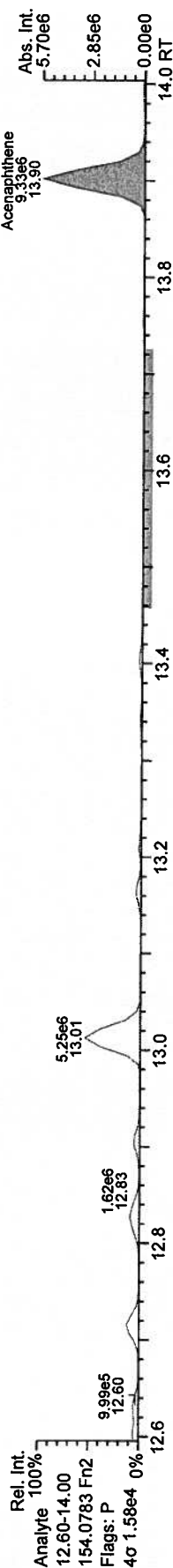
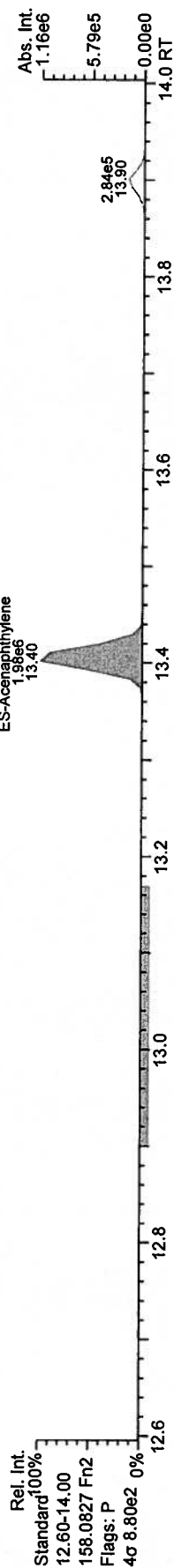
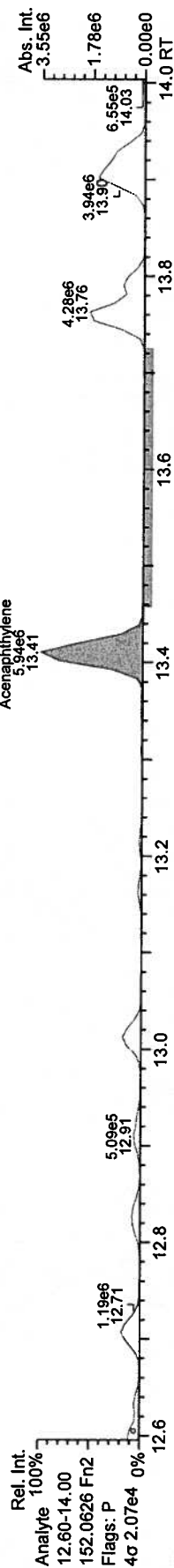




AP Lab ID: P1977\_7528\_004  
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Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

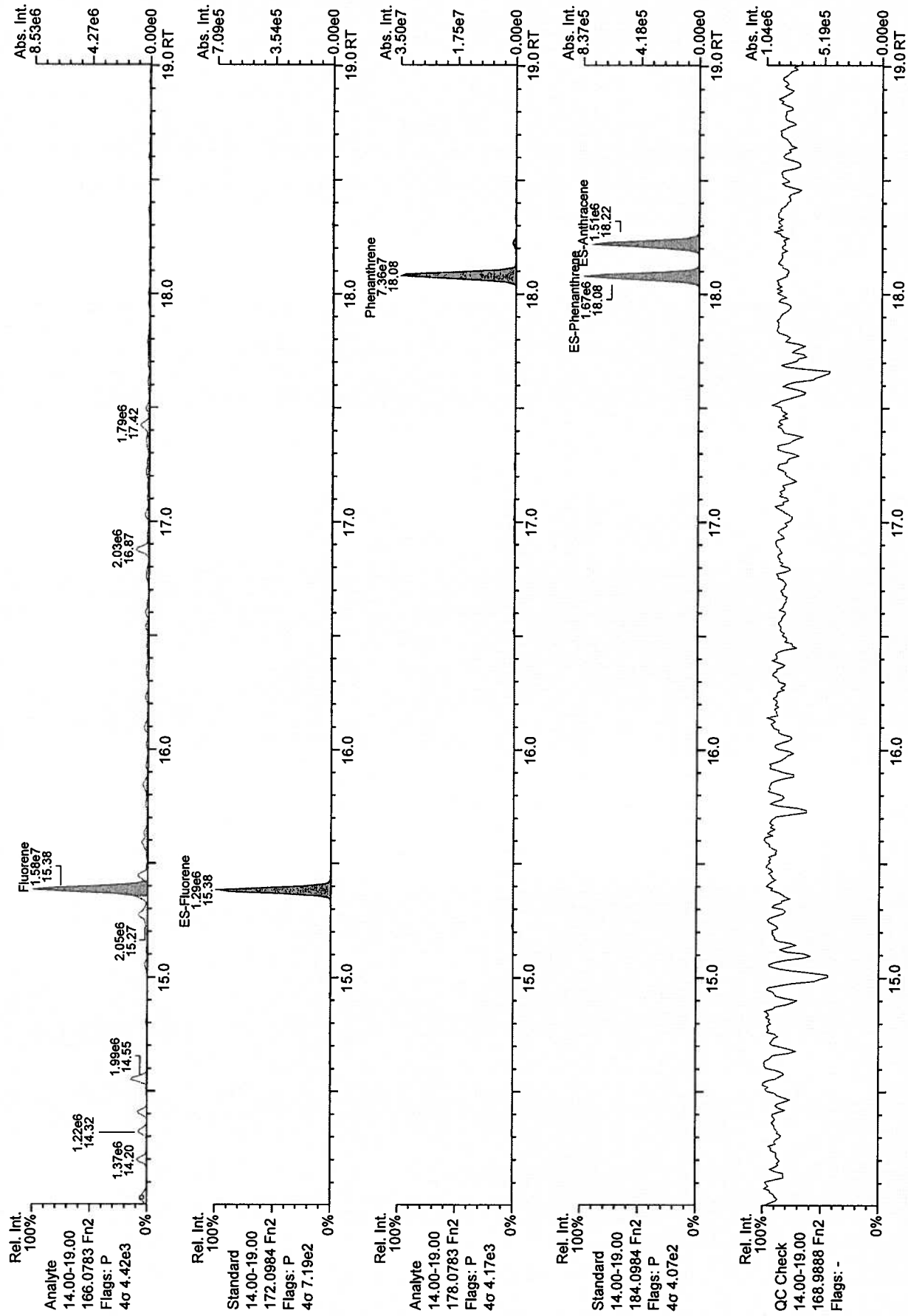
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AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

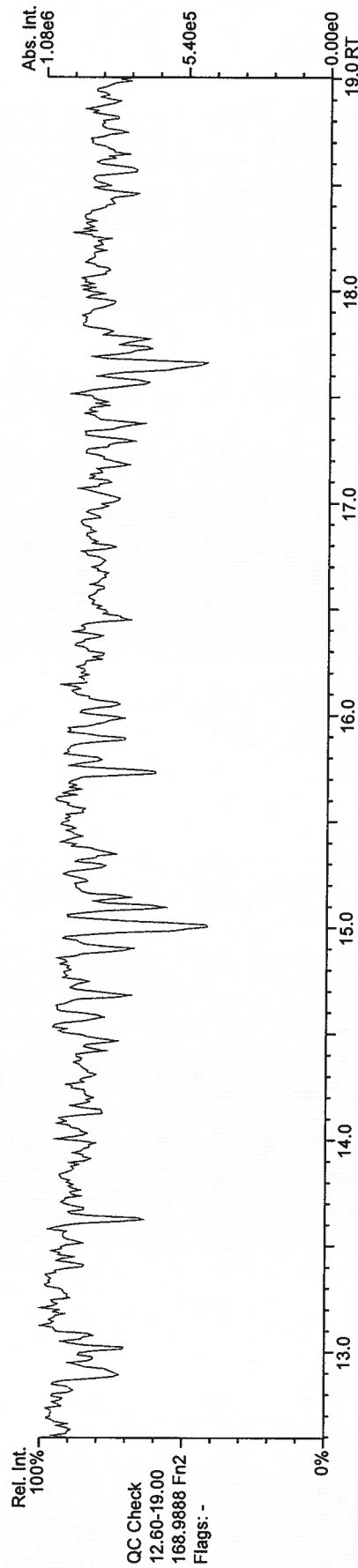
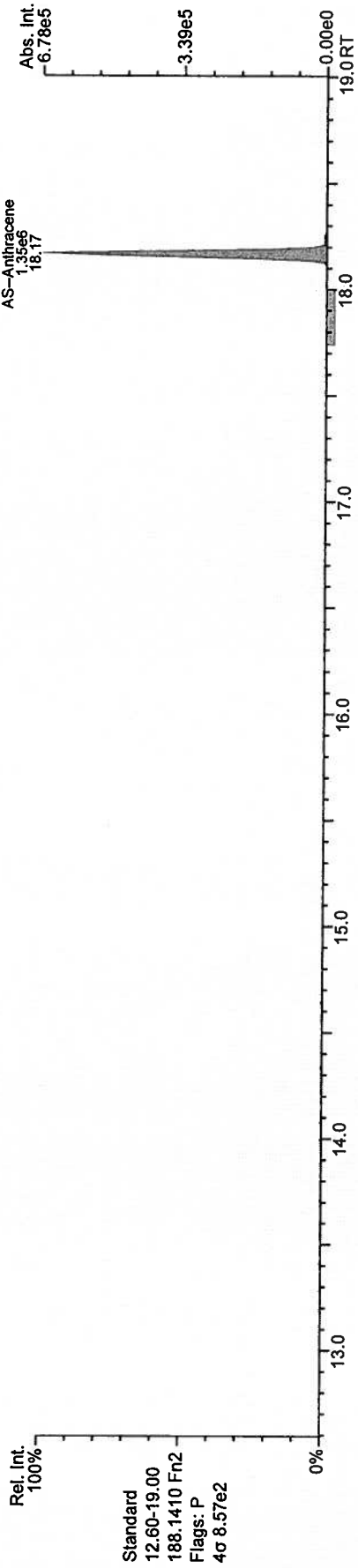
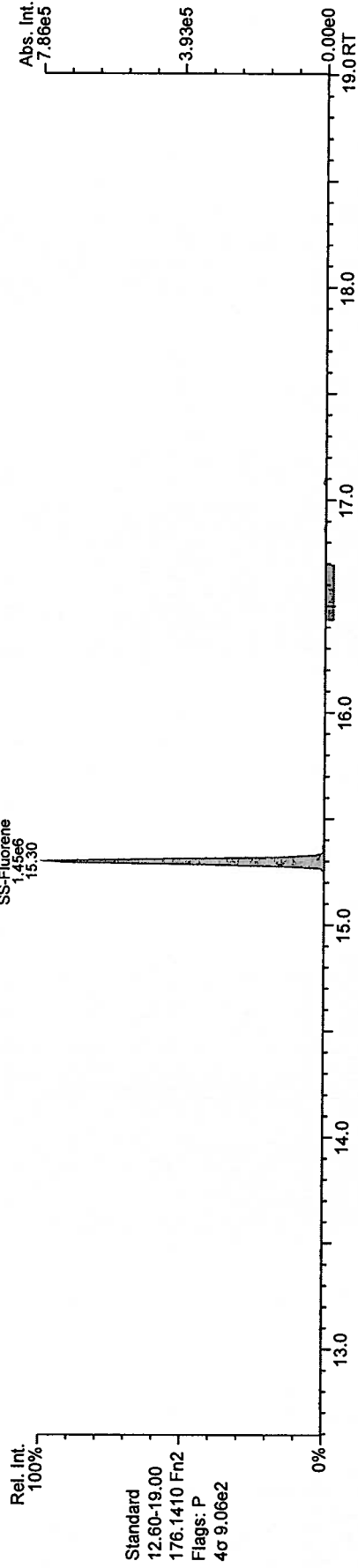
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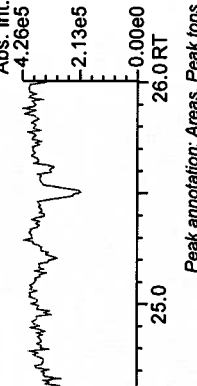
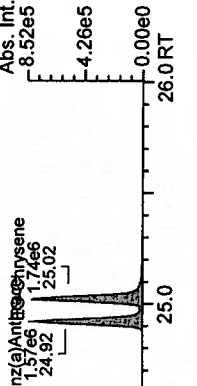
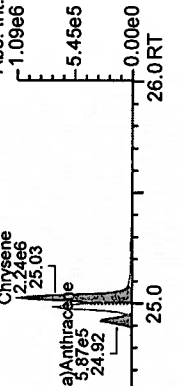
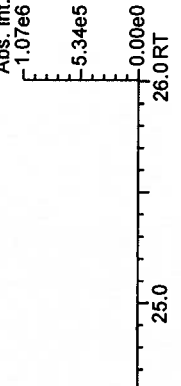
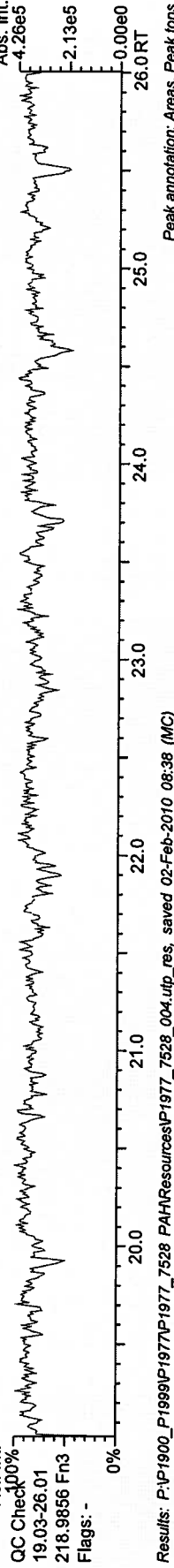
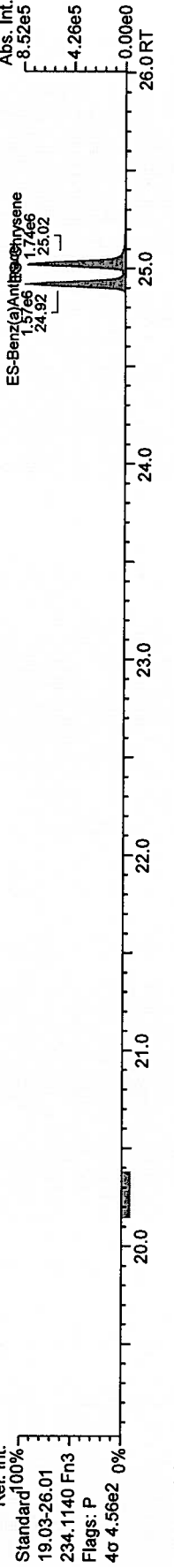
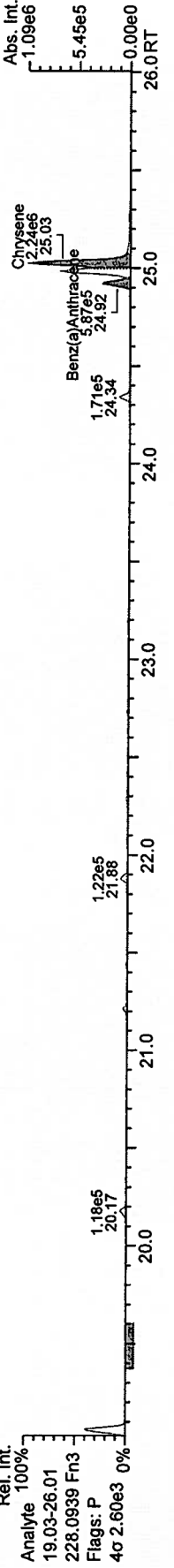
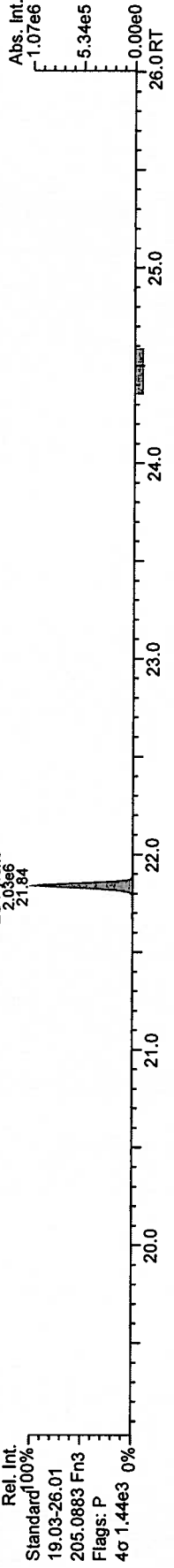
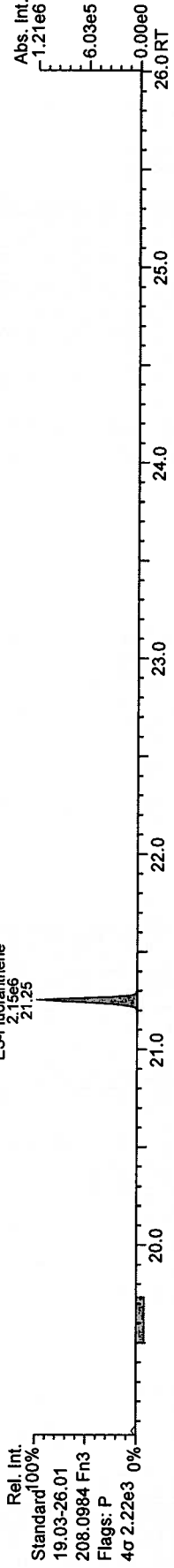
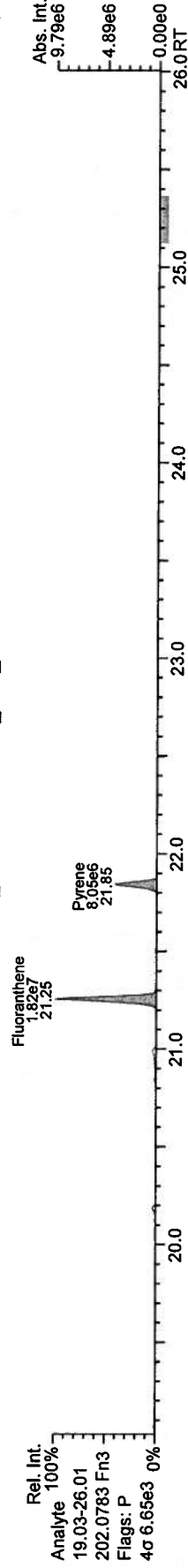
AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

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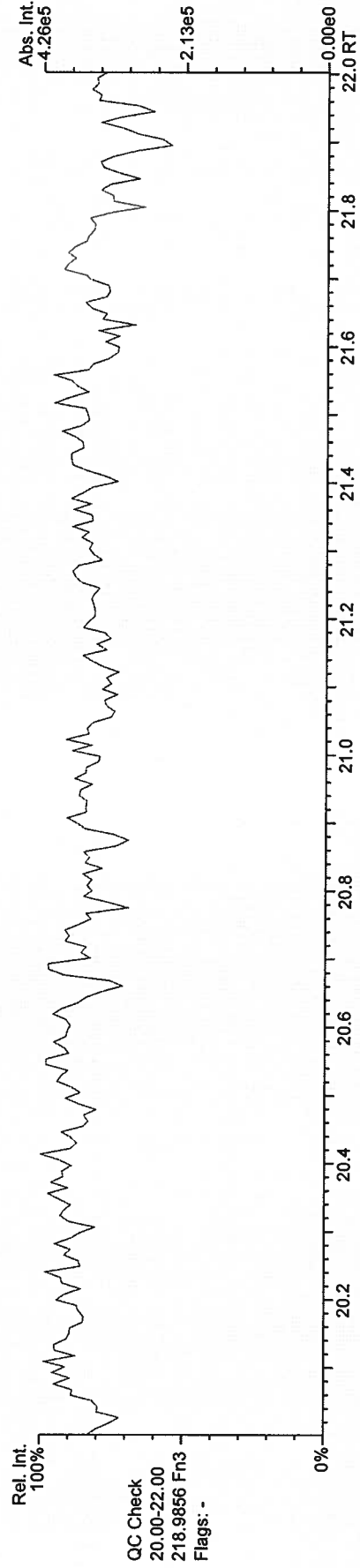
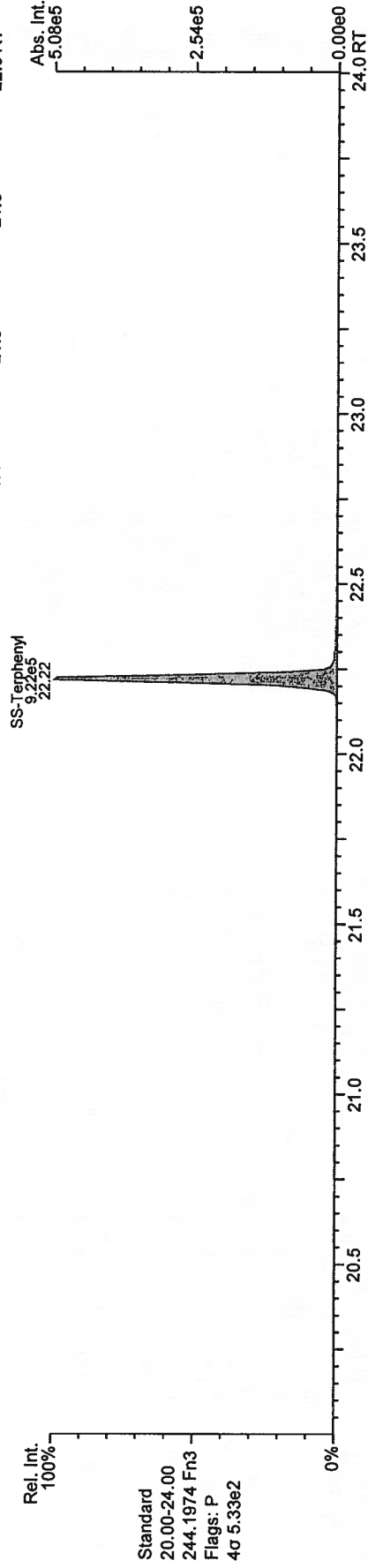
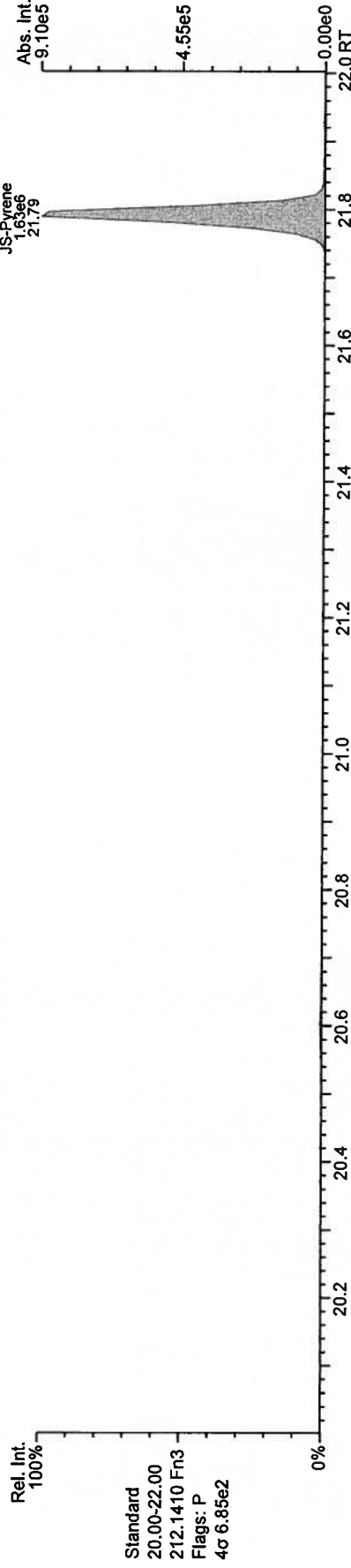
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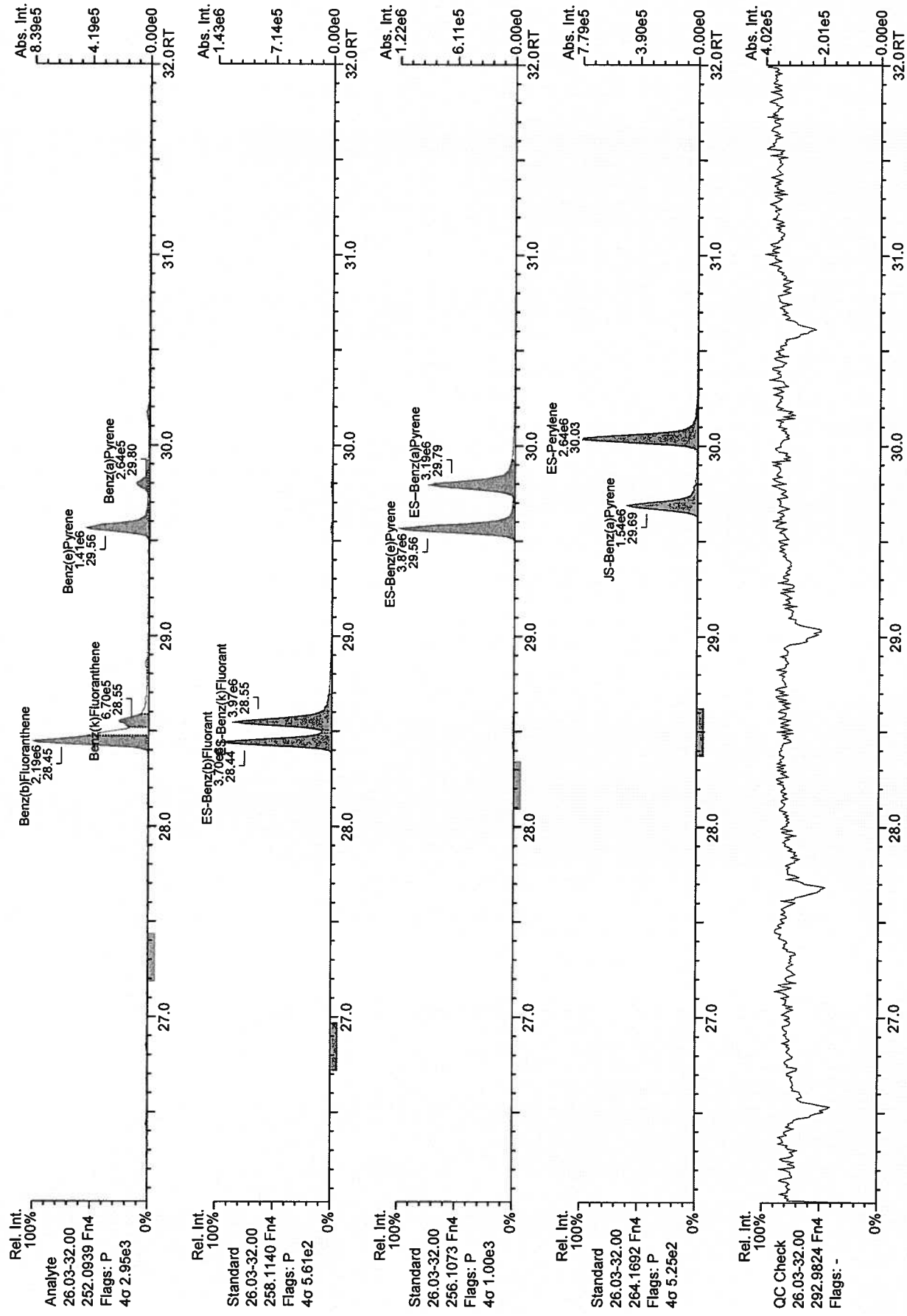


AP Lab ID: P1977\_7528\_004  
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Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

Acq: 1-FEB-2010 17:39:37  
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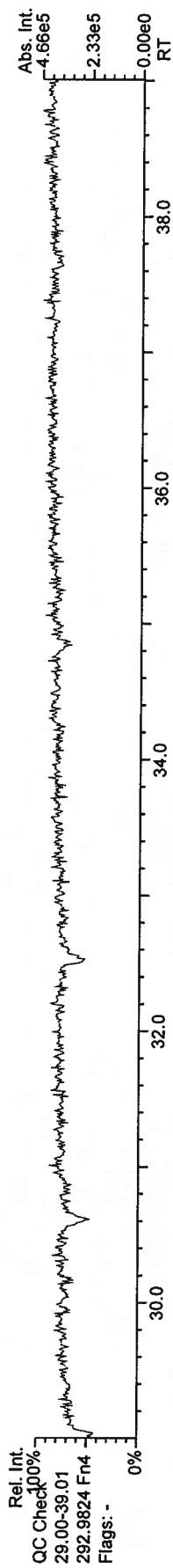
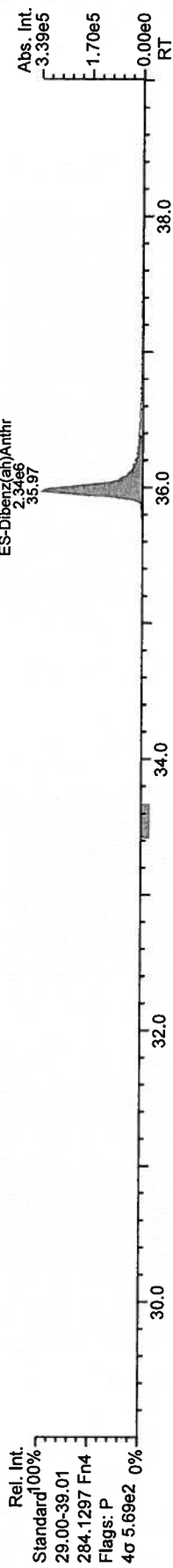
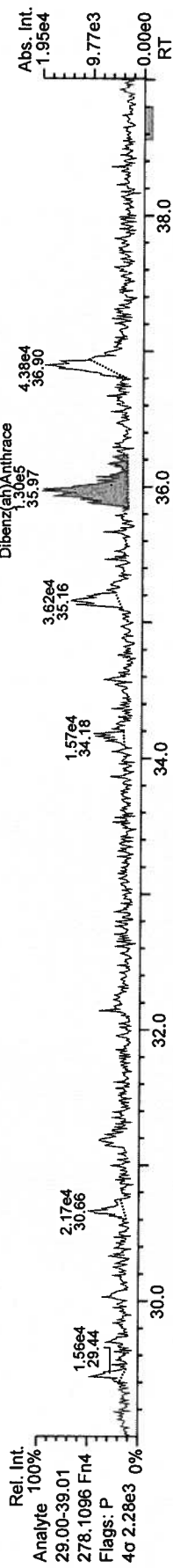
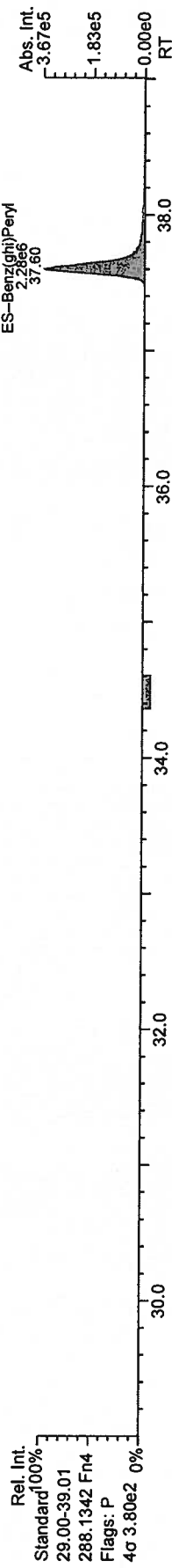
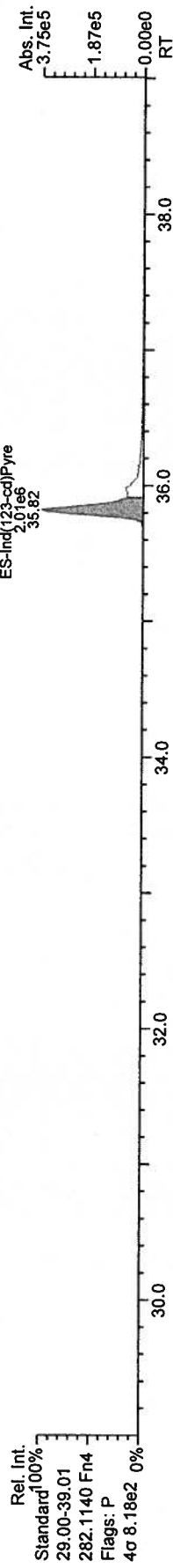
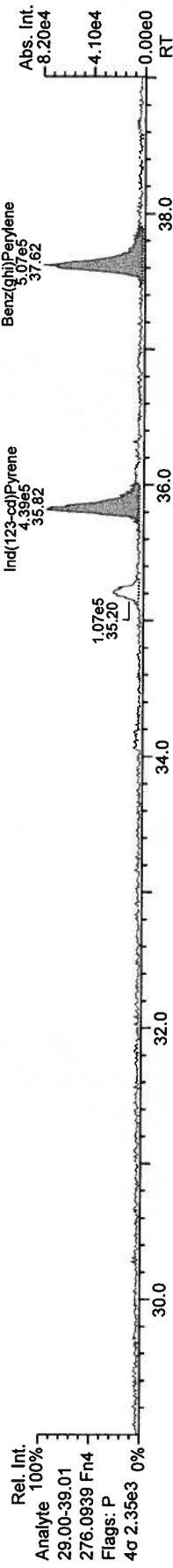




AP Lab ID: P1977\_7528\_004  
Instr: AutoSpec-Ultima MM1

Sample ID: SSI #1-R-3  
SIR expt: PAH\_DB5 GC: DB5MS\_60M\_PAH Vial: 81

Acq: 1-FEB-2010 17:39:37  
User: MC Datafile: 100201P2-07



P1977



**ANALYTICAL PERSPECTIVES**

## **PART 3**

# **ANALYTICAL RESULTS**

DOCUMENTATION FOR THE ANALYSIS  
OF  
POLYCHLORINATED BIPHENYLS



MB1_7528_PCB_SDS Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode:	
										Noise	DL
PCB-77 33'44'-TeCB	NotFnd		1.0006	-		0.00E+00		1.04	ND	3.66E+03	4.91
PCB-81 344'5'-TeCB	NotFnd		1.0008	-		0.00E+00		1.05	ND	3.66E+03	4.89
PCB-105 233'44'-PeCB	NotFnd		1.0007	-		0.00E+00		0.94	ND	2.42E+03	4.42
PCB-114 2344'5'-PeCB	NotFnd		1.0007	-		0.00E+00		0.93	ND	2.42E+03	4.66
PCB-118 23'44'5'-PeCB	31.37	J	1.0007	1.0007	0	4.07E+04	0.58	0.95	7.07	2.42E+03	4.49
PCB-123 2'344'5'-PeCB	NotFnd		1.0006	-		0.00E+00		0.98	ND	2.42E+03	4.69
PCB-126 33'44'5'-PeCB	NotFnd		1.0005	-		0.00E+00		0.95	ND	3.16E+03	5.45
PCB-156/157 233'44'5'/233'44'5'	NotFnd	C	1.0005	-		0.00E+00		0.93	ND	2.48E+03	7.76
PCB-167 23'44'55'-HxCB	NotFnd		1.0006	-		0.00E+00		0.96	ND	2.48E+03	5.39
PCB-169 33'44'55'-HxCB	NotFnd		1.0005	-		0.00E+00		0.89	ND	2.48E+03	6.58
PCB-189 233'44'55'-HpCB	NotFnd		1.0004	-		0.00E+00		0.87	ND	2.43E+03	4.74
PCB-209 DeCB	NotFnd		1.0004	-		0.00E+00		1.05	ND	1.68E+03	6.21
Recv.											
ES PCB-1	9.54		0.7029	0.7029	0	2.34E+07	3.21	0.97	76.8 %	25%	150%
ES PCB-3	11.55		0.8512	0.8512	0	2.59E+07	3.27	0.99	83.6 %	25%	150%
ES PCB-4	11.78		0.8680	0.8682	+0.1	2.06E+07	1.62	0.74	88.8 %	25%	150%
ES PCB-15	17.05		1.2558	1.2567	+0.9	3.70E+07	1.60	1.07	110 %	25%	150%
ES PCB-19	14.59		1.0748	1.0749	+0.1	1.97E+07	1.07	0.60	104 %	25%	150%
ES PCB-37	23.15		1.0877	1.0882	+0.7	3.54E+07	1.07	1.68	97 %	25%	150%
ES PCB-54	17.31		0.8143	0.8138	-0.5	2.88E+07	0.76	1.55	85.4 %	25%	150%
ES PCB-77	29.39		1.3802	1.3815	+2.3	3.06E+07	0.80	1.36	104 %	25%	150%
ES PCB-81	28.91		1.3579	1.3590	+1.9	3.00E+07	0.83	1.36	102 %	25%	150%
ES PCB-104	22.09		0.8145	0.8140	-0.7	2.67E+07	1.58	1.53	91.8 %	25%	150%
ES PCB-105	32.35		1.1915	1.1920	+1.0	2.40E+07	1.55	1.28	98.5 %	25%	150%
ES PCB-114	31.80		1.1714	1.1718	+0.8	2.41E+07	1.56	1.35	94.2 %	25%	150%
ES PCB-118	31.35		1.1548	1.1552	+0.8	2.43E+07	1.57	1.35	94.8 %	25%	150%
ES PCB-123	31.07		1.1446	1.1450	+0.7	2.21E+07	1.59	1.23	94.3 %	25%	150%
ES PCB-126	34.96		1.2874	1.2883	+1.9	2.70E+07	1.63	1.46	97.3 %	25%	150%
ES PCB-153	32.92		0.9690	0.9689	-0.2	2.30E+07	1.29	1.18	97.5 %	25%	150%
ES PCB-155	26.94		0.7934	0.7928	-1.0	2.77E+07	1.27	1.45	96.1 %	25%	150%
ES PCB-156/157	37.50		1.1032	1.1035	+0.7	4.14E+07	1.24	1.13	92 %	25%	150%
ES PCB-167	36.52		1.0745	1.0747	+0.4	2.07E+07	1.26	1.11	93.6 %	25%	150%
ES PCB-169	40.22		1.1834	1.1838	+1.0	1.98E+07	1.25	1.09	91.1 %	25%	150%
ES PCB-170	39.73		0.9007	0.9005	-0.5	1.56E+07	1.07	1.30	91 %	25%	150%
ES PCB-180	38.66		0.8766	0.8764	-0.5	2.08E+07	1.04	1.72	91.6 %	25%	150%
ES PCB-188	31.79		0.7211	0.7206	-1.0	2.86E+07	1.04	1.56	92 %	25%	150%
ES PCB-189	42.35		0.9600	0.9599	-0.3	2.67E+07	1.04	2.04	99.2 %	25%	150%
ES PCB-202	36.32		0.8237	0.8233	-0.9	2.39E+07	0.89	1.26	95.3 %	25%	150%
ES PCB-205	44.51		1.0090	1.0090	0	1.86E+07	0.93	1.41	99.6 %	25%	150%
ES PCB-206	45.98		1.0422	1.0422	0	1.21E+07	0.80	0.93	97.9 %	25%	150%
ES PCB-208	41.95		0.9510	0.9508	-0.5	1.64E+07	0.80	1.32	94.1 %	25%	150%
ES PCB-209	47.33		1.0729	1.0728	-0.3	1.34E+07	1.18	1.01	100 %	25%	150%

## MB1\_7528\_PCB\_SDS

Actual RT	Pred RRT	QC	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	at DL
SS PCB-28	19.69		0.9258	-0.2	3.46E+07	1.05	1.04	94.4 %	30%	135%
SS PCB-111	29.41		1.0837	+0.4	2.26E+07	1.60	1.01	101 %	30%	135%
SS PCB-178	34.36		1.0113	0	1.80E+07	1.05	0.63	101 %	30%	135%
CS PCB-28	19.69		0.9258	-0.2	3.46E+07	1.05	1.74	91.6 %	30%	135%
CS PCB-111	29.41		1.0837	+0.4	2.26E+07	1.60	1.25	95.2 %	30%	135%
CS PCB-178	34.36		1.0113	0	1.80E+07	1.05	0.98	92.5 %	30%	135%

JS PCB-9	13.57				3.15E+07	1.63				
JS PCB-52	21.27				2.18E+07	0.77				
JS PCB-101	27.13				1.90E+07	1.63				
JS PCB-138	33.98				2.00E+07	1.28				
JS PCB-194	44.11				1.32E+07	0.92				

Checkcode:

ατ

Totals	NON-EMPC	EMPC	DL
Mono-CBs	22.7	32.2	3.92
Di-CBs	197	197	15.3
Tri-CBs	76.5	85.6	6.37
Tetra-CB:	60.2	60.2	4.15
Penta-CB:	42.2	42.2	4.46
Hexa-CBs	0	25.1	5.82
Hepta-CB:	10.6	10.6	5.61
Octa-CBs	2.89	2.89	4.55
Nona-CBs	0	0	9.44

PCB-1 2-MoCB	9.55	J	1.0012	0	6.49E+04	3.55	1.18	9.42	4.30E+03	3.92
PCB-2 3-MoCB	11.40	J	0.9869	0	1.18E+05	2.85	1.37	13.3	4.30E+03	3.35
PCB-3 4-MoCB	11.56	J EMPC	1.0010	-0.1	7.16E+04	2.16	1.17	9.45	4.30E+03	3.92
PCB-4 22'-DiCB	NotFnd		-		0.00E+00		0.87	ND	1.26E+04	19.1
PCB-10 26-DiCB	NotFnd		-		0.00E+00		1.27	ND	1.26E+04	13.1
PCB-9 25-DiCB	NotFnd		-		0.00E+00		1.22	ND	1.18E+04	9.2
PCB-7 24-DiCB	NotFnd		-		0.00E+00		0.96	ND	1.18E+04	11.7
PCB-6 23'-DiCB	NotFnd		-		0.00E+00		1.22	ND	1.18E+04	9.23
PCB-5 23-DiCB	NotFnd		-		0.00E+00		0.92	ND	1.18E+04	12.2
PCB-8 24'-DiCB	14.33	J SI	1.0562	+0.2	1.22E+05	SI*	1.22	10.9	1.18E+04	9.23
PCB-14 35-DiCB	NotFnd		0.9257		0.00E+00		1.00	ND	1.18E+04	11.3
PCB-11 33'-DiCB	16.52	SI	0.9689	-0.1	1.64E+06	SI*	0.95	186	1.18E+04	11.8
PCB-13/12 34'-/34-DiCB	NotFnd	C	0.9851		0.00E+00		1.02	ND	1.18E+04	11
PCB-15 44'-DiCB	NotFnd		1.0008		0.00E+00		0.98	ND	1.18E+04	11.4
PCB-19 22'6-TrCB	NotFnd		1.0011		0.00E+00		0.95	ND	3.96E+03	6.75
PCB-30/18 246-/22'5-TrCB	16.25	J C	1.1132	+1.2	1.30E+05	0.96	1.39	19	3.96E+03	4.63
PCB-17 22'4-TrCB	16.62	J	1.1393	+0.4	4.71E+04	1.05	1.03	9.3	3.96E+03	6.23
PCB-27 23'6-TrCB	NotFnd		1.1522		0.00E+00		1.40	ND	3.96E+03	4.57
PCB-24 236-TrCB	NotFnd		1.1602		0.00E+00		1.33	ND	3.96E+03	4.82
PCB-16 22'3-TrCB	17.02		1.1668	+0.3	3.01E+04	1.19	1.09	5.61	3.96E+03	5.87

MB1_7528_PCB_SDS	Actual	Pred	Actual	Diff	Response	Ra	RRF	Conc	Checkcode:	α
Name	RT	QC	RRT	Secs					Noise	DL
PCB-32 24'6-TrCB	17.48	J EMPC	1.1978	1.1985	6.55E+04	0.80	1.48	9.04	3.96E+03	4.35
PCB-34 2'35-TrCB	NotFnd		0.8033	-	0.00E+00		1.04	ND	4.57E+03	4.92
PCB-23 235-TrCB	NotFnd		0.8090	-	0.00E+00		1.47	ND	4.57E+03	3.48
PCB-26/29 23'5-/245-TrCB	18.98	C	0.8210	0.8200	3.44E+04	1.08	1.09	3.58	4.57E+03	4.71
PCB-25 23'4-TrCB	NotFnd		0.8292	-	0.00E+00		1.40	ND	4.57E+03	3.65
PCB-31 24'5-TrCB	19.45	J	0.8409	0.8403	1.22E+05	1.04	1.13	12.2	4.57E+03	4.54
PCB-28/20 244'-/233'-TrCB	19.71	J C	0.8524	0.8514	1.73E+05	1.00	1.21	16.1	4.57E+03	4.21
PCB-21/33 234'-/2'34-TrCB	19.91	J C	0.8598	0.8601	7.45E+04	1.09	1.19	7.1	4.57E+03	4.31
PCB-22 234'-TrCB	20.25		0.8755	0.8749	4.04E+04	0.90	1.28	3.55	4.57E+03	3.98
PCB-36 33'5-TrCB	NotFnd		0.9336	-	0.00E+00		1.27	ND	4.57E+03	4.01
PCB-39 34'5-TrCB	NotFnd		0.9469	-	0.00E+00		1.60	ND	4.57E+03	3.2
PCB-38 345-TrCB	NotFnd		0.9688	-	0.00E+00		1.02	ND	4.57E+03	5.02
PCB-35 33'4-TrCB	NotFnd		0.9856	-	0.00E+00		0.89	ND	4.57E+03	5.73
PCB-37 344'-TrCB	NotFnd		1.0008	-	0.00E+00		0.85	ND	4.57E+03	5.99
PCB-54 22'66'-TeCB	NotFnd		1.0010	-	0.00E+00		0.95	ND	2.56E+03	3.26
PCB-50/53 22'46-/22'56'TeCB	19.21	J C	0.9043	0.9029	2.66E+04	0.78	0.69	5.12	2.18E+03	4.43
PCB-45 22'36-TeCB	NotFnd		0.9305	-	0.00E+00		0.65	ND	2.18E+03	4.72
PCB-51 22'46'-TeCB	NotFnd		0.9338	-	0.00E+00		0.69	ND	2.18E+03	4.43
PCB-46 22'36'-TeCB	NotFnd		0.9435	-	0.00E+00		0.62	ND	2.18E+03	4.91
PCB-52 22'55'-TeCB	21.29	J	1.0010	1.0009	1.32E+05	0.87	0.94	18.7	2.18E+03	3.27
PCB-73 23'5'6TeCB	NotFnd		1.0067	-	0.00E+00		0.83	ND	2.18E+03	3.69
PCB-43 22'35-TeCB	NotFnd		1.0106	-	0.00E+00		0.70	ND	2.18E+03	4.36
PCB-69/49 23'46-/22'45'TeCB	21.71	J C	1.0198	1.0208	4.98E+04	0.84	0.97	6.87	2.18E+03	3.17
PCB-48 22'45-TeCB	NotFnd		1.0323	-	0.00E+00		0.75	ND	2.18E+03	4.07
PCB-44/47/65 22'35'-/22'44'-	22.17	J C	1.0420	1.0422	1.13E+05	0.85	0.83	18.2	2.18E+03	3.69
PCB-59/62/75 233'6-/2346-/24	NotFnd	C	1.0544	-	0.00E+00		1.14	ND	2.18E+03	2.67
PCB-42 22'34'-TeCB	NotFnd		1.0624	-	0.00E+00		0.70	ND	2.18E+03	4.4
PCB-41 22'34-TeCB	NotFnd		1.0773	-	0.00E+00		0.60	ND	2.18E+03	5.08
PCB-71/40 23'4'6/22'33'-TeCB	NotFnd	C	1.0822	-	0.00E+00		0.90	ND	2.18E+03	3.4
PCB-64 234'6-TeCB	NotFnd		1.0912	-	0.00E+00		1.25	ND	2.18E+03	2.44
PCB-72 23'55'-TeCB	NotFnd		0.8282	-	0.00E+00		1.36	ND	3.66E+03	3.78
PCB-68 23'45'-TeCB	NotFnd		0.8368	-	0.00E+00		1.73	ND	3.66E+03	2.97
PCB-57 233'5-TeCB	NotFnd		0.8491	-	0.00E+00		1.12	ND	3.66E+03	4.6
PCB-58 233'5'-TeCB	NotFnd		0.8562	-	0.00E+00		1.29	ND	3.66E+03	3.99
PCB-67 23'45-TeCB	NotFnd		0.8612	-	0.00E+00		1.48	ND	3.66E+03	3.46
PCB-63 234'5-TeCB	NotFnd		0.8690	-	0.00E+00		1.53	ND	3.66E+03	3.37
PCB-61/70/74/76 2345-/23'4'5	25.41	J C	0.8788	0.8788	1.08E+05	0.67	1.28	11.3	3.66E+03	4.01
PCB-66 23'44'-TeCB	NotFnd		0.8884	-	0.00E+00		1.38	ND	3.66E+03	3.71
PCB-55 233'4-TeCB	NotFnd		0.8933	-	0.00E+00		1.20	ND	3.66E+03	4.29
PCB-56 233'4'-TeCB	NotFnd		0.9081	-	0.00E+00		1.36	ND	3.66E+03	3.78
PCB-60 2344'-TeCB	NotFnd		0.9145	-	0.00E+00		1.16	ND	3.66E+03	4.42
PCB-80 33'55'-TeCB	NotFnd		0.9263	-	0.00E+00		1.74	ND	3.66E+03	2.96
PCB-79 33'45'-TeCB	NotFnd		0.9712	-	0.00E+00		1.49	ND	3.66E+03	3.44
PCB-78 33'45-TeCB	NotFnd		0.9876	-	0.00E+00		1.21	ND	3.66E+03	4.24
PCB-104 22'466'-PeCB	NotFnd		1.0009	-	0.00E+00		0.99	ND	2.12E+03	3.07
PCB-96 22'366'-PeCB	NotFnd		1.0152	-	0.00E+00		1.11	ND	2.12E+03	2.73
PCB-103 22'45'6-PeCB	NotFnd		0.8879	-	0.00E+00		0.94	ND	2.42E+03	4.91

## MB1\_7528\_PCB\_SDS

MB1_7528_PCB_SDS Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	αr DL
PCB-94 22'356'-PeCB	NotFnd		0.8949	-		0.00E+00		1.11	ND	2.42E+03	4.16
PCB-95 22'35'6-PeCB	24.66	J	0.9088	0.9087	-0.1	6.08E+04	0.65	0.89	12.4	2.42E+03	5.19
PCB-100/93 22'44'6-/22'356-P	NotFnd	C	0.9159	-		0.00E+00		0.82	ND	2.42E+03	5.64
PCB-102 22'456'-PeCB	NotFnd		0.9200	-		0.00E+00		0.75	ND	2.42E+03	6.15
PCB-98 22'3'46-PeCB	NotFnd		0.9224	-		0.00E+00		1.03	ND	2.42E+03	4.45
PCB-88 22'346-PeCB	NotFnd		0.9330	-		0.00E+00		1.05	ND	2.42E+03	4.39
PCB-91 22'34'6-PeCB	NotFnd		0.9359	-		0.00E+00		1.11	ND	2.42E+03	4.14
PCB-84 22'33'6-PeCB	NotFnd		0.9429	-		0.00E+00		0.75	ND	2.42E+03	6.15
PCB-89 22'346'-PeCB	NotFnd		0.9579	-		0.00E+00		0.87	ND	2.42E+03	5.28
PCB-121 23'45'6-PeCB	NotFnd		0.9708	-		0.00E+00		1.55	ND	2.42E+03	2.98
PCB-92 22'355'-PeCB	NotFnd		0.9825	-		0.00E+00		0.81	ND	2.42E+03	5.68
PCB-113/90/101 233'5'6-/22'3	27.15	J C	0.9999	1.0007	+1.3	5.73E+04	0.58	0.90	11.5	2.42E+03	5.11
PCB-83 22'33'5-PeCB	NotFnd		1.0155	-		0.00E+00		0.72	ND	2.42E+03	6.42
PCB-99 22'44'5-PeCB	27.65	J	1.0189	1.0189	0	2.87E+04	0.57	1.16	4.48	2.42E+03	3.97
PCB-112 233'56-PeCB	NotFnd		1.0227	-		0.00E+00		1.18	ND	2.42E+03	3.88
PCB-108/119/86/97/125/87 233	NotFnd	C	1.0354	-		0.00E+00		1.11	ND	2.42E+03	4.16
PCB-117 234'56-PeCB	NotFnd		1.0543	-		0.00E+00		0.85	ND	2.42E+03	5.41
PCB-116/85 23456-/22'344'-Pe	NotFnd	C	1.0573	-		0.00E+00		1.24	ND	2.42E+03	3.72
PCB-110 233'4'6-PeCB	28.84	J	1.0625	1.0630	+0.9	5.28E+04	0.57	1.41	6.78	2.42E+03	3.27
PCB-115 2344'6-PeCB	NotFnd		1.0651	-		0.00E+00		1.08	ND	2.42E+03	4.24
PCB-82 22'33'4-PeCB	NotFnd		1.0724	-		0.00E+00		0.87	ND	2.42E+03	5.29
PCB-111 233'55'-PeCB	NotFnd		1.0845	-		0.00E+00		1.58	ND	2.42E+03	2.91
PCB-120 23'455'-PeCB	NotFnd	C	1.0988	-		0.00E+00		1.22	ND	2.42E+03	3.76
PCB-107/124 233'4'5-/2'3455'	NotFnd		0.9908	-		0.00E+00		1.06	ND	2.42E+03	4.33
PCB-109 233'46-PeCB	NotFnd		0.9974	-		0.00E+00		1.19	ND	2.42E+03	3.87
PCB-106 233'45-PeCB	NotFnd		1.0039	-		0.00E+00		1.21	ND	2.42E+03	3.82
PCB-122 2'33'45-PeCB	NotFnd		1.0100	-		0.00E+00		0.80	ND	2.42E+03	5.43
PCB-127 33'455'-PeCB	NotFnd		1.0390	-		0.00E+00		1.00	ND	2.42E+03	4.13
PCB-155 22'44'66'-HxCB	NotFnd		1.0008	-		0.00E+00		0.99	ND	2.46E+03	3.54
PCB-152 22'3566'-HxCB	NotFnd		1.0069	-		0.00E+00		1.18	ND	2.46E+03	2.97
PCB-150 22'34'66'-HxCB	NotFnd		1.0122	-		0.00E+00		1.43	ND	2.46E+03	2.45
PCB-136 22'33'66'-HxCB	NotFnd		1.0235	-		0.00E+00		0.98	ND	2.46E+03	3.55
PCB-145 22'3466'HxCB	NotFnd		1.0329	-		0.00E+00		0.96	ND	2.46E+03	3.63
PCB-148 22'34'56'-HxCB	NotFnd		1.0803	-		0.00E+00		1.25	ND	2.46E+03	3.59
PCB-151/135 22'355'6-/22'33'	NotFnd	C	1.0995	-		0.00E+00		0.88	ND	2.46E+03	5.1
PCB-154 22'44'5'6-HxCB	NotFnd		1.1069	-		0.00E+00		0.88	ND	2.46E+03	5.09
PCB-144 22'345'6-HxCB	NotFnd		1.1166	-		0.00E+00		0.91	ND	2.46E+03	4.91
PCB-147/149 22'34'56-/22'34'	30.40	J EMPC C	1.1278	1.1283	+0.9	4.47E+04	1.73	1.04	7.5	2.46E+03	4.32
PCB-134 22'33'56-HxCB	NotFnd		1.1339	-		0.00E+00		0.68	ND	2.46E+03	6.61
PCB-143 22'3456'-HxCB	NotFnd		1.1369	-		0.00E+00		1.25	ND	2.46E+03	3.59
PCB-139/140 22'344'6-/22'344'	NotFnd	C	1.1466	-		0.00E+00		1.06	ND	2.46E+03	4.22
PCB-131 22'33'46-HxCB	NotFnd		1.1529	-		0.00E+00		0.83	ND	2.46E+03	5.42
PCB-142 22'3456-HxCB	NotFnd		1.1578	-		0.00E+00		1.09	ND	2.46E+03	4.11
PCB-132 22'33'46'-HxCB	NotFnd		1.1672	-		0.00E+00		0.88	ND	2.46E+03	5.07
PCB-133 22'33'55'-HxCB	NotFnd		1.1827	-		0.00E+00		0.84	ND	2.46E+03	5.34
PCB-165 233'55'6-HxCB	NotFnd		0.9483	-		0.00E+00		0.91	ND	2.46E+03	4.93
PCB-146 22'34'55'-HxCB	NotFnd		0.9545	-		0.00E+00		1.13	ND	2.46E+03	3.98

## MB1\_7528\_PCB\_SDS

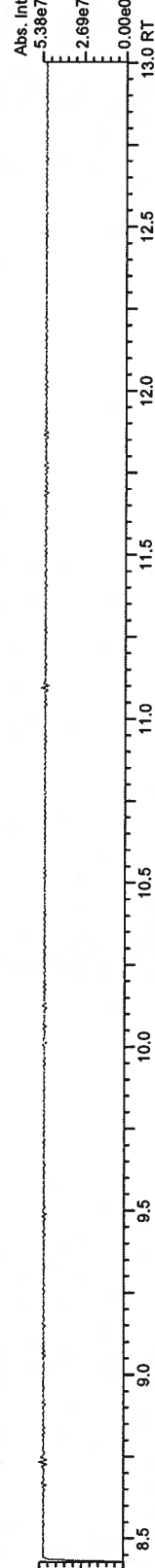
Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	αr DL
PCB-161 233'45'6"-HxCB	NotFnd		0.9578	-		0.00E+00		1.09	ND	2.46E+03	4.1
PCB-153/168 22'44'55'"/23'44'	32.95	J EMPC C	0.9703	0.9695	-1.6	5.32E+04	1.00	1.15	8.07	2.46E+03	3.91
PCB-141 22'3455'-HxCB	NotFnd		0.9746	-		0.00E+00		0.85	ND	2.46E+03	5.25
PCB-130 22'33'45'-HxCB	NotFnd		0.9847	-		0.00E+00		0.66	ND	2.46E+03	6.75
PCB-137 22'344'5"-HxCB	NotFnd		0.9902	-		0.00E+00		1.13	ND	2.46E+03	3.96
PCB-164 233'4'5'6"-HxCB	NotFnd		0.9930	-		0.00E+00		1.15	ND	2.46E+03	3.89
PCB-163/138/129 233'4'56"/22'	34.00	J EMPC C	1.0012	1.0005	-1.4	5.37E+04	1.00	0.99	9.49	2.46E+03	4.55
PCB-160 233'456-HxCB	NotFnd		1.0048	-		0.00E+00		1.58	ND	2.46E+03	2.84
PCB-158 233'44'6"-HxCB	NotFnd		1.0104	-		0.00E+00		1.22	ND	2.46E+03	3.66
PCB-128/166 22'33'44'"/2344'5	NotFnd	C	0.9601	-		0.00E+00		1.00	ND	2.48E+03	5.16
PCB-159 233'455'-HxCB	NotFnd		0.9829	-		0.00E+00		1.16	ND	2.48E+03	4.45
PCB-162 233'4'55'-HxCB	NotFnd		0.9895	-		0.00E+00		1.49	ND	2.48E+03	3.46
PCB-188 22'34'566'-HxCB	NotFnd		1.0007	-		0.00E+00		0.97	ND	2.55E+03	3.84
PCB-179 22'33'566'-HxCB	NotFnd		1.0096	-		0.00E+00		1.13	ND	2.55E+03	3.28
PCB-184 22'344'66'-HxCB	NotFnd		1.0236	-		0.00E+00		1.01	ND	2.55E+03	3.67
PCB-176 22'33'466'-HxCB	NotFnd		1.0330	-		0.00E+00		1.17	ND	2.55E+03	3.17
PCB-186 22'34566'-HxCB	NotFnd		1.0452	-		0.00E+00		0.98	ND	2.55E+03	3.77
PCB-178 22'33'55'6"-HxCB	NotFnd		1.0814	-		0.00E+00		0.73	ND	2.55E+03	5.07
PCB-175 22'33'45'6"-HxCB	NotFnd		1.0983	-		0.00E+00		0.72	ND	2.49E+03	7.1
PCB-187 22'34'55'6"-HxCB	NotFnd		1.1055	-		0.00E+00		1.01	ND	2.49E+03	5.03
PCB-182 22'344'56'-HxCB	NotFnd		1.1109	-		0.00E+00		0.97	ND	2.49E+03	5.26
PCB-183 22'344'5'6"-HxCB	NotFnd		1.1215	-		0.00E+00		0.89	ND	2.49E+03	5.7
PCB-185 22'3455'6"-HxCB	NotFnd		1.1242	-		0.00E+00		0.95	ND	2.49E+03	5.35
PCB-174 22'33'456'-HxCB	NotFnd		1.1280	-		0.00E+00		0.95	ND	2.49E+03	5.39
PCB-177 22'33'4'56"-HxCB	NotFnd		1.1396	-		0.00E+00		0.90	ND	2.49E+03	5.64
PCB-181 22'344'56"-HxCB	NotFnd		1.1501	-		0.00E+00		0.77	ND	2.49E+03	6.58
PCB-171/173 22'33'44'6"/22'3	NotFnd	C	1.1559	-		0.00E+00		0.82	ND	2.49E+03	6.25
PCB-172 22'33'455'-HxCB	NotFnd		0.9006	-		0.00E+00		0.75	ND	2.49E+03	6.76
PCB-192 233'455'6"-HxCB	NotFnd		0.9062	-		0.00E+00		1.00	ND	2.49E+03	5.09
PCB-180/193 22'344'55'"/233'	38.68	J C	0.9130	0.9135	+1.2	4.06E+04	1.11	0.73	10.6	2.49E+03	6.94
PCB-191 233'44'5'6"-HxCB	NotFnd		0.9206	-		0.00E+00		0.96	ND	2.49E+03	5.33
PCB-170 22'33'44'5"-HxCB	NotFnd		0.9387	-		0.00E+00		1.36	ND	2.49E+03	4.99
PCB-190 233'44'56"-HxCB	NotFnd		0.9492	-		0.00E+00		1.31	ND	2.49E+03	5.2
PCB-202 22'33'55'66'-OcCB	NotFnd		1.0006	-		0.00E+00		0.87	ND	1.99E+03	4.18
PCB-201 22'33'45'66'-OcCB	NotFnd		1.0220	-		0.00E+00		0.81	ND	1.99E+03	4.5
PCB-204 22'344'566'-OcCB	NotFnd		1.0376	-		0.00E+00		1.00	ND	1.99E+03	3.64
PCB-197 22'33'44'66'-OcCB	NotFnd		1.0429	-		0.00E+00		0.96	ND	1.99E+03	3.78
PCB-200 22'33'4566'-OcCB	NotFnd		1.0455	-		0.00E+00		0.75	ND	1.99E+03	4.84
PCB-198/199 22'33'455'6"/22'	NotFnd	C	1.1098	-		0.00E+00		0.75	ND	1.99E+03	4.82
PCB-196 22'33'44'56'-OcCB	NotFnd		1.1255	-		0.00E+00		0.69	ND	1.99E+03	5.28
PCB-203 22'344'55'6"-OcCB	NotFnd		1.1300	-		0.00E+00		0.88	ND	1.99E+03	4.12
PCB-195 22'33'44'56"-OcCB	NotFnd		0.9475	-		0.00E+00		0.97	ND	2.06E+03	4.92
PCB-194 22'33'44'55'-OcCB	44.13		0.9915	0.9915	0	1.35E+04	0.91	1.01	2.89	2.06E+03	4.7
PCB-205 233'44'55'6"-OcCB	NotFnd		1.0004	-		0.00E+00		0.97	ND	2.06E+03	4.91
PCB-208 22'33'455'66'-NoCB	NotFnd		1.0005	-		0.00E+00		0.95	ND	2.85E+03	8.78
PCB-207 22'33'44'566'-NoCB	NotFnd		1.0191	-		0.00E+00		1.04	ND	2.85E+03	8.02
PCB-206 22'33'44'55'6"-NoCB	NotFnd		1.0004	-		0.00E+00		1.07	ND	2.85E+03	10.1

AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

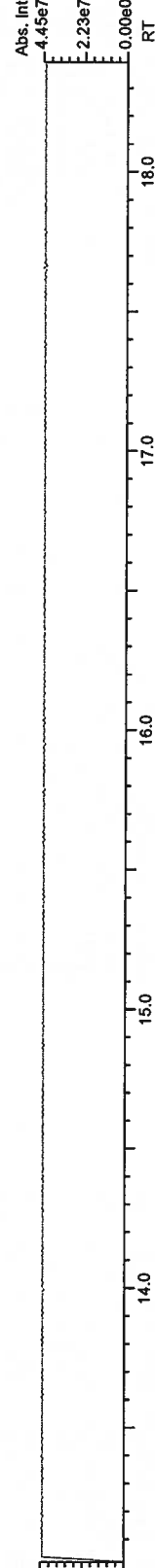
Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

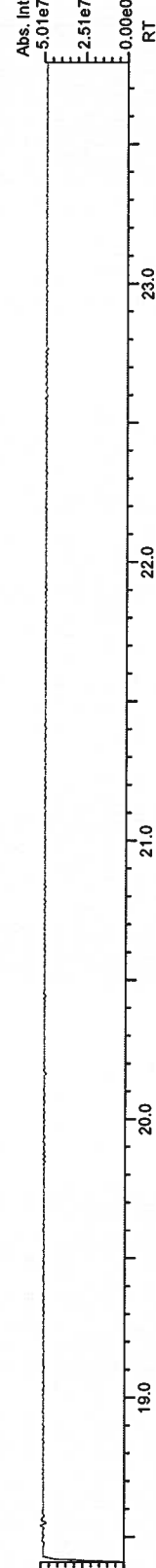
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Flags: -



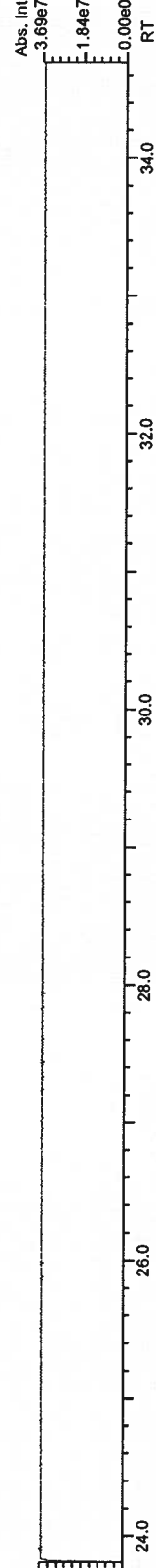
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QC Check  
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242.9856 Fn2  
Flags: -



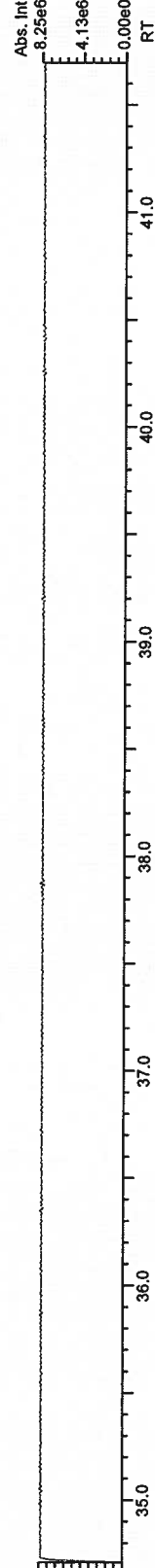
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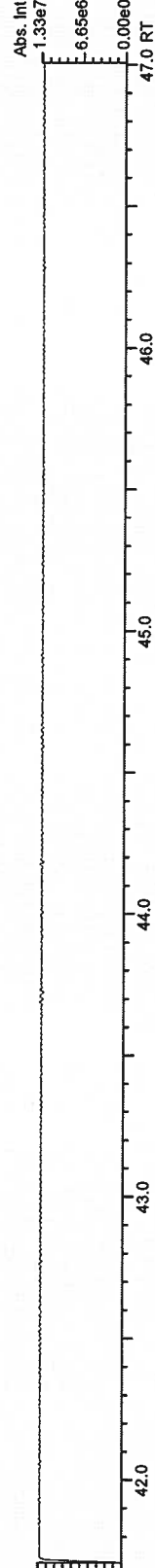
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23.81-34.69  
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Flags: -



Rel. Int.  
100%  
QC Check  
34.71-41.70  
366.9792 Fn5  
Flags: -



Rel. Int.  
100%  
QC Check  
41.71-47.01  
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Flags: -



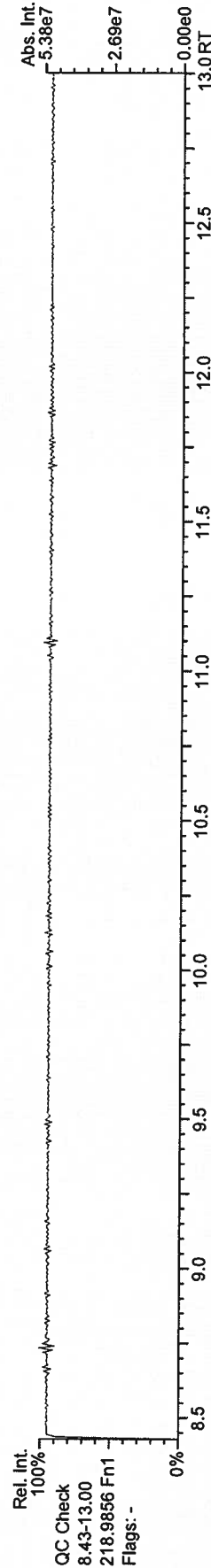
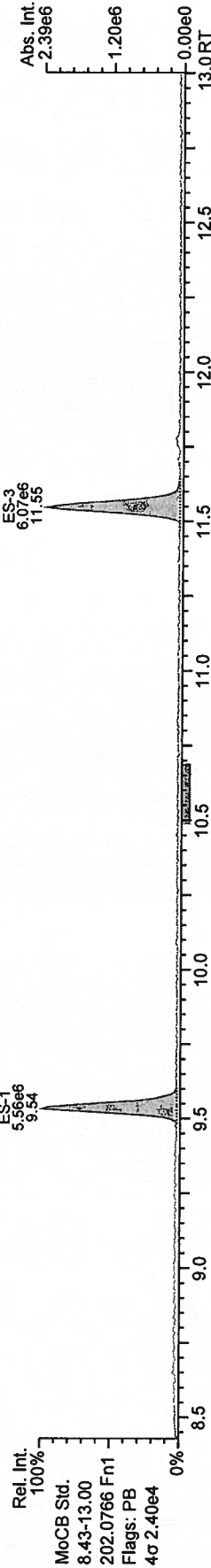
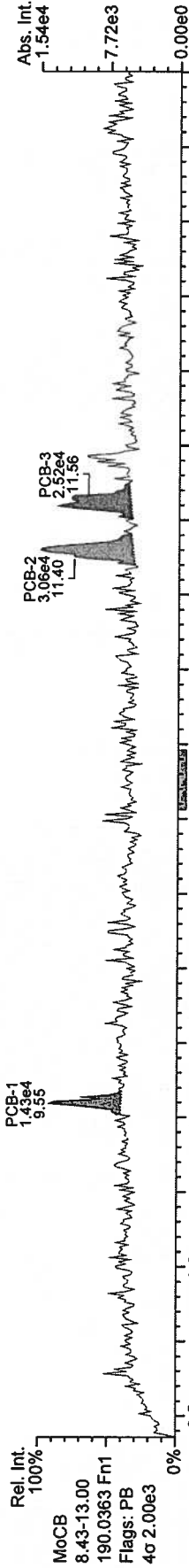
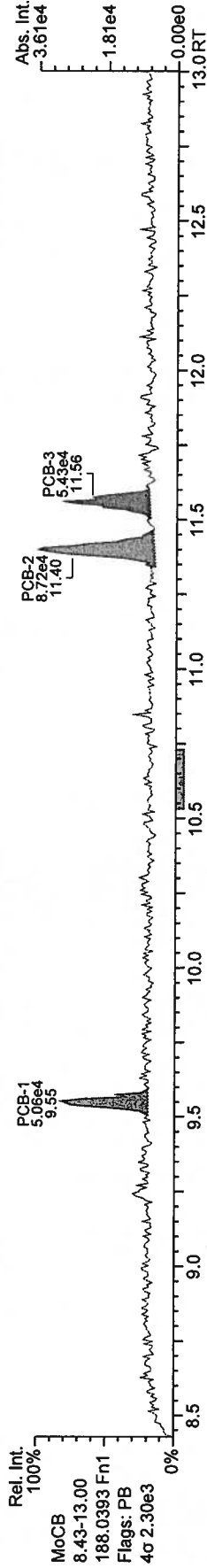
Rel. Int.  
100%  
QC Check  
47.02-52.01  
454.9728 Fn7  
Flags: -



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405 cl1-10 GC: pcbx100\_a BI Vial: 30

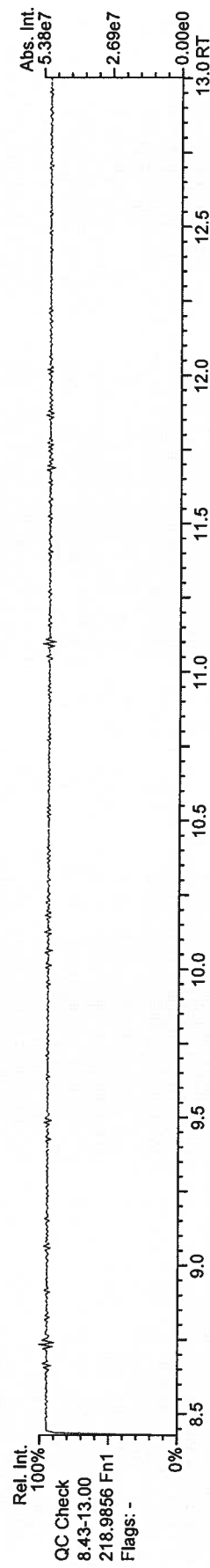
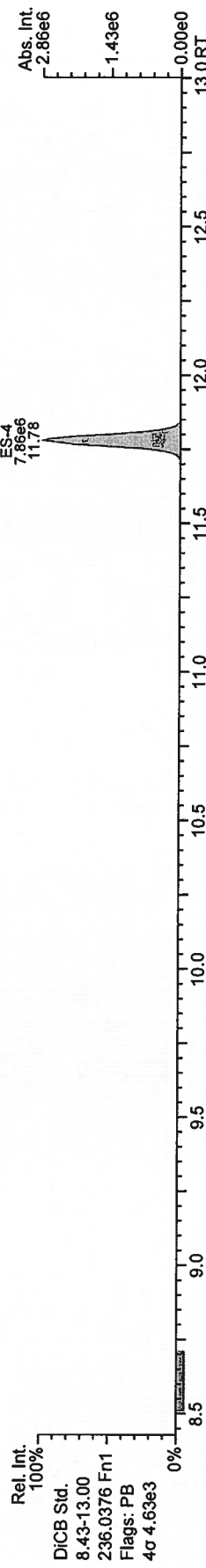
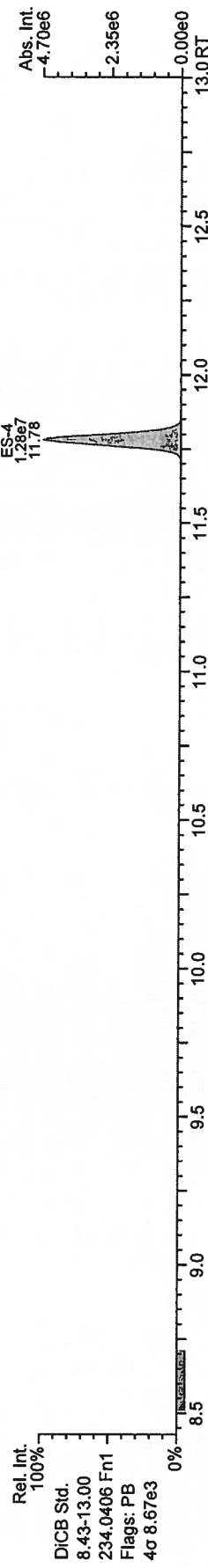
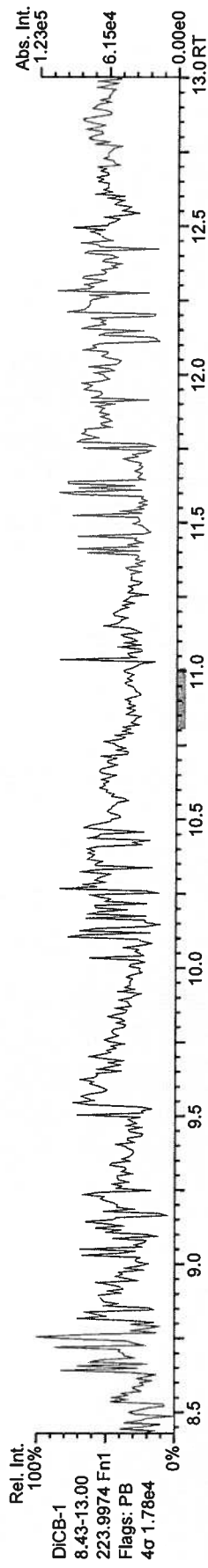
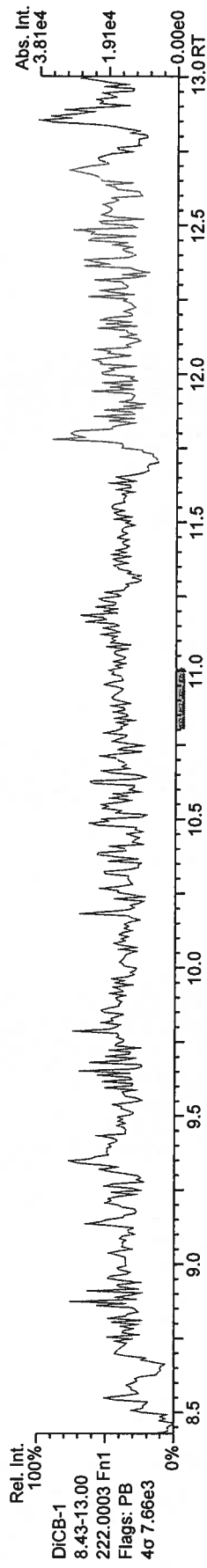
Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



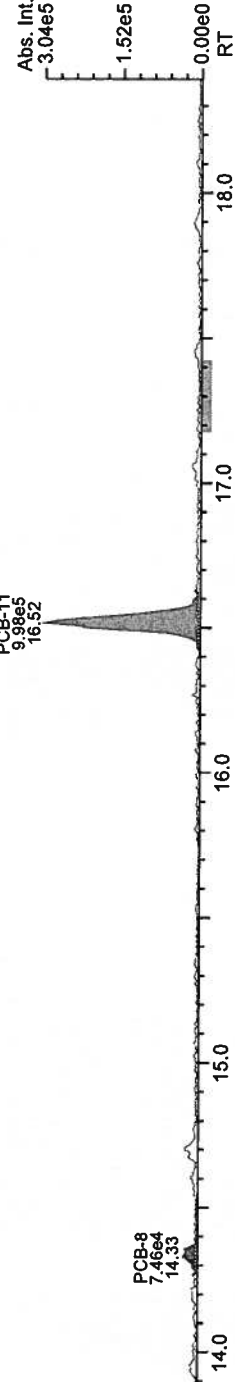


AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

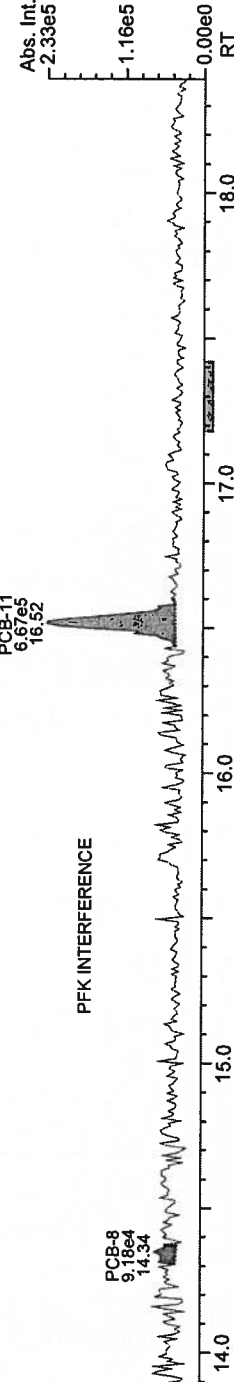
Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

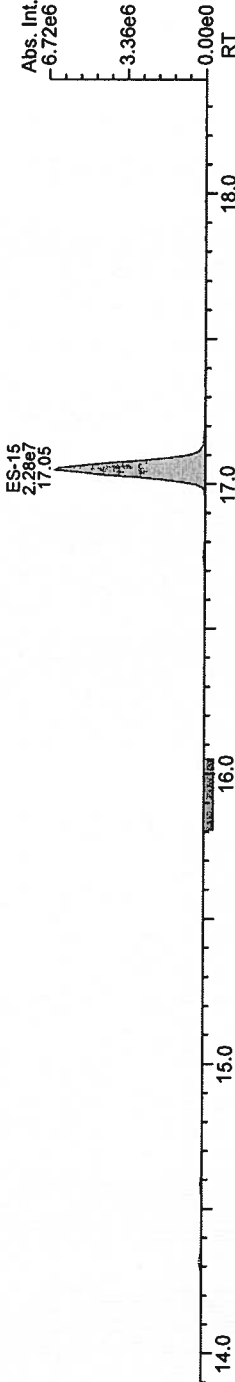
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13.07-18.39  
222.0003 Fn2  
Flags: PB  
4σ 7.19e3



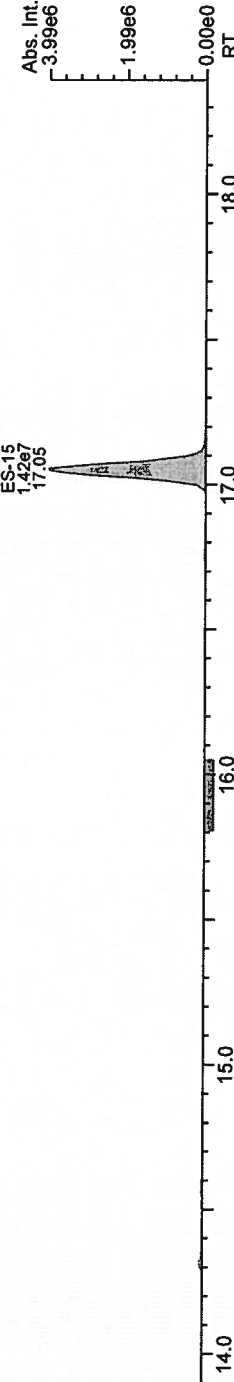
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223.9974 Fn2  
Flags: PB  
4σ 1.59e4



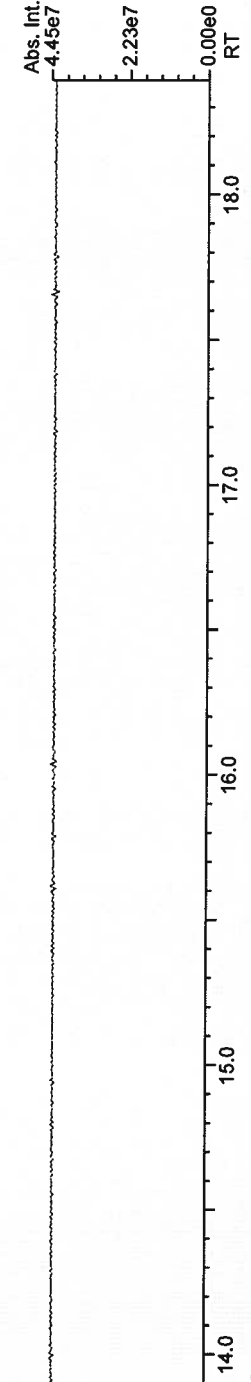
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D1CB Std.  
13.07-18.39  
234.0406 Fn2  
Flags: PB  
4σ 1.16e4



Rel. Int.  
100%  
D1CB Std.  
13.07-18.39  
236.0376 Fn2  
Flags: PB  
4σ 5.58e3



Rel. Int.  
100%  
QC Check  
13.07-18.39  
242.9856 Fn2  
Flags: -

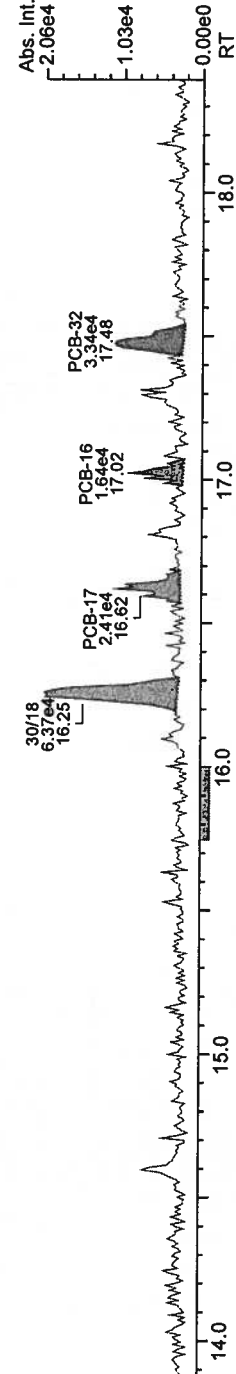


AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

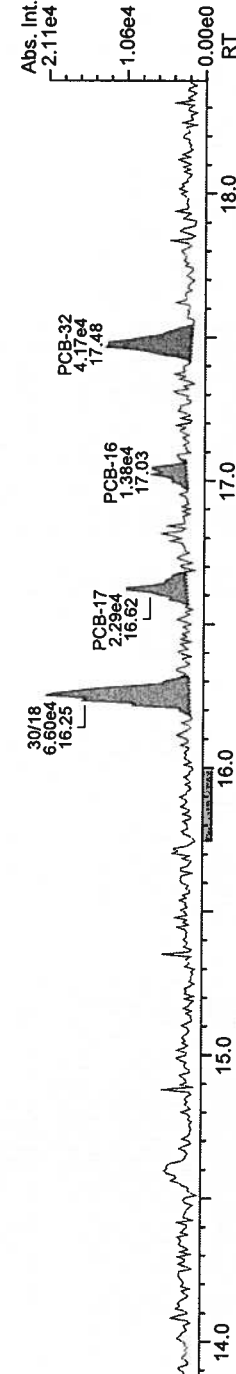
Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

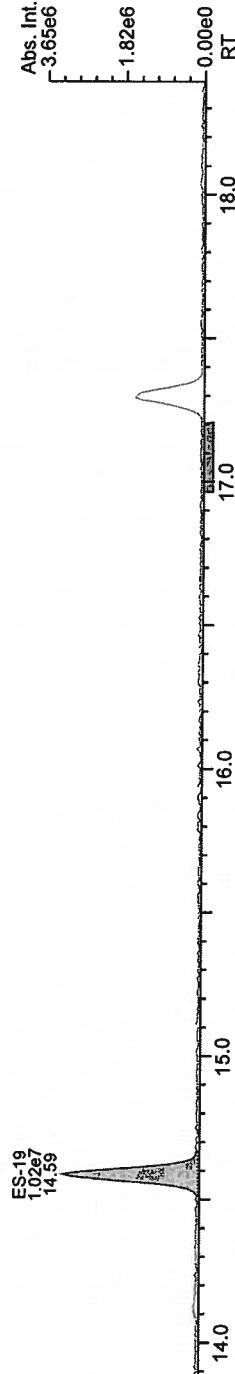
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4σ 1.97e3



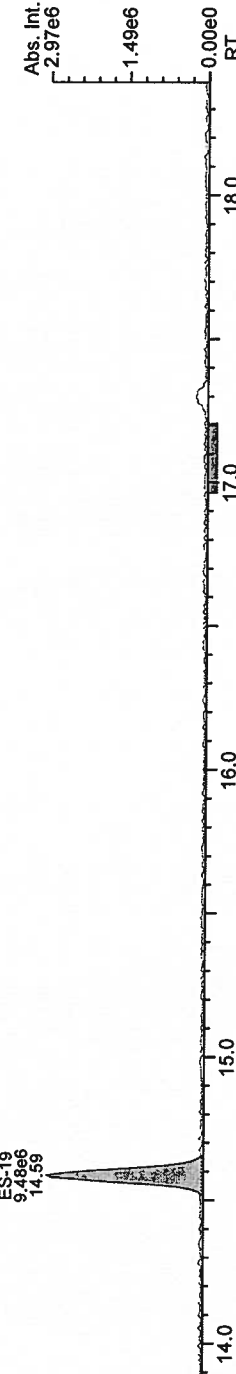
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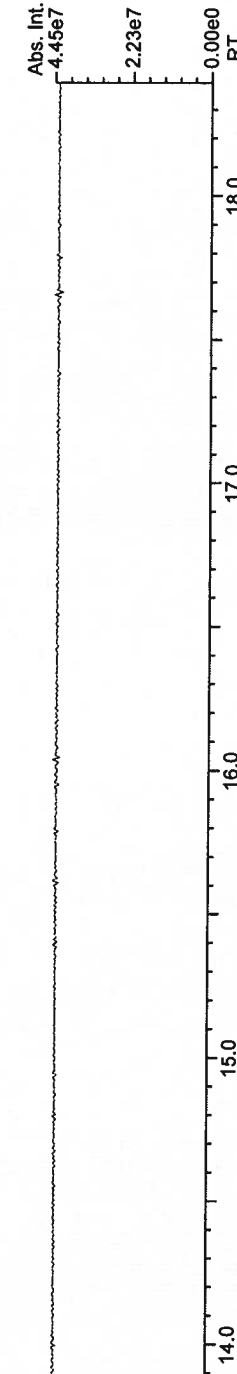
Rel. Int.  
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TrCB Std.  
13.02-18.39  
268.0016 Fn2  
Flags: PB  
4σ 3.55e4



Rel. Int.  
100%  
TrCB Std.  
13.02-18.39  
269.9986 Fn2  
Flags: PB  
4σ 5.56e4



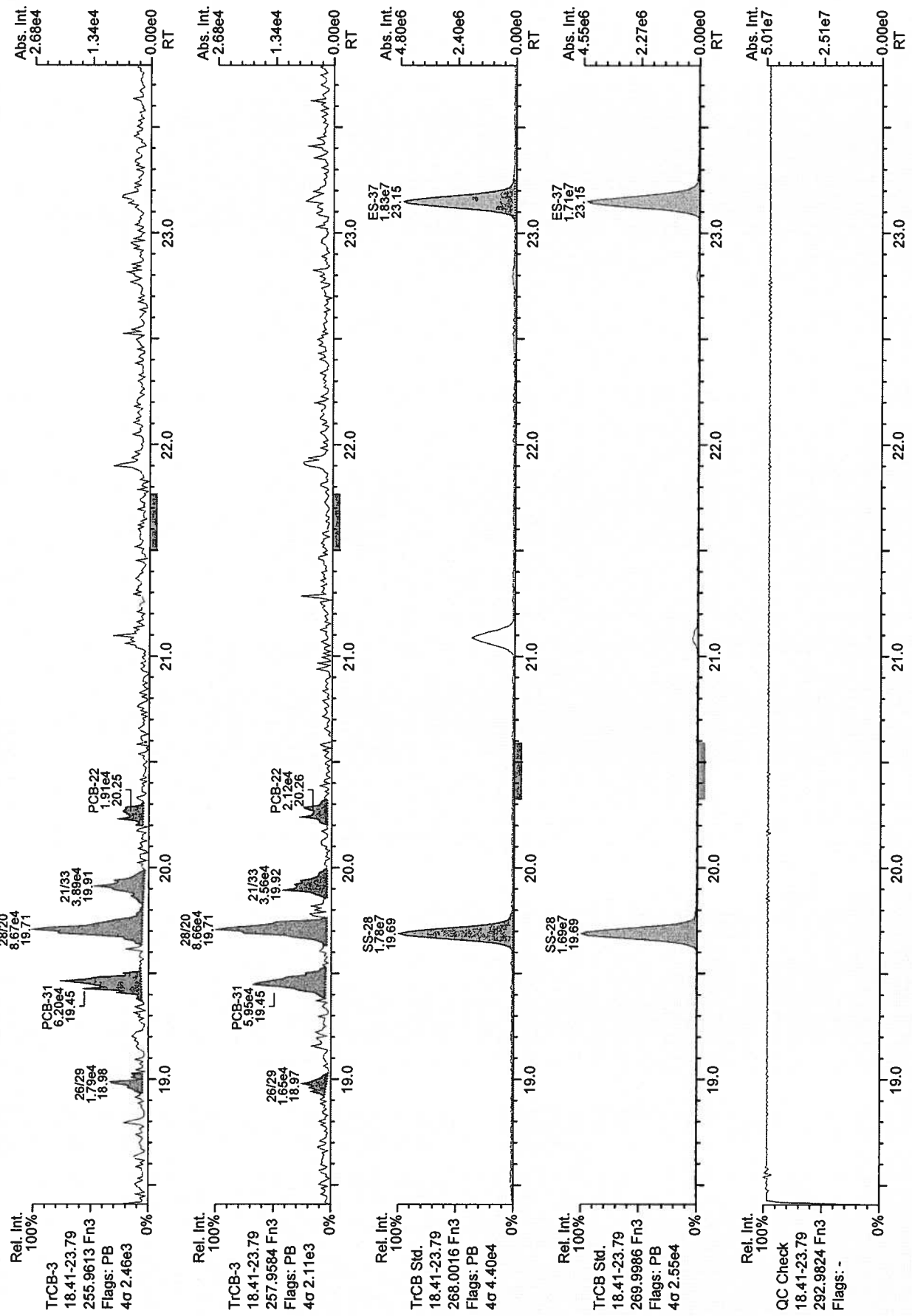
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QC Check  
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242.9856 Fn2  
Flags: -



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

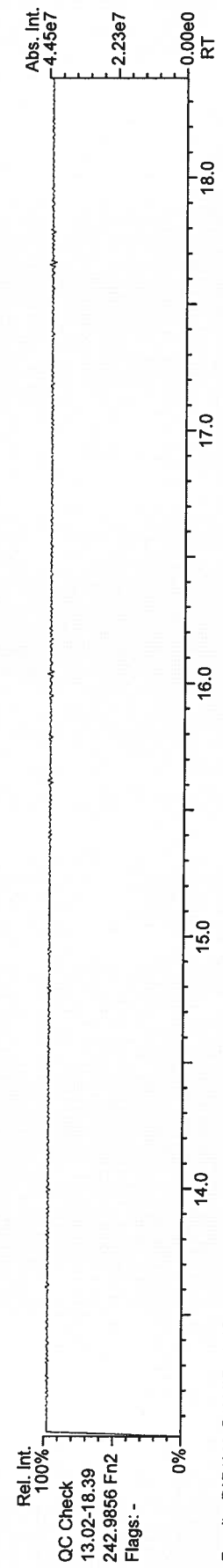
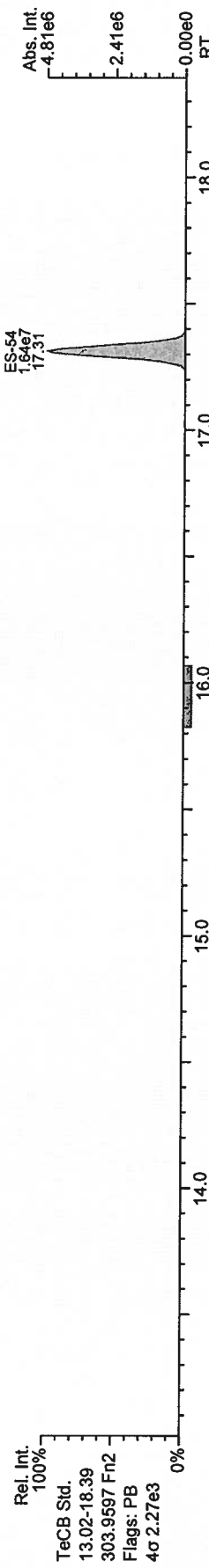
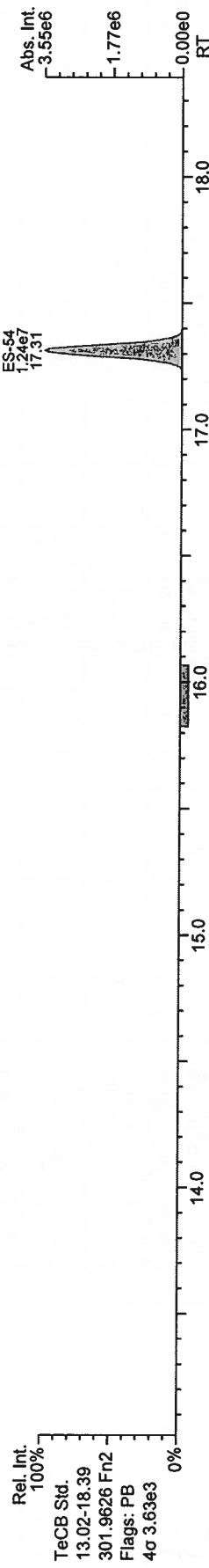
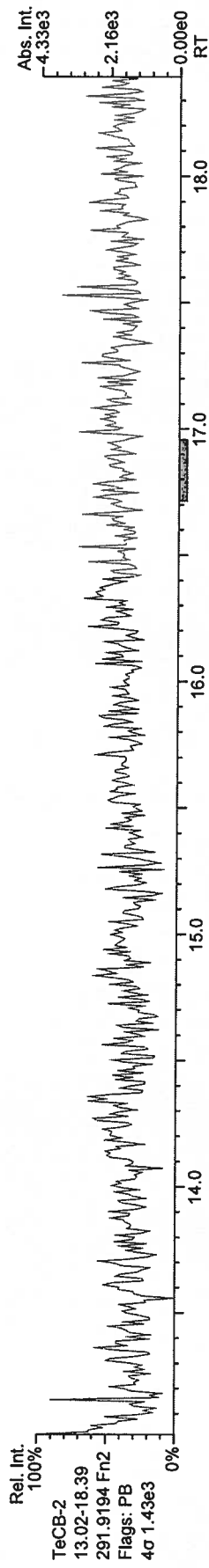
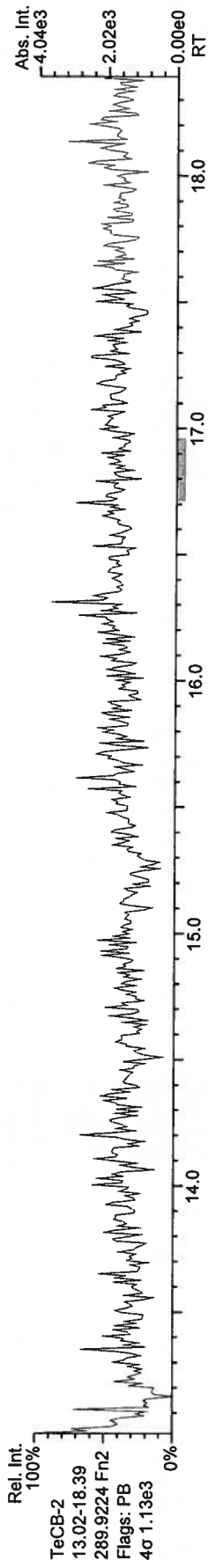
Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

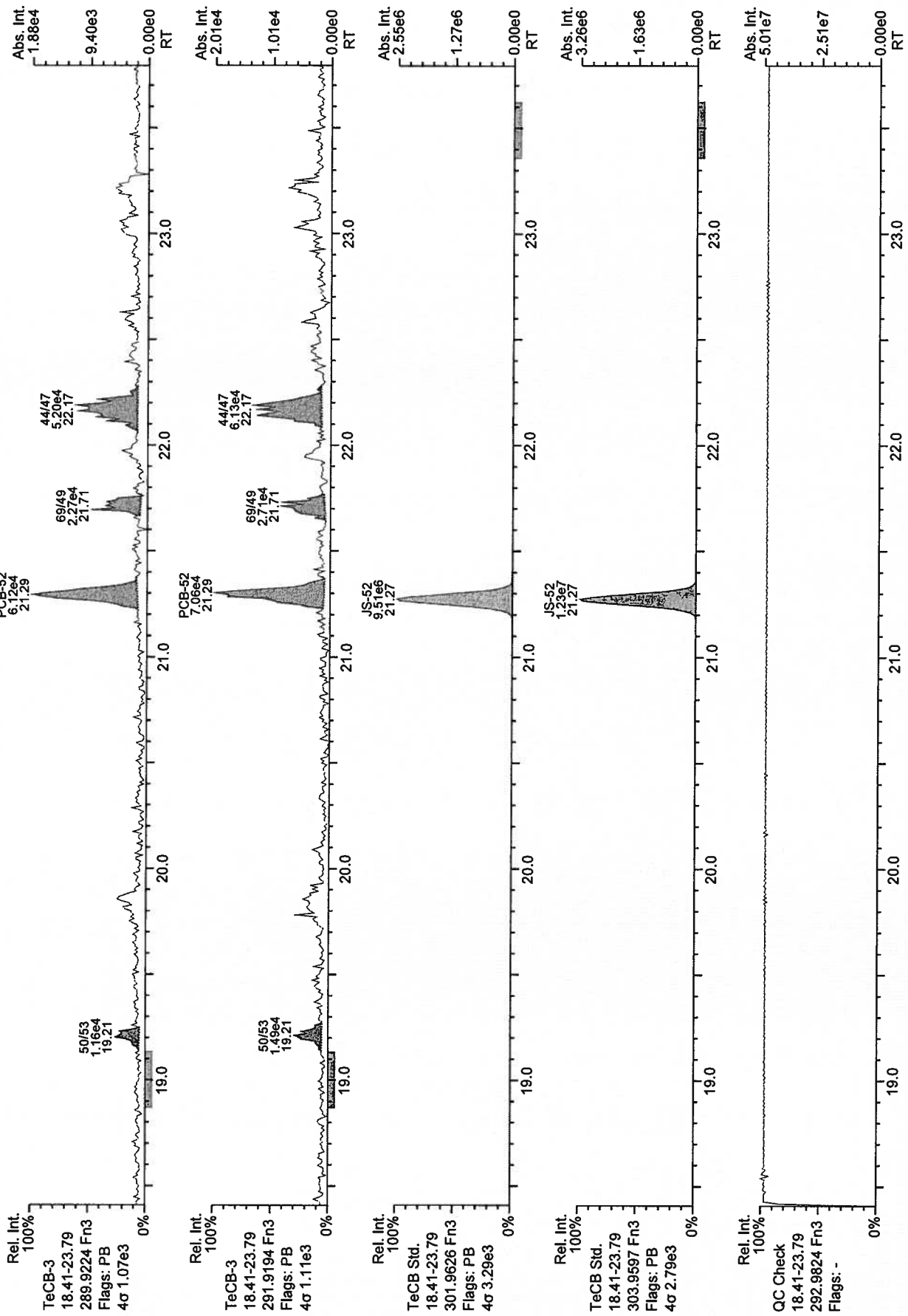
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AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

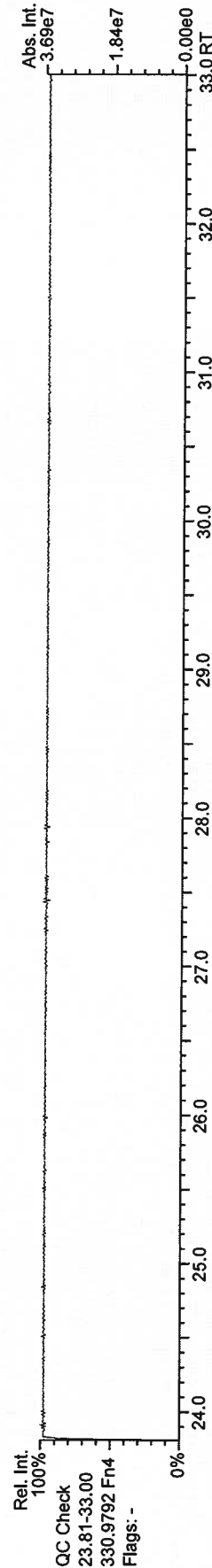
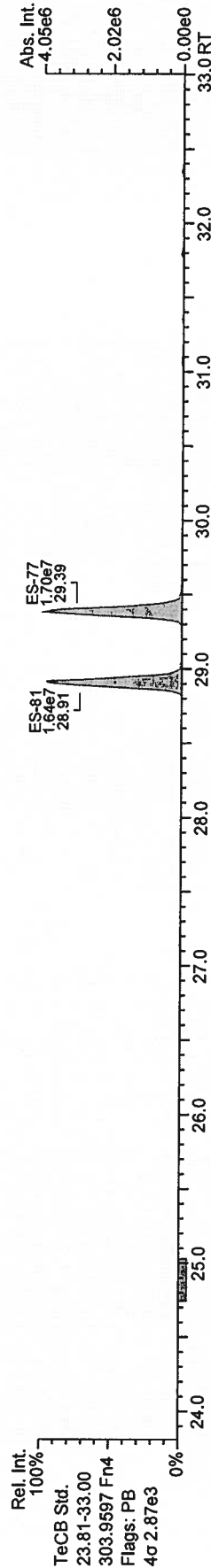
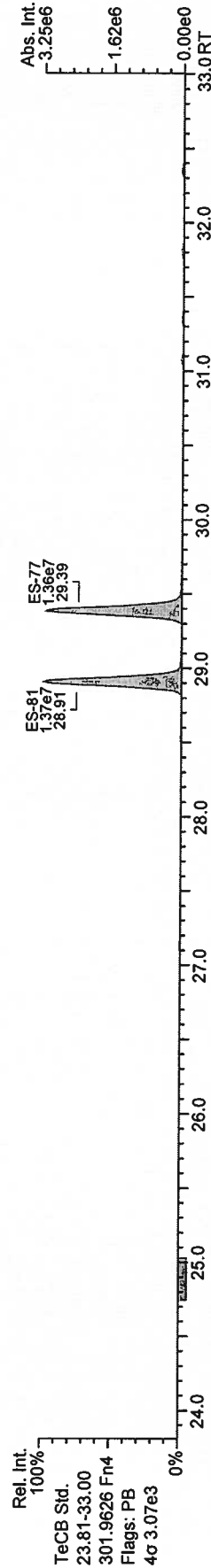
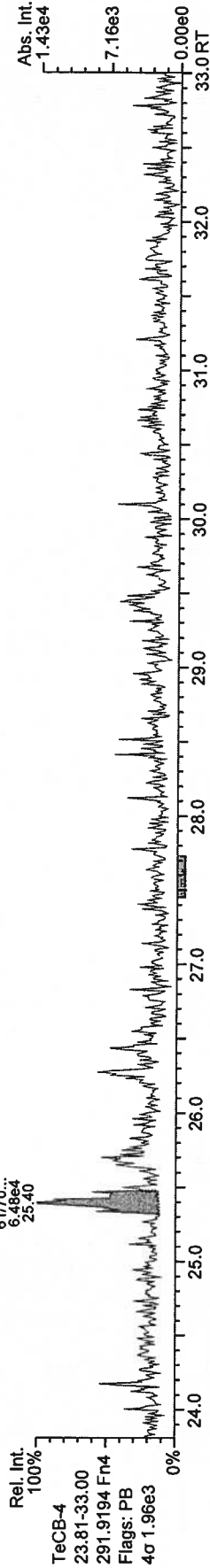
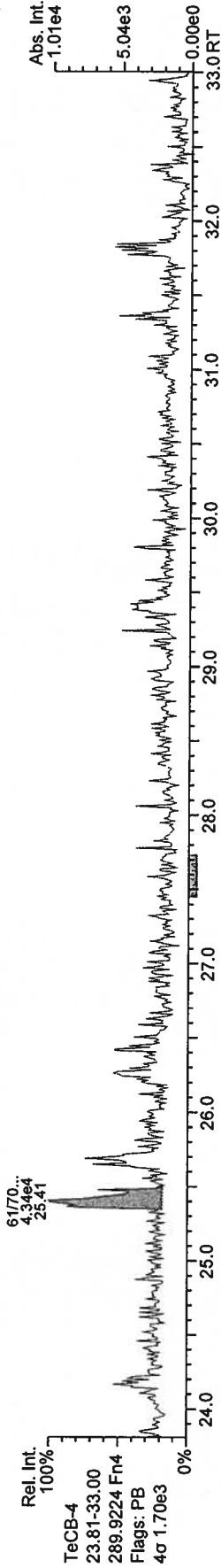
Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

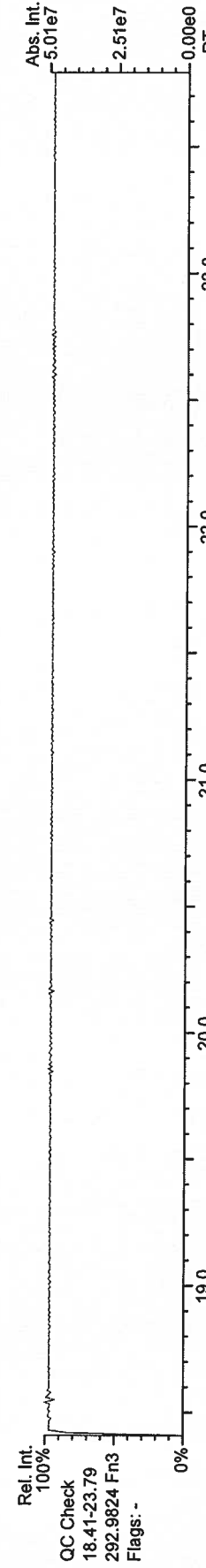
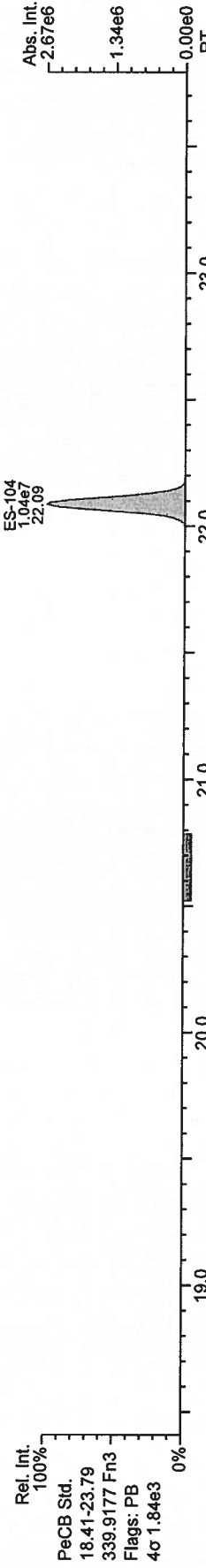
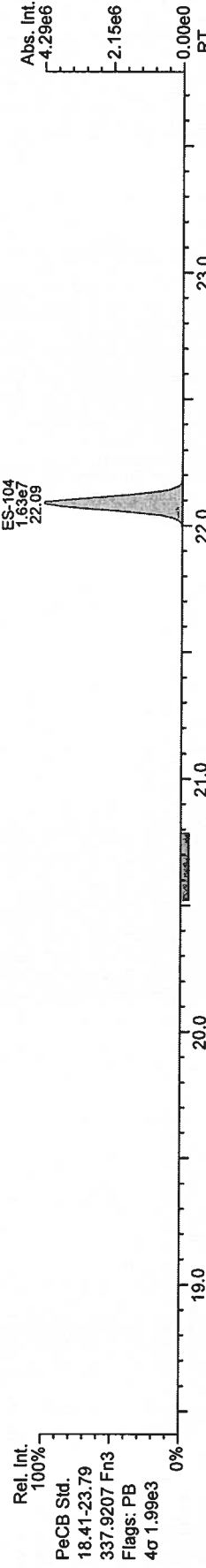
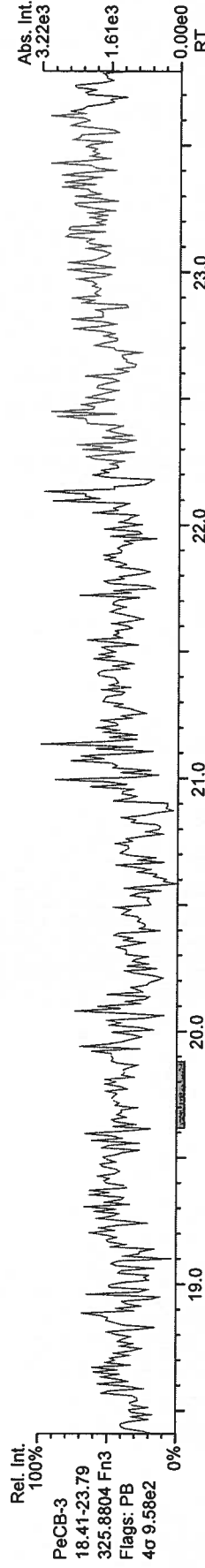
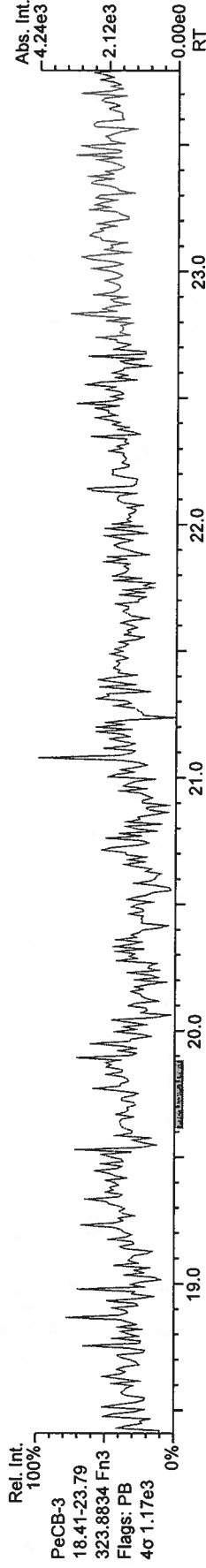


Results: P:\P1900\_P1999\P1977P1977\_7528\_PCB\_SDS\_ult\_res, saved 10-Feb-2010 11:47 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 7349, 3720 scc: 575-916  
Peak annotation: Areas, Centroids  
Revised: 09-Feb-2010 16:09:13 (CW) Printed: 10-Feb-2010 12:07:12 Page 9 of 22

AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

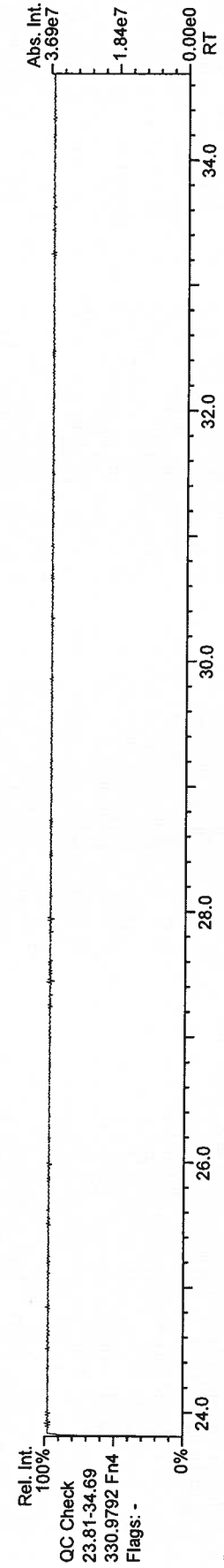
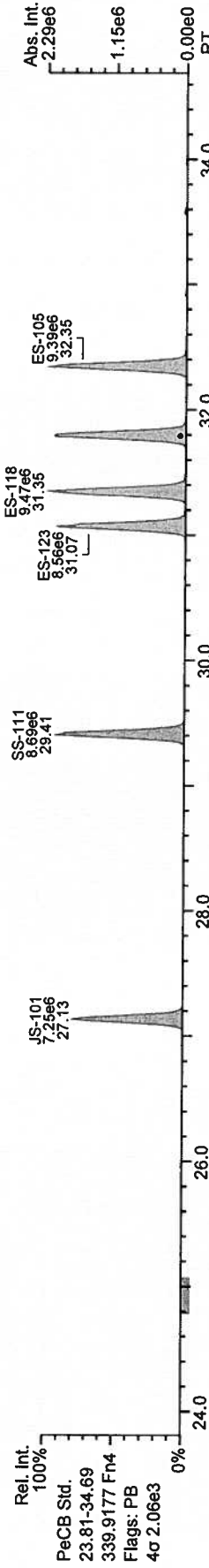
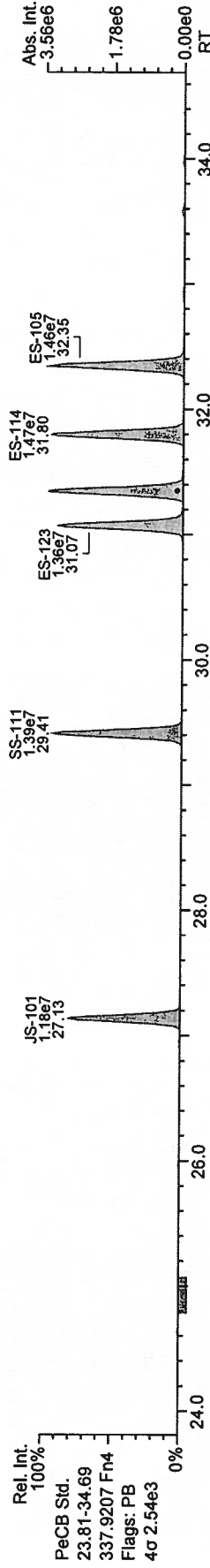
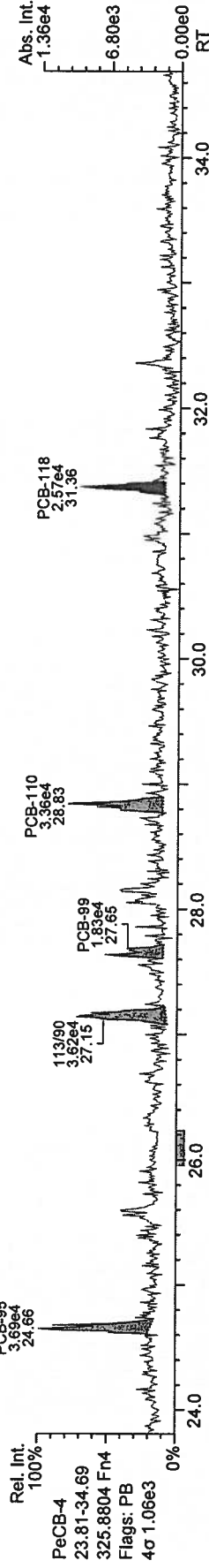
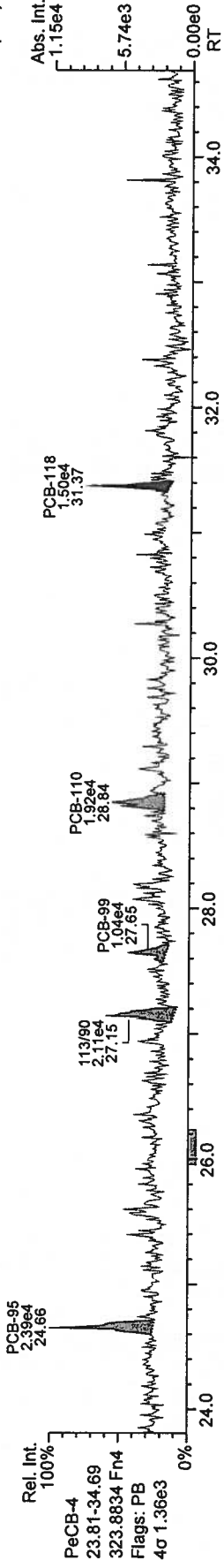
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AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



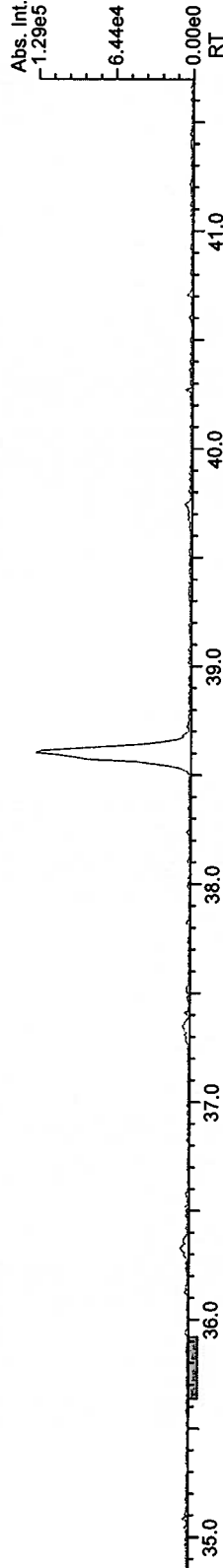


AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

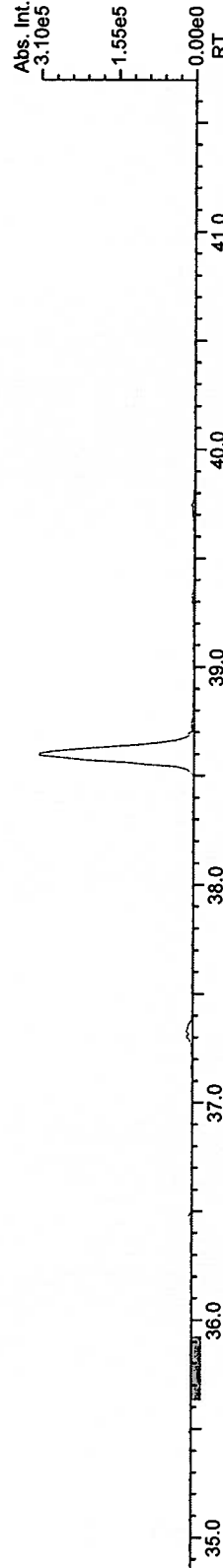
Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

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323.8834 Fn5  
Flags: PB  
4σ 1.50e3



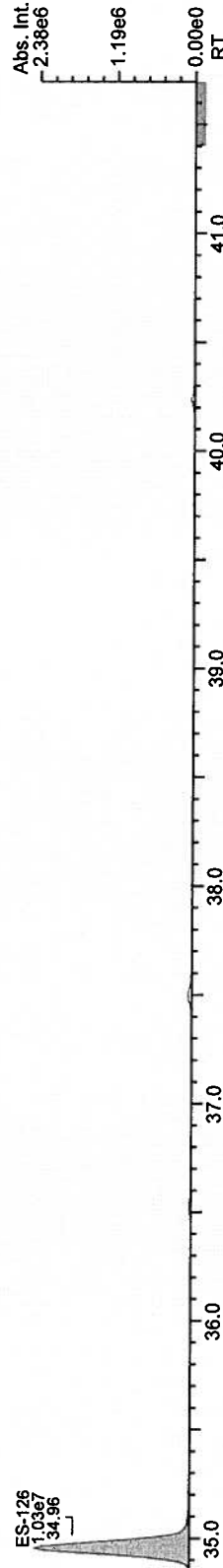
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325.8804 Fn5  
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4σ 1.66e3



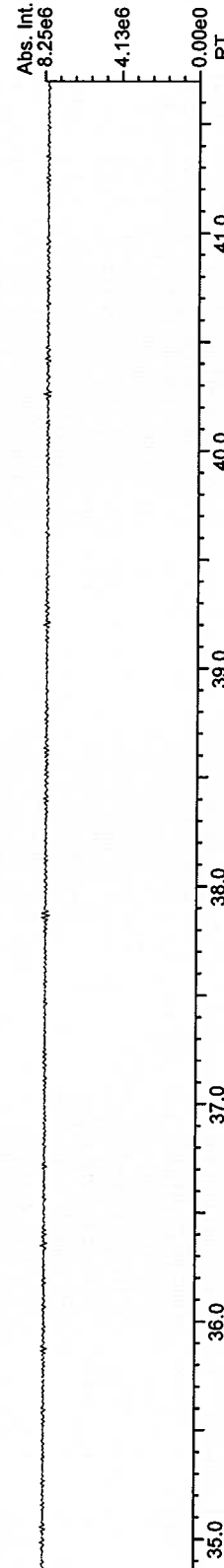
Rel. Int.  
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PeCB Std.  
34.71-41.70  
337.9207 Fn5  
Flags: PB  
4σ 2.76e3



Rel. Int.  
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PeCB Std.  
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339.9177 Fn5  
Flags: PB  
4σ 2.10e3



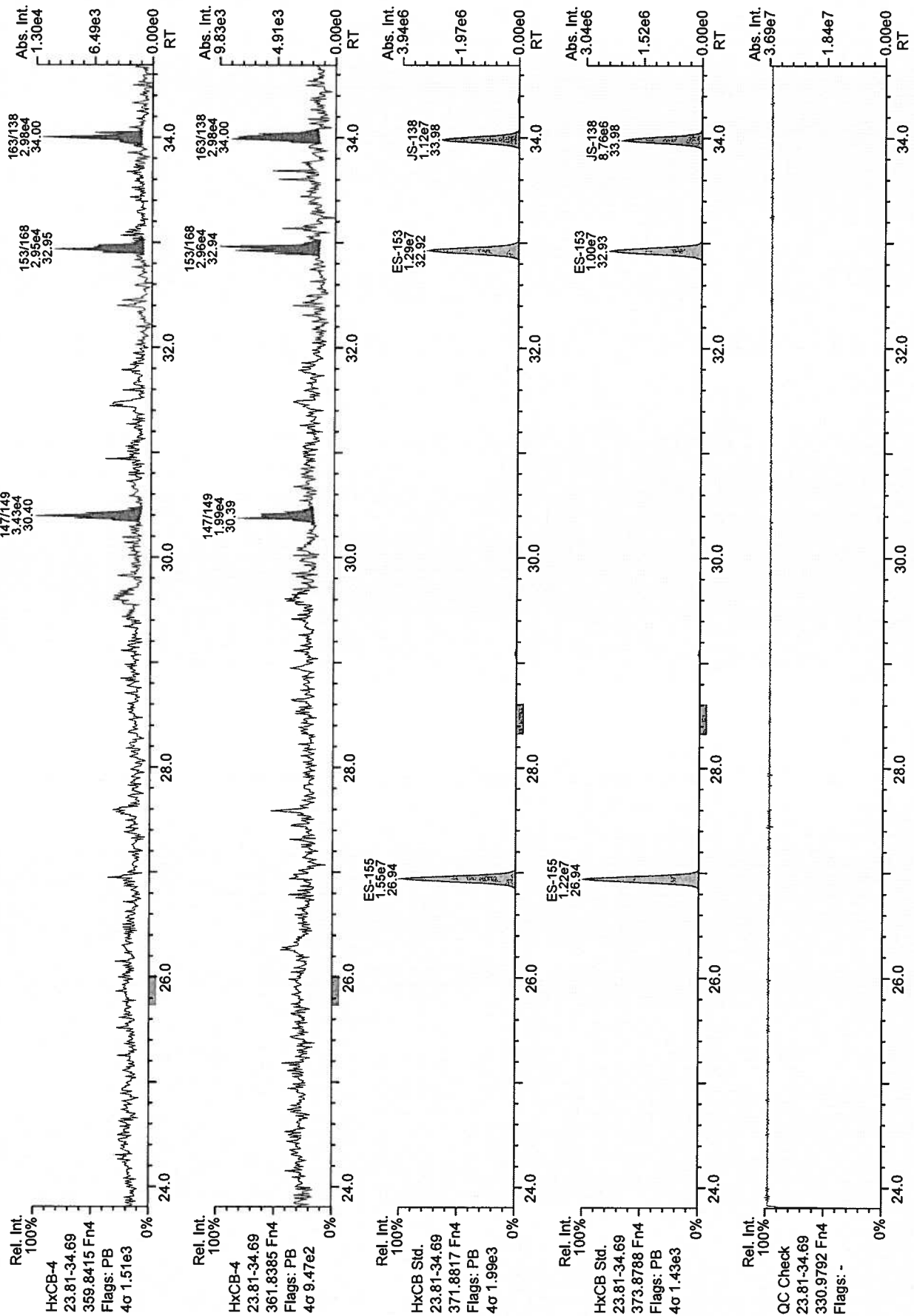
Rel. Int.  
100%  
QC Check  
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366.9792 Fn5  
Flags: -



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

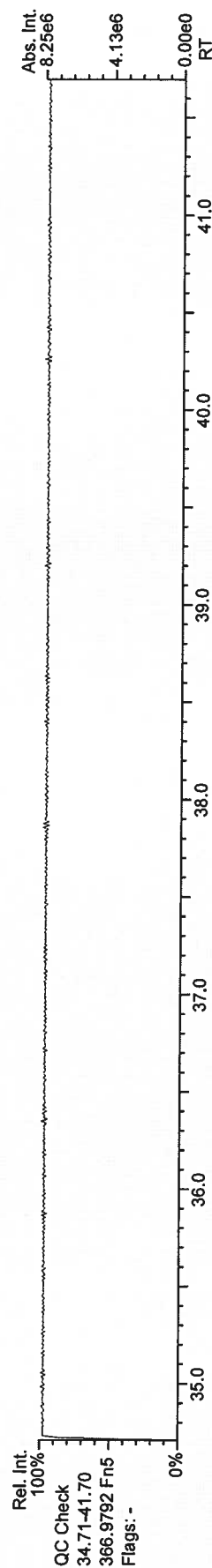
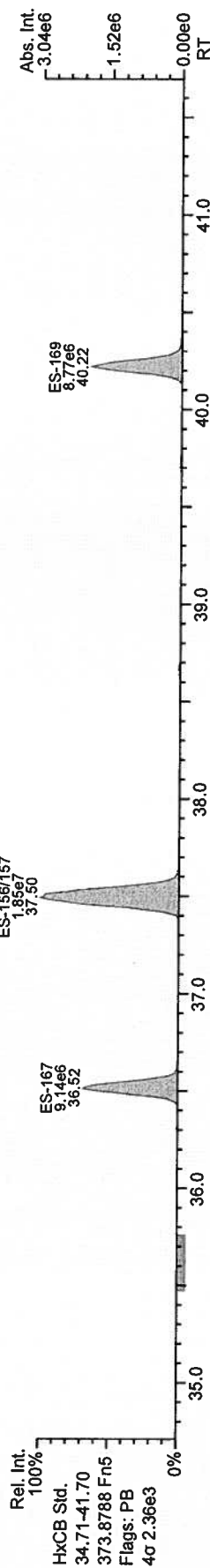
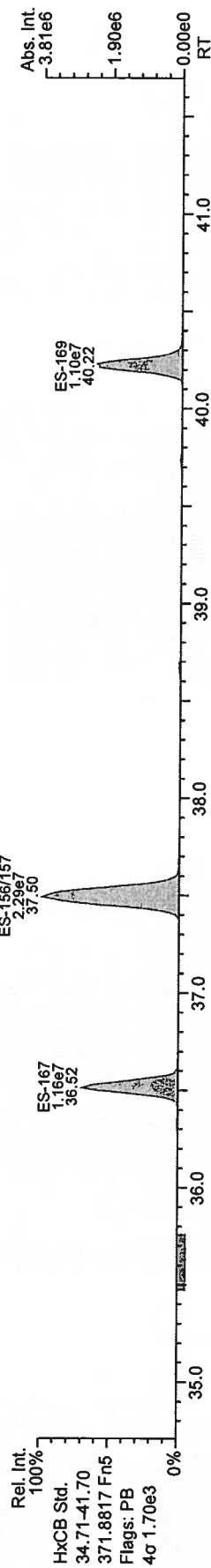
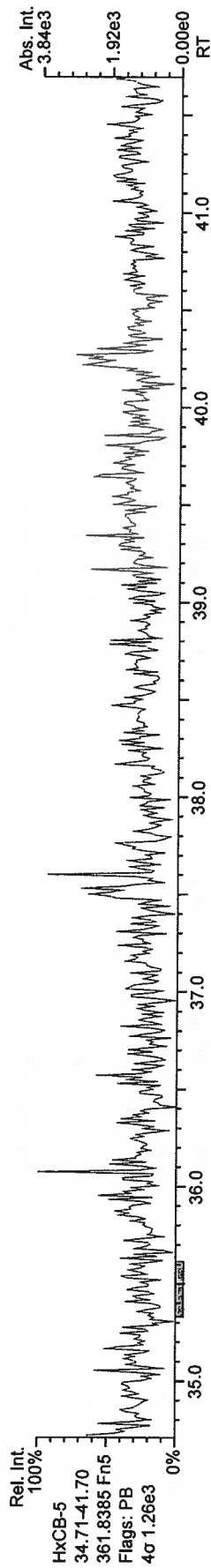
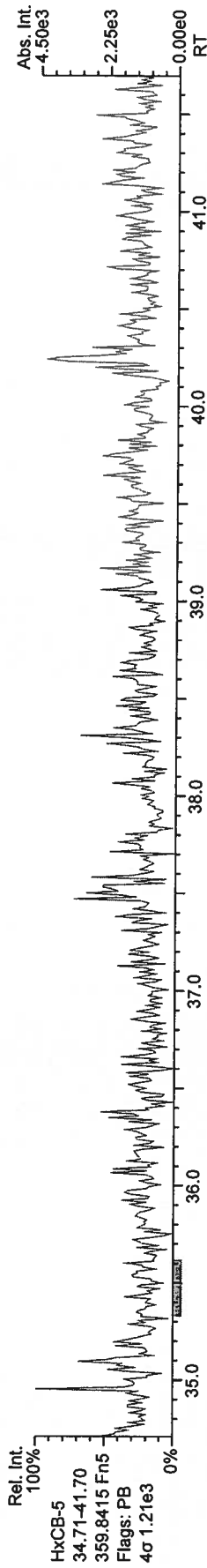
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User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



Results: P:\P1900\_P1999\P1977P1977\_7528\_PCBResources\MB1\_7528\_PCB\_SDS.ulp\_res, saved 10-Feb-2010 11:47 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 6015, 4478 scc: 575-976

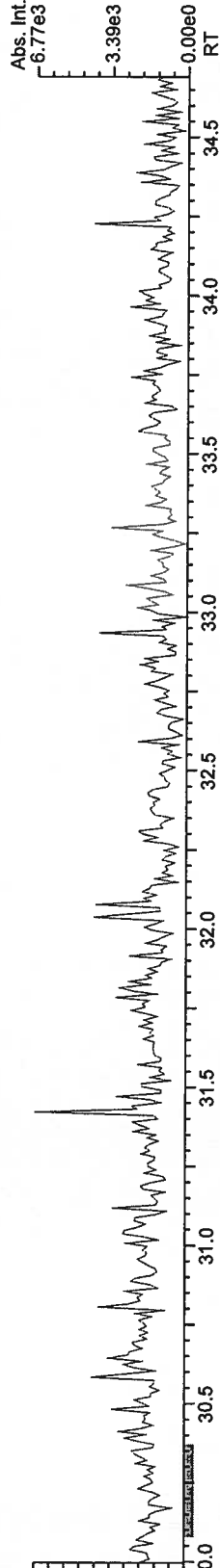
Revised: 09-Feb-2010 16:09:13 (CW) Printed: 10-Feb-2010 12:08:16 Page 14 of 22  
Peak annotation: Areas, Centroids

AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

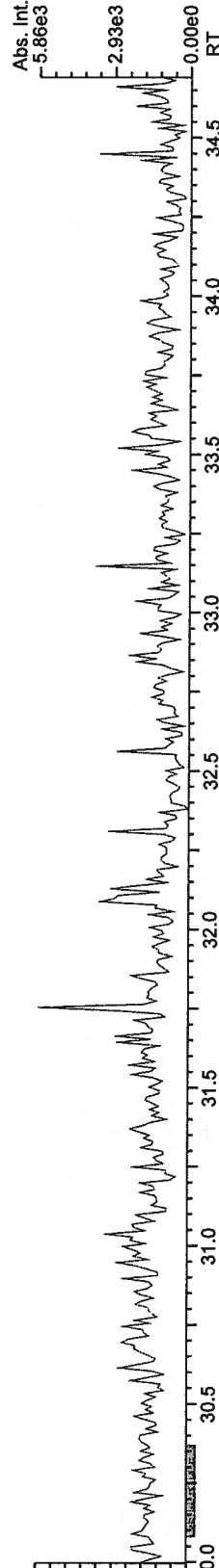
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VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

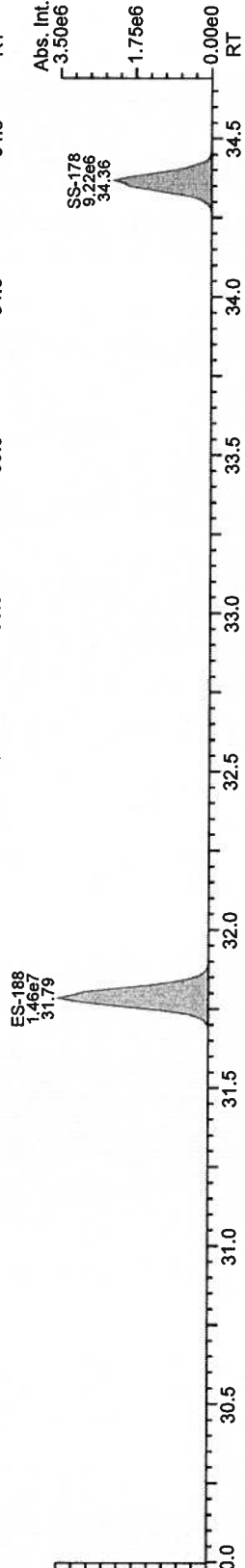
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393.8025 Fn4  
Flags: PB  
4σ 1.45e3



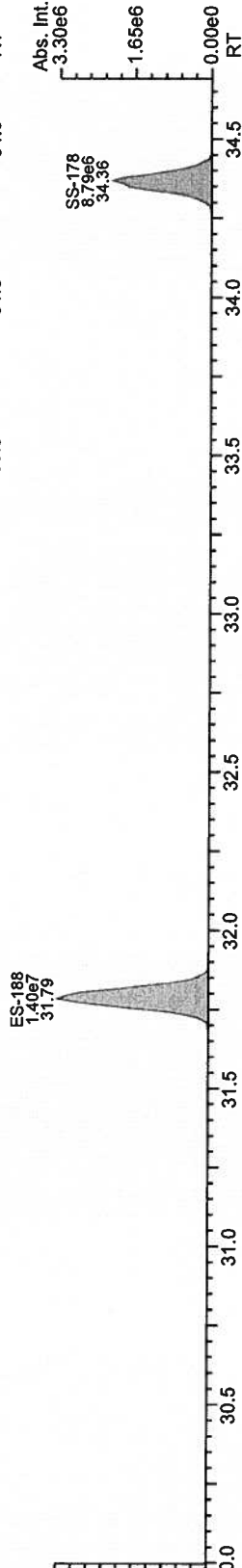
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HpCB-4  
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395.7995 Fn4  
Flags: PB  
4σ 1.10e3



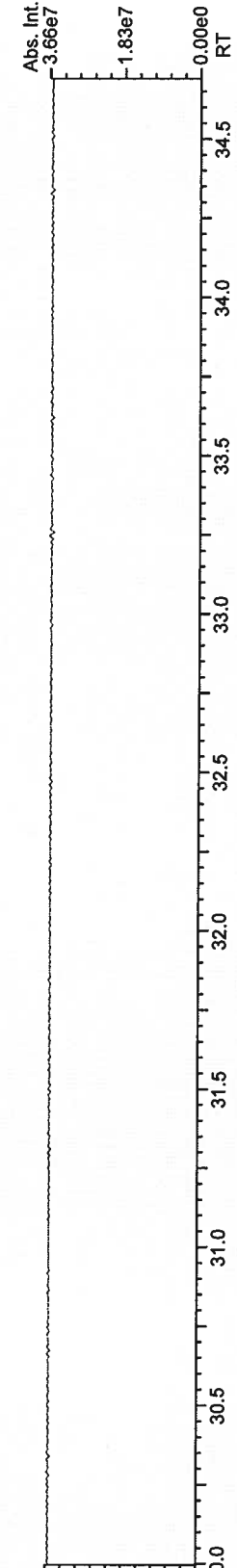
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HpCB Std.  
30.00-34.69  
405.8428 Fn4  
Flags: PB  
4σ 2.35e3



Rel. Int.  
100%  
HpCB Std.  
30.00-34.69  
407.8398 Fn4  
Flags: PB  
4σ 1.70e3



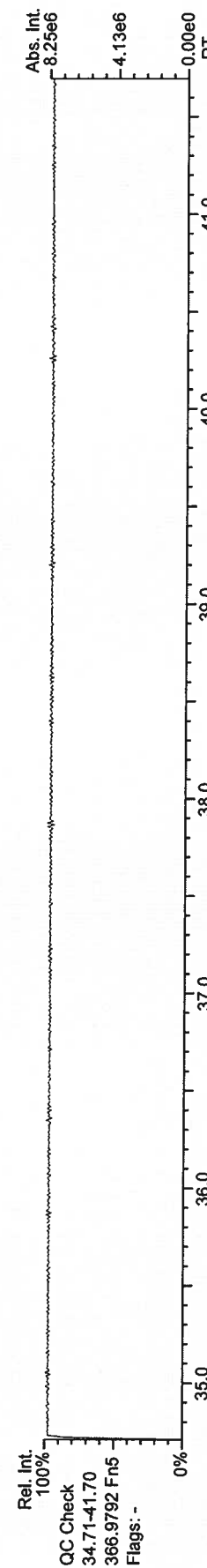
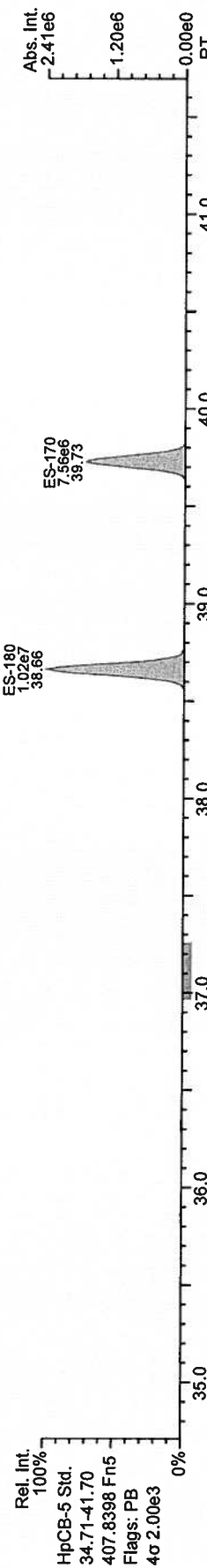
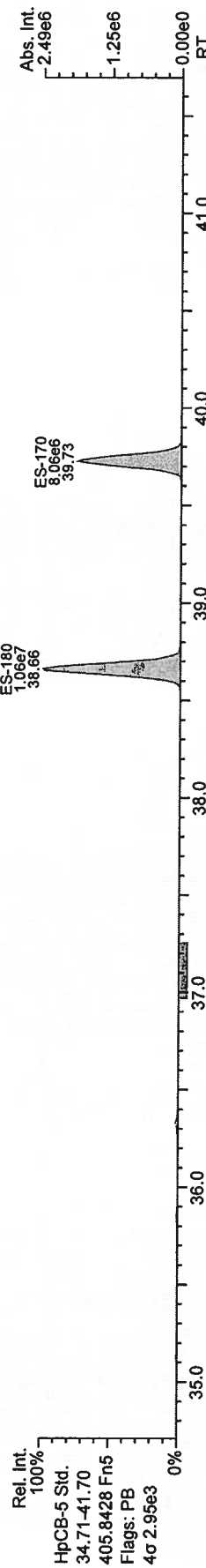
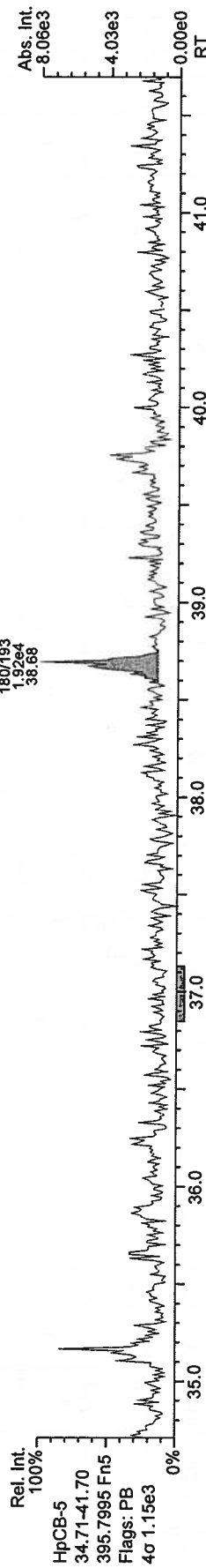
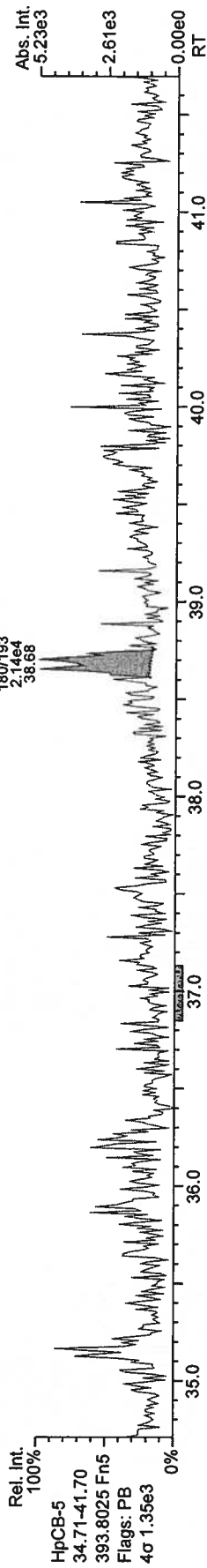
Rel. Int.  
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QC Check  
30.00-34.69  
330.9792 Fn4  
Flags: -



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

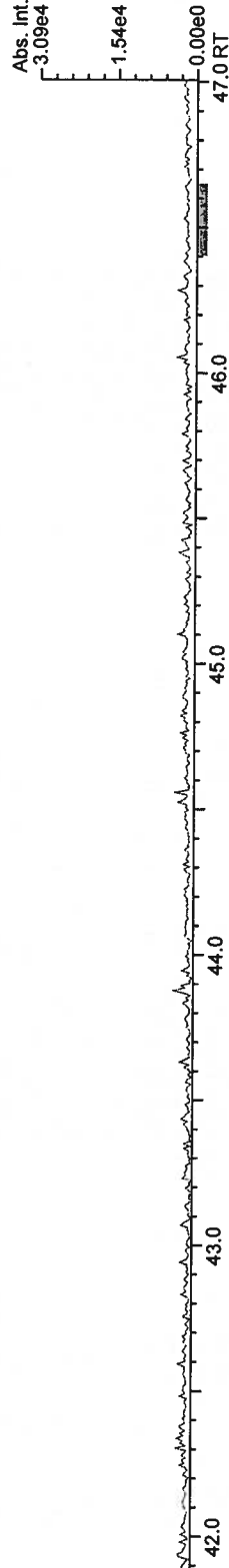


AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

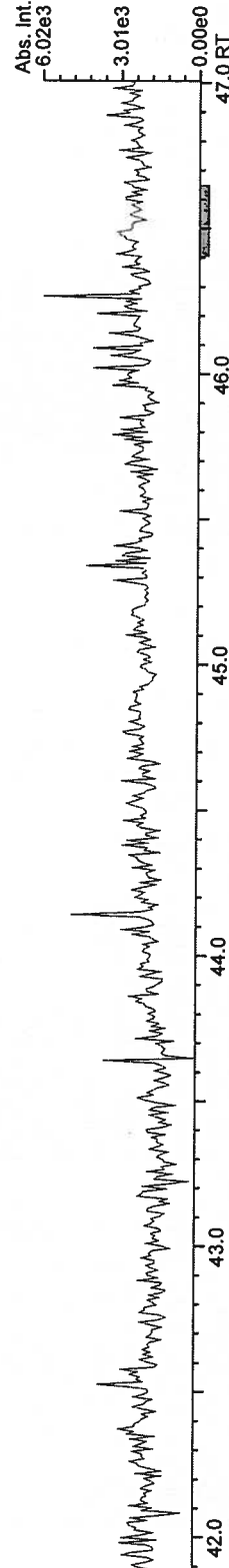
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VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

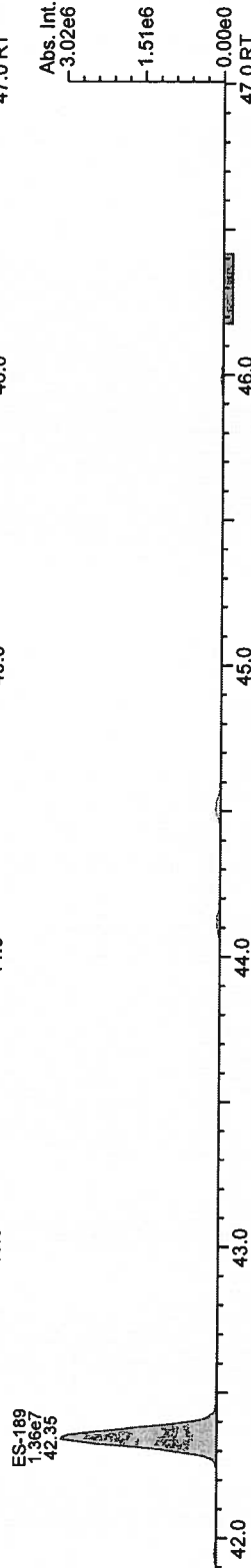
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HpCB-6  
41.71-47.01  
393.8025 Fn6  
Flags: PB  
4σ 1.16e3



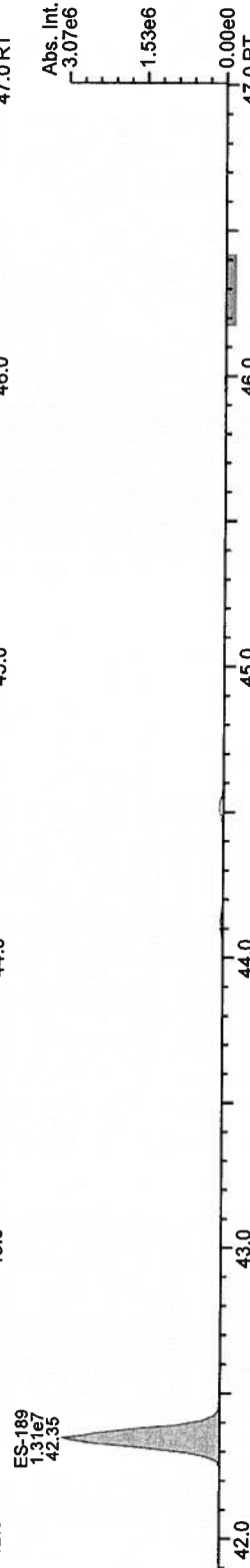
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100%  
HpCB-6  
41.71-47.01  
395.7995 Fn6  
Flags: PB  
4σ 1.27e3



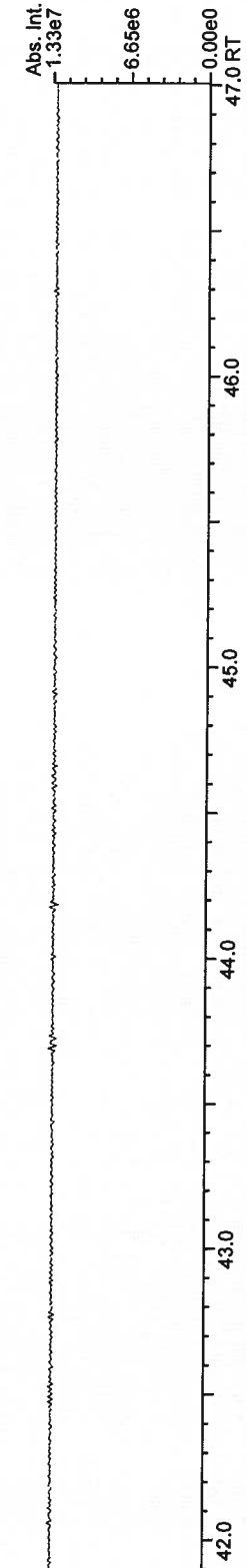
Rel. Int.  
100%  
HpCB Std.  
41.71-47.01  
405.8428 Fn6  
Flags: PB  
4σ 3.86e3



Rel. Int.  
100%  
HpCB Std.  
41.71-47.01  
407.8398 Fn6  
Flags: PB  
4σ 3.05e3



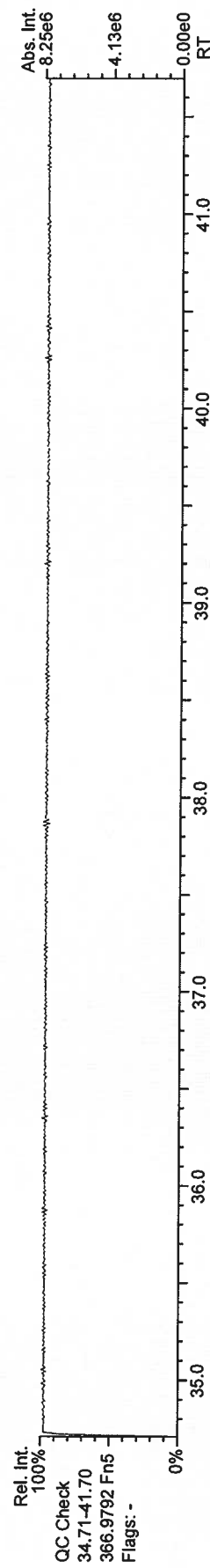
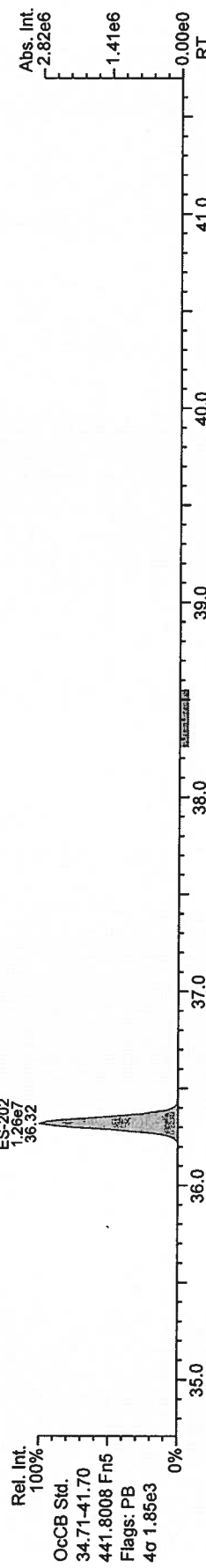
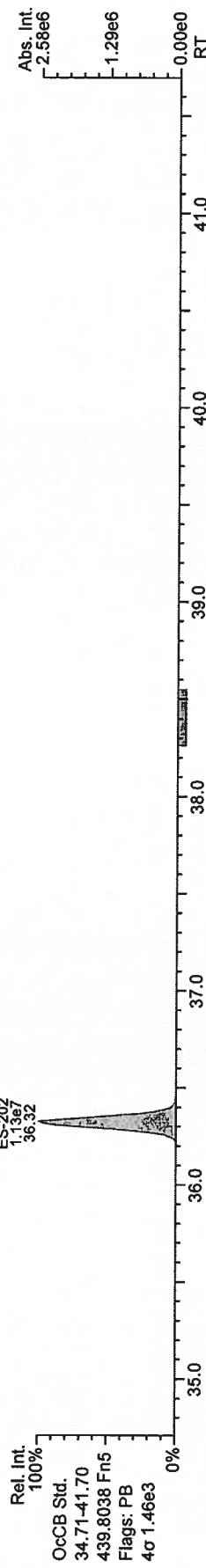
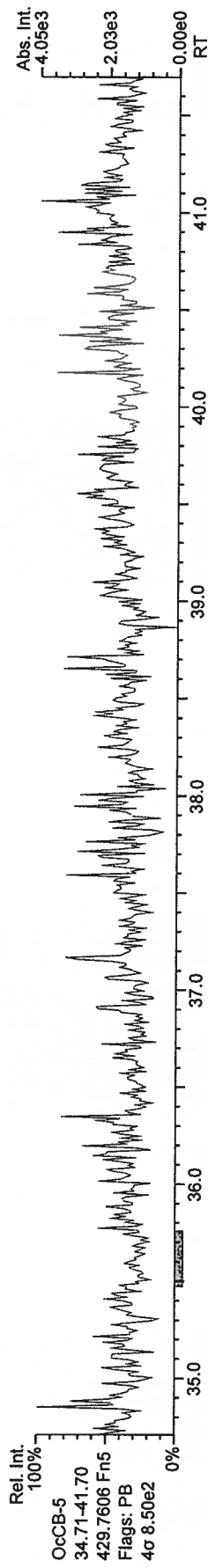
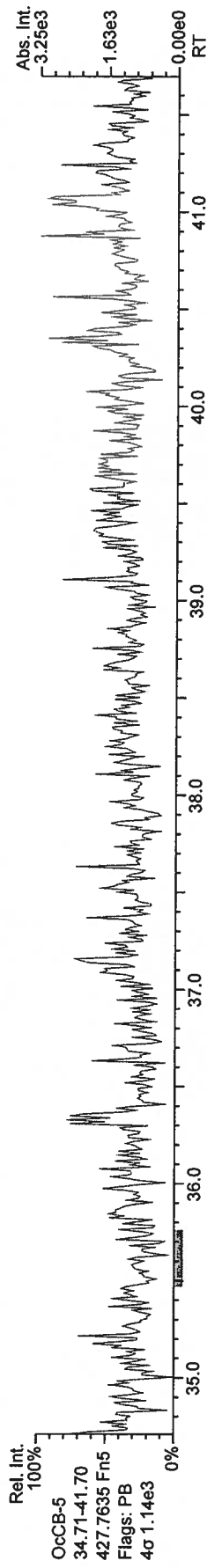
Rel. Int.  
100%  
QC Check  
41.71-47.01  
454.9728 Fn6  
Flags: -



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



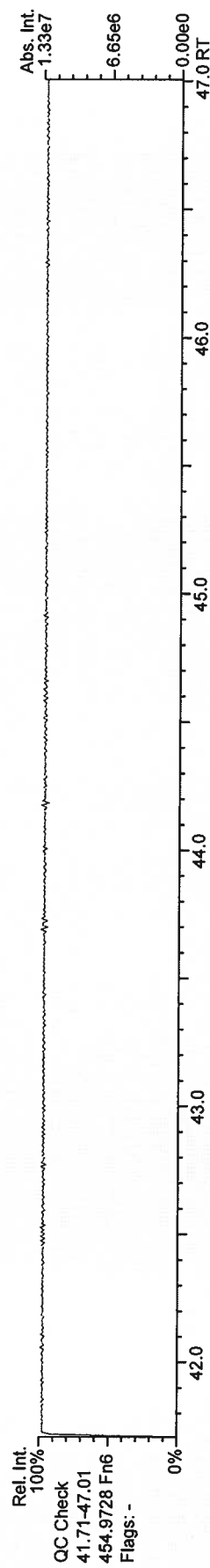
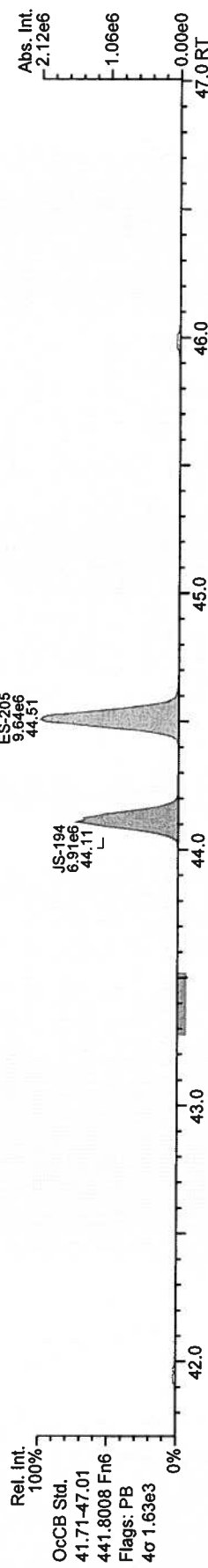
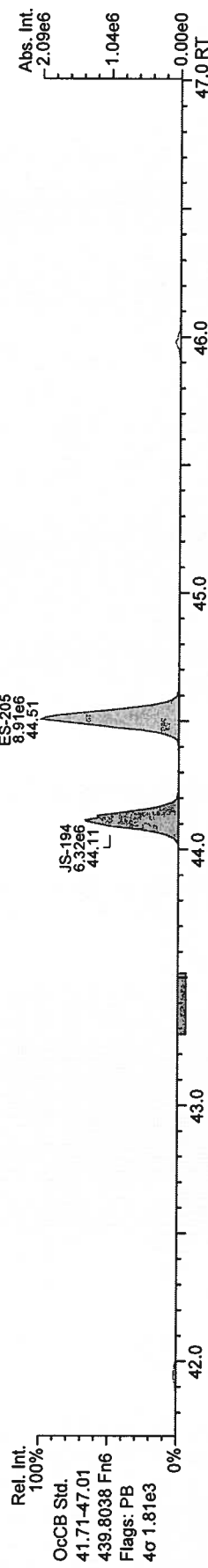
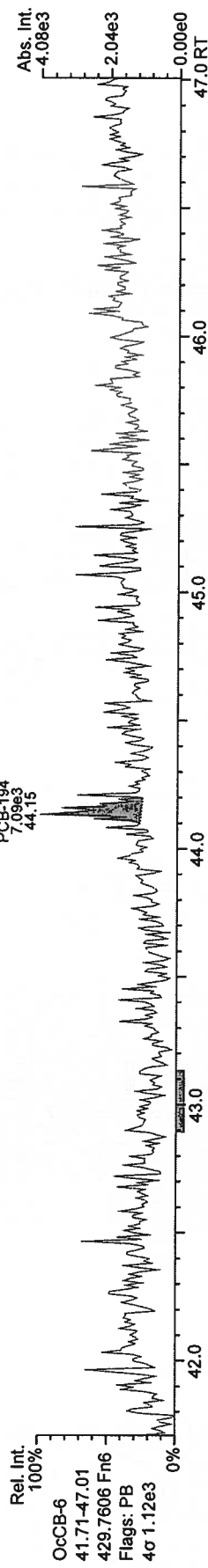
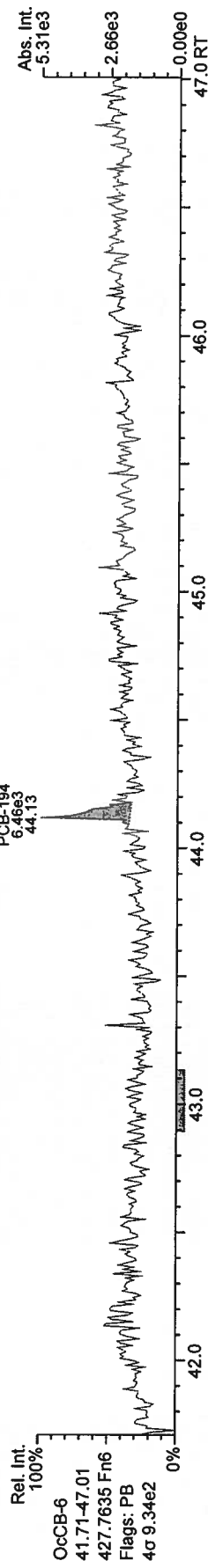
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AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 8680, 3261 scc: 575-916

Revised: 09-Feb-2010 16:09:13 (CW) Printed: 10-Feb-2010 12:08:57 Page 18 of 22  
Peak annotation: Areas, Centroids

AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)

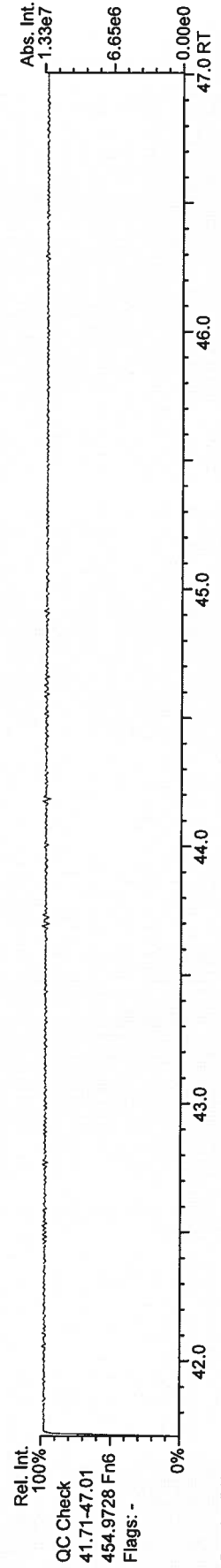
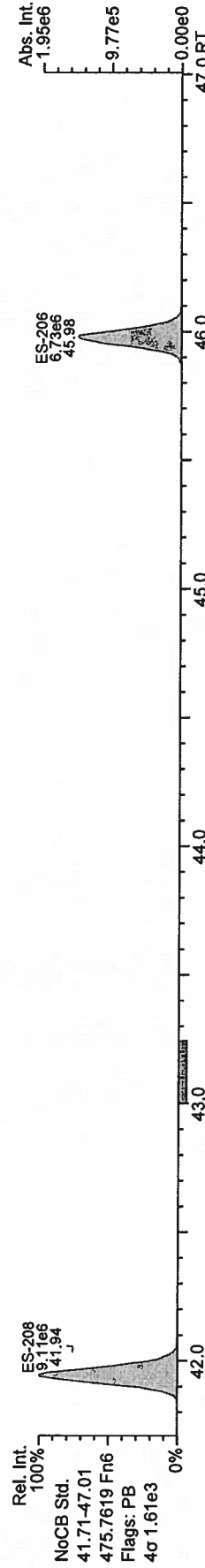
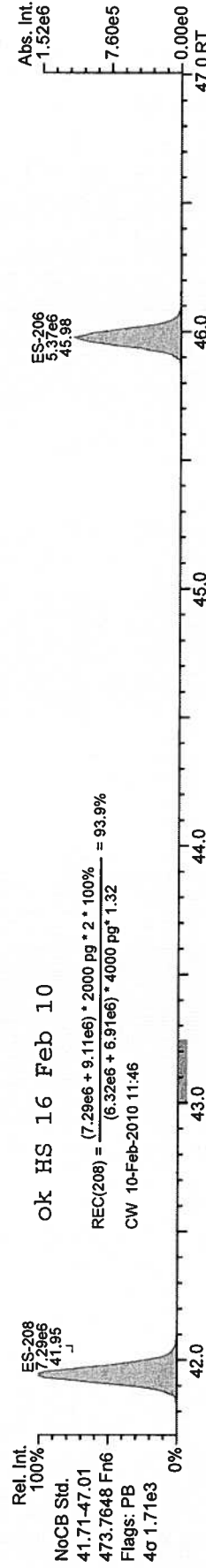
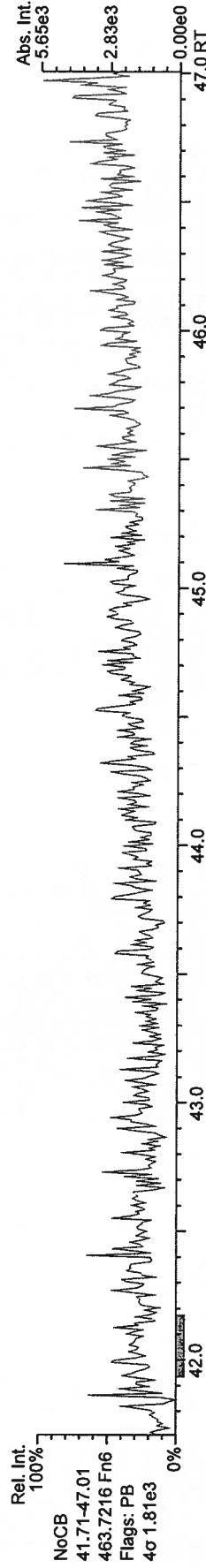
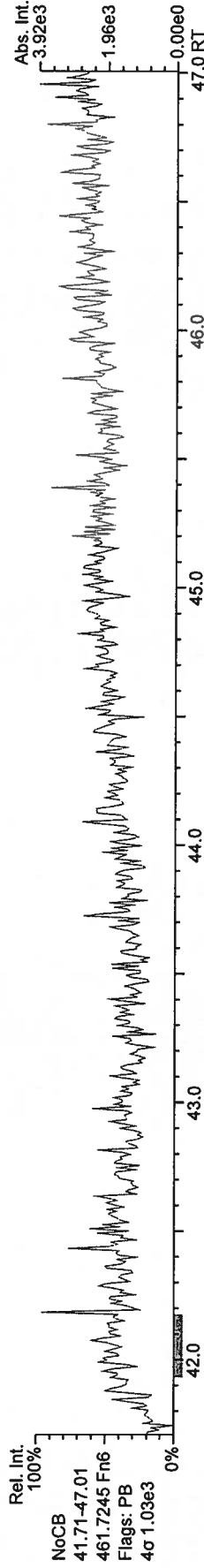




AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

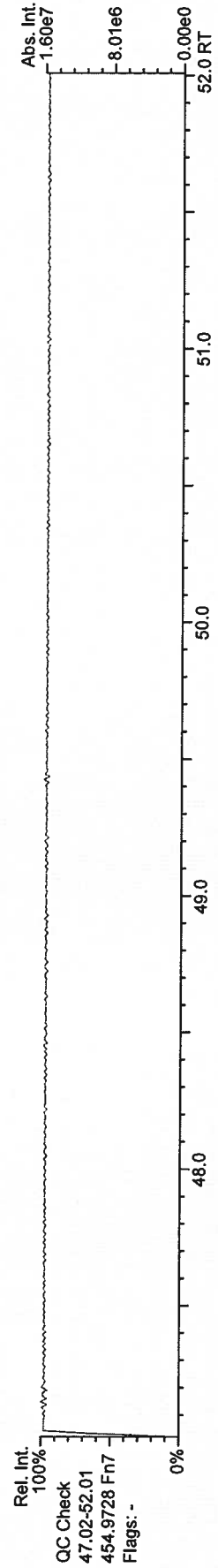
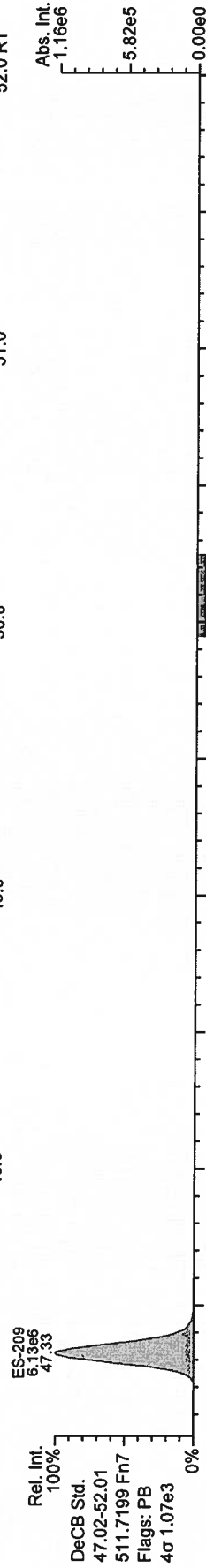
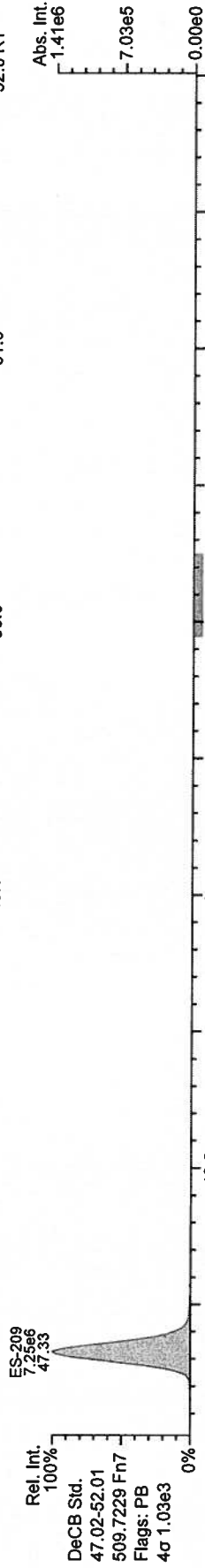
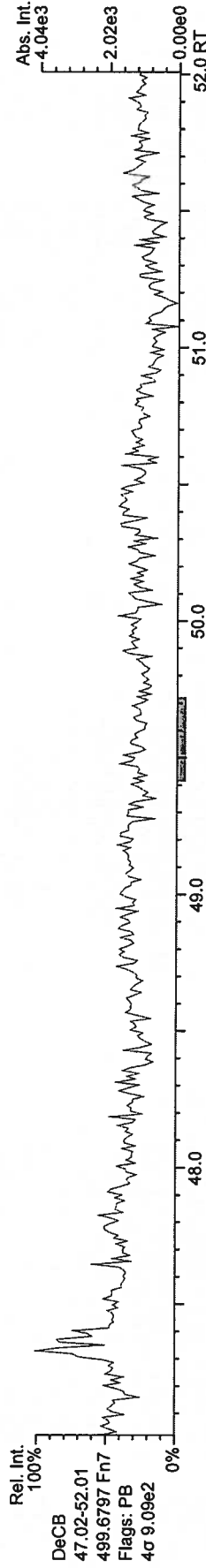
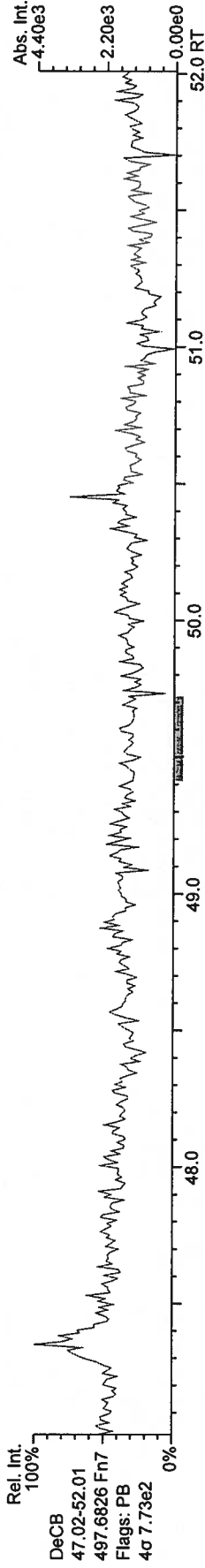
Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 30

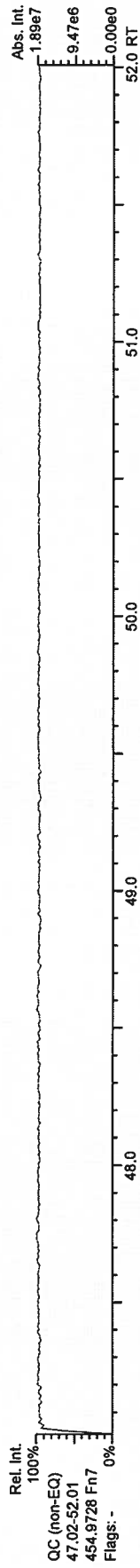
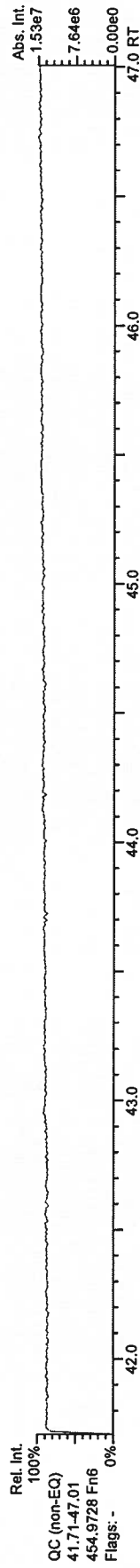
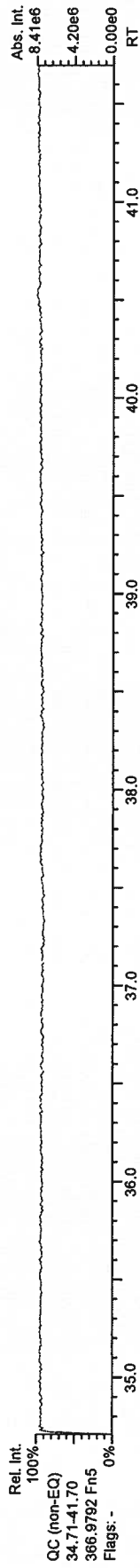
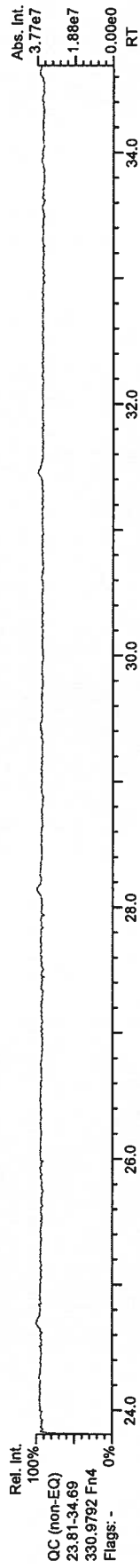
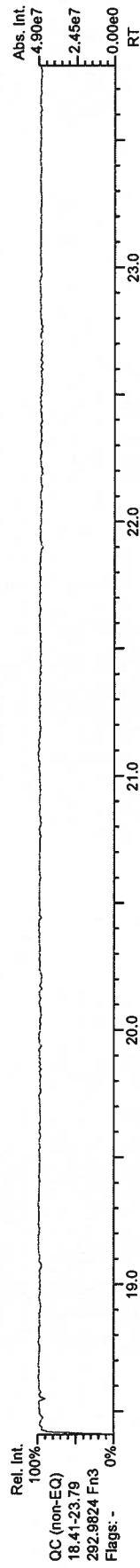
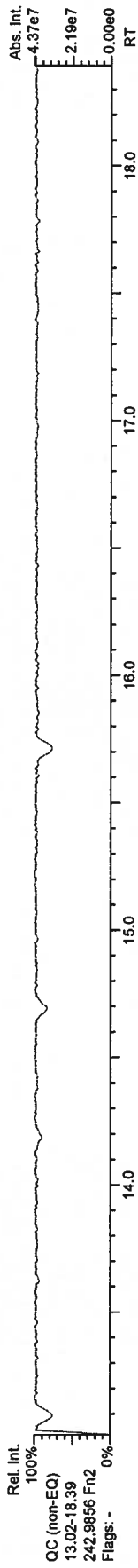
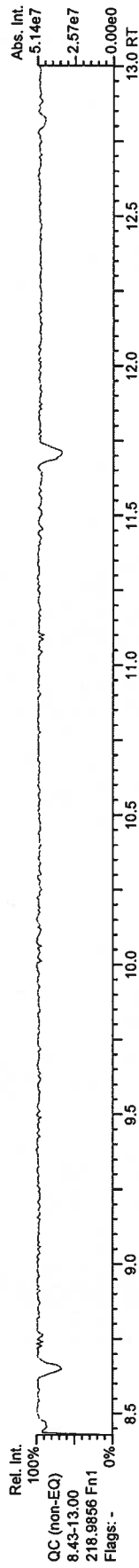
Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)



AP Lab ID: MB1\_7528\_PCB\_SDS  
Instr: AutoSpec-Ultima MM4

Sample ID: MB1\_7528\_PCB\_SDS  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 30

Acq: 05-Feb-2010 00:40:53  
User: CW Datafile: 100204S12 (EQ)





P1977\_7528\_PCB\_001

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	Checkcode:	WT DL
SS PCB-28	19.78		0.9258	0.9255	-0.4	2.81E+07	1.06	1.04	98.3 %	30%		135%
SS PCB-111	29.54		1.0837	1.0839	+0.4	2.81E+07	1.55	1.01	94.3 %	30%		135%
SS PCB-178	34.49		1.0113	1.0112	-0.2	3.06E+07	1.03	0.63	102 %	30%		135%
CS PCB-28	19.78		0.9258	0.9255	-0.4	2.81E+07	1.06	1.74	73.1 %	30%		135%
CS PCB-111	29.54		1.0837	1.0839	+0.4	2.81E+07	1.55	1.25	77 %	30%		135%
CS PCB-178	34.49		1.0113	1.0112	-0.2	3.06E+07	1.03	0.98	91.8 %	30%		135%

JS PCB-9	13.63					3.86E+07	1.60					
JS PCB-52	21.37					2.21E+07	0.76					
JS PCB-101	27.26					2.93E+07	1.64					
JS PCB-138	34.11					3.41E+07	1.27					
JS PCB-194	44.26					1.76E+07	0.91					

Checkcode:

WT

Totals	NON-EMPC	EMPC	DL
Mono-CBs	4,440	4,440	6.05
Di-CBs	32,200	32,200	7.61
Tri-CBs	23,800	23,800	9.7
Tetra-CB.	36,800	36,900	5.15
Penta-CB.	18,200	18,400	5.73
Hexa-CBs	13,200	13,200	6.44
Hepta-CB.	5,090	5,090	5.13
Octa-CBs	913	913	4.56
Nona-CBs	106	121	6.9

PCB-1 2-MoCB	9.58		1.0012	1.0012	0	1.48E+07	3.06	1.18	1,820	6.82E+03	5.69
PCB-2 3-MoCB	11.45		0.9869	0.9869	0	6.57E+06	2.96	1.37	659	6.82E+03	5.47
PCB-3 4-MoCB	11.61		1.0010	1.0010	0	1.67E+07	2.95	1.17	1,960	6.82E+03	6.4
PCB-4 22'-DiCB	11.84	SI	1.0012	1.0012	0	5.12E+06	SI*	0.87	891	6.17E+03	8.33
PCB-10 26-DiCB	12.00	SI	1.0146	1.0142	-0.3	5.09E+05	SI*	1.27	60.8	6.17E+03	5.72
PCB-9 25-DiCB	13.64	SI	1.0011	1.0009	-0.2	1.85E+06	SI*	1.22	171	6.40E+03	5.55
PCB-7 24-DiCB	13.79	SI	1.0120	1.0121	+0.1	3.99E+06	SI*	0.96	467	6.40E+03	7.04
PCB-6 23'-DiCB	14.01	SI	1.0278	1.0281	+0.3	4.39E+06	SI*	1.22	406	6.40E+03	5.57
PCB-5 23-DiCB	14.28	SI	1.0479	1.0478	-0.1	1.41E+06	SI*	0.92	172	6.40E+03	7.37
PCB-8 24'-DiCB	14.39	SI	1.0562	1.0563	+0.1	2.31E+07	SI*	1.22	2,140	6.40E+03	5.56
PCB-14 35-DiCB	15.85	SI	0.9257	0.9251	-0.6	3.56E+05	SI*	1.00	40.1	6.40E+03	6.79
PCB-11 33'-DiCB	16.60	SI	0.9689	0.9689	0	2.18E+08	SI*	0.95	25,800	6.40E+03	7.14
PCB-13/12 34'-/34-DiCB	16.87	C SI	0.9851	0.9843	-0.8	3.86E+06	SI*	1.02	424	6.40E+03	6.62
PCB-15 44'-DiCB	17.15	SI	1.0008	1.0008	0	1.44E+07	SI*	0.98	1,650	6.40E+03	6.89
PCB-19 22'6-TrCB	14.66		1.0011	1.0011	0	1.60E+06	1.06	0.95	302	3.87E+03	6.33
PCB-30/18 246-/22'5-TrCB	16.33	C	1.1132	1.1151	+1.9	1.84E+07	1.02	1.39	2,380	3.87E+03	4.34
PCB-17 22'4-TrCB	16.70		1.1393	1.1401	+0.8	9.09E+06	1.03	1.03	1,580	3.87E+03	5.84
PCB-27 23'6-TrCB	16.89		1.1522	1.1530	+0.8	1.59E+06	0.99	1.40	202	3.87E+03	4.28
PCB-24 236-TrCB	17.01		1.1602	1.1613	+1.1	4.73E+05	1.16	1.33	63.6	3.87E+03	4.52
PCB-16 22'3-TrCB	17.10		1.1668	1.1677	+0.9	6.93E+06	1.03	1.09	1,130	3.87E+03	5.5

## P1977\_7528\_PCB\_001

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	wt DL
PCB-32 24'6"-TrCB	17.56		1.1978	1.1988	+1.1	8.18E+06	1.05	1.48	992	3.87E+03	4.07
PCB-34 2'35"-TrCB	18.67	J	0.8033	0.8027	-0.7	1.10E+05	1.01	1.04	15.4	6.78E+03	10.7
PCB-23 235"-TrCB	18.80	J	0.8090	0.8084	-0.7	1.15E+05	1.19	1.47	11.4	6.78E+03	7.61
PCB-26/29 23'5"-/245"-TrCB	19.07	C	0.8210	0.8199	-1.3	5.95E+06	1.01	1.09	796	6.78E+03	10.3
PCB-25 23'4"-TrCB	19.27		0.8292	0.8286	-0.7	3.05E+06	1.05	1.40	316	6.78E+03	7.97
PCB-31 24'5"-TrCB	19.54		0.8409	0.8404	-0.6	3.25E+07	1.02	1.13	4,190	6.78E+03	9.92
PCB-28/20 244'-/233'-TrCB	19.80	C	0.8524	0.8515	-1.1	3.78E+07	1.03	1.21	4,520	6.78E+03	9.21
PCB-21/33 234'-/2'34"-TrCB	20.01	C	0.8598	0.8604	+0.7	2.29E+07	1.02	1.19	2,800	6.78E+03	9.41
PCB-22 234'-TrCB	20.35		0.8755	0.8751	-0.5	1.37E+07	1.01	1.28	1,550	6.78E+03	8.7
PCB-36 33'5"-TrCB	21.70		0.9336	0.9332	-0.5	2.97E+05	1.09	1.27	33.8	6.78E+03	8.77
PCB-39 34'5"-TrCB	22.03		0.9469	0.9475	+0.8	2.77E+05	0.91	1.60	25.1	6.78E+03	6.98
PCB-38 345"-TrCB	NotFnd		0.9688	-		0.00E+00		1.02	ND	6.78E+03	11
PCB-35 33'4"-TrCB	22.92		0.9856	0.9857	+0.1	2.52E+06	1.00	0.89	410	6.78E+03	12.5
PCB-37 344'-TrCB	23.27		1.0008	1.0008	0	1.46E+07	1.03	0.85	2,470	6.78E+03	13.1
PCB-54 22'66"-TeCB	17.42	J	1.0010	1.0015	+0.5	6.14E+04	0.69	0.95	7.83	2.46E+03	2.89
PCB-50/53 22'46'-/22'56"-TeCB	19.30	C	0.9043	0.9030	-1.5	2.07E+06	0.74	0.69	355	2.87E+03	5.8
PCB-45 22'36"-TeCB	19.88		0.9305	0.9300	-0.6	2.09E+06	0.78	0.65	381	2.87E+03	6.18
PCB-51 22'46"-TeCB	19.95		0.9338	0.9335	-0.4	1.11E+07	0.77	0.69	1,900	2.87E+03	5.79
PCB-46 22'36"-TeCB	20.16		0.9435	0.9431	-0.5	9.26E+05	0.80	0.62	176	2.87E+03	6.42
PCB-52 22'55"-TeCB	21.39		1.0010	1.0010	0	1.92E+07	0.77	0.94	2,430	2.87E+03	4.27
PCB-73 23'5'6TeCB	NotFnd		1.0067	-		0.00E+00		0.83	ND	2.87E+03	4.83
PCB-43 22'35"-TeCB	21.60		1.0106	1.0104	-0.3	6.27E+05	0.84	0.70	106	2.87E+03	5.7
PCB-69/49 23'46'-/22'45"-TeCB	21.81	C	1.0198	1.0206	+1.0	1.30E+07	0.78	0.97	1,590	2.87E+03	4.14
PCB-48 22'45"-TeCB	22.06		1.0323	1.0321	-0.3	4.32E+06	0.77	0.75	681	2.87E+03	5.32
PCB-44/47/65 22'35'-/22'44'-	22.29	C	1.0420	1.0427	+0.9	9.36E+07	0.77	0.83	13,400	2.87E+03	4.82
PCB-59/62/75 233'6'-/2346'-/24	22.53	C	1.0544	1.0543	-0.1	2.28E+06	0.78	1.14	236	2.87E+03	3.49
PCB-42 22'34"-TeCB	22.71		1.0624	1.0623	-0.1	4.76E+06	0.80	0.70	810	2.87E+03	5.75
PCB-41 22'34"-TeCB	23.02		1.0773	1.0771	-0.3	1.99E+06	0.77	0.60	392	2.87E+03	6.65
PCB-71/40 23'4'6/22'33'-TeCB	23.13	C	1.0822	1.0821	-0.1	8.45E+06	0.77	0.90	1,110	2.87E+03	4.45
PCB-64 234'6"-TeCB	23.32		1.0912	1.0912	0	9.69E+06	0.77	1.25	916	2.87E+03	3.2
PCB-72 23'55"-TeCB	24.05	J	0.8282	0.8282	0	2.23E+05	0.80	1.36	19.4	4.83E+03	4.96
PCB-68 23'45"-TeCB	24.29		0.8368	0.8368	0	1.38E+07	0.76	1.73	943	4.83E+03	3.89
PCB-57 233'5"-TeCB	24.65	EMPC	0.8491	0.8492	+0.1	2.48E+05	0.93	1.12	26.3	4.83E+03	6.03
PCB-58 233'5"-TeCB	NotFnd		0.8562	-		0.00E+00		1.29	ND	4.83E+03	5.23
PCB-67 23'45"-TeCB	25.00		0.8612	0.8611	-0.1	1.67E+06	0.73	1.48	133	4.83E+03	4.54
PCB-63 234'5"-TeCB	25.23		0.8690	0.8689	-0.2	1.46E+06	0.73	1.53	113	4.83E+03	4.41
PCB-61/70/74/76 2345'-/23'4'5	25.52	C	0.8788	0.8791	+0.5	6.26E+07	0.77	1.28	5,790	4.83E+03	5.26
PCB-66 23'44"-TeCB	25.79		0.8884	0.8883	-0.2	3.00E+07	0.77	1.38	2,570	4.83E+03	4.87
PCB-55 233'4"-TeCB	25.93		0.8933	0.8930	-0.5	1.02E+06	0.81	1.20	101	4.83E+03	5.63
PCB-56 233'4"-TeCB	26.36		0.9081	0.9080	-0.2	1.45E+07	0.75	1.36	1,260	4.83E+03	4.95
PCB-60 2344'-TeCB	26.55		0.9145	0.9144	-0.2	9.75E+06	0.77	1.16	994	4.83E+03	5.8
PCB-80 33'55"-TeCB	NotFnd		0.9263	-		0.00E+00		1.74	ND	4.83E+03	3.88
PCB-79 33'45"-TeCB	28.19		0.9712	0.9711	-0.2	3.60E+05	0.72	1.49	28.5	4.83E+03	4.51
PCB-78 33'45"-TeCB	NotFnd		0.9876	-		0.00E+00		1.21	ND	4.83E+03	5.56
PCB-104 22'466'-PeCB	NotFnd		1.0009	-		0.00E+00		0.99	ND	2.55E+03	4.2
PCB-96 22'366'-PeCB	22.53		1.0152	1.0152	0	1.98E+05	0.63	1.11	28	2.55E+03	3.73
PCB-103 22'45'6-PeCB	24.20		0.8879	0.8878	-0.1	1.46E+05	0.65	0.94	21.2	3.53E+03	5.94

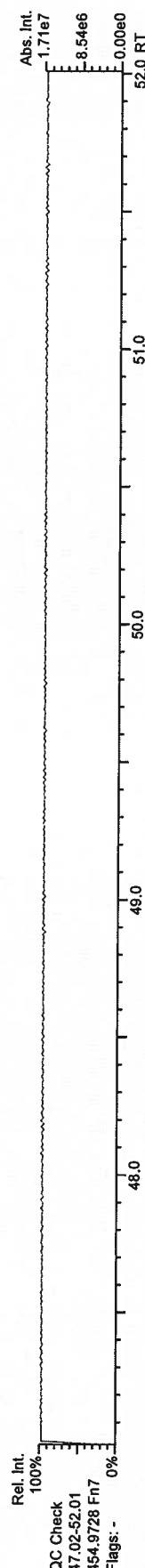
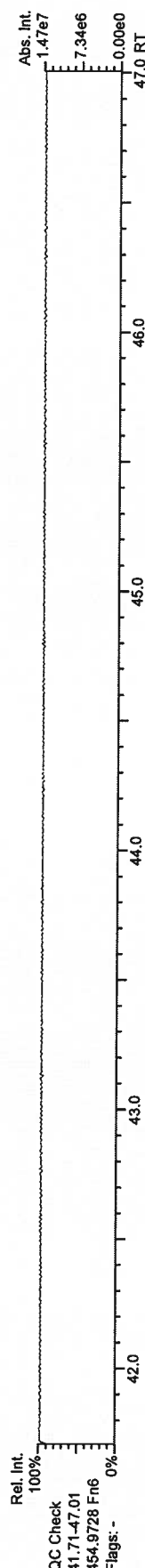
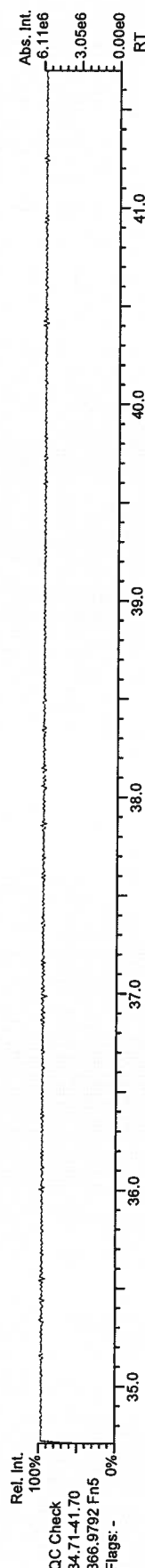
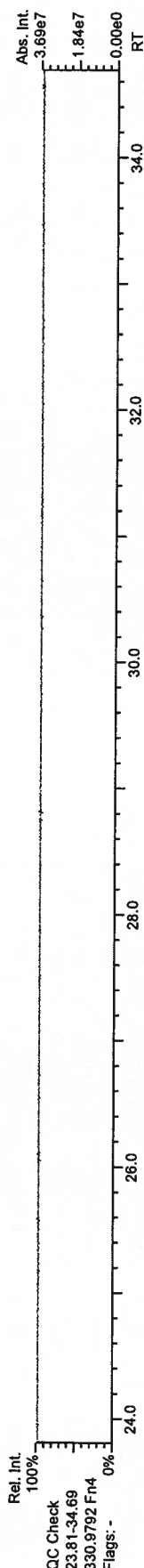
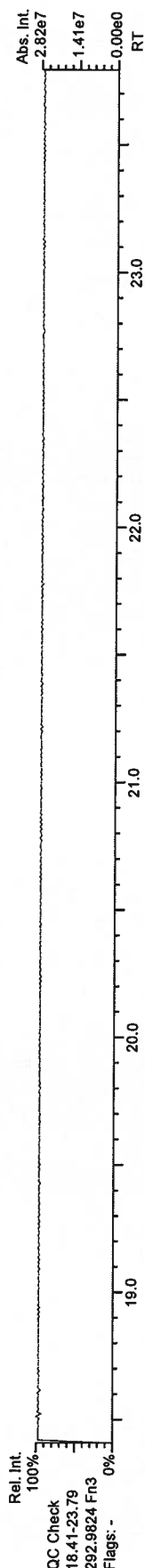
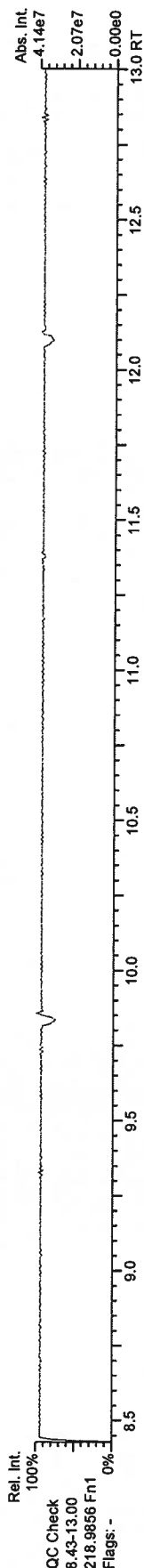
## P1977\_7528\_PCB\_001

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	Checkcode:	wt DL
PCB-94 22'356'-PeCB	24.39	J	0.8949	0.8947	-0.3	1.03E+05	0.60	1.11	12.6	3.53E+03		5.02
PCB-95 22'35'6'-PeCB	24.76		0.9088	0.9086	-0.3	1.63E+07	0.63	0.89	2,490	3.53E+03		6.27
PCB-100/93 22'44'6'-/22'356-P	24.95	J C	0.9159	0.9155	-0.6	2.08E+05	0.63	0.82	34.6	3.53E+03		6.81
PCB-102 22'456'-PeCB	25.07		0.9200	0.9199	-0.2	6.74E+05	0.62	0.75	122	3.53E+03		7.43
PCB-98 22'3'46'-PeCB	NotFnd		0.9224	-		0.00E+00		1.03	ND	3.53E+03		5.38
PCB-88 22'346'-PeCB	NotFnd		0.9330	-		0.00E+00		1.05	ND	3.53E+03		5.3
PCB-91 22'34'6'-PeCB	25.50		0.9359	0.9355	-0.6	2.72E+06	0.65	1.11	332	3.53E+03		5
PCB-84 22'33'6'-PeCB	25.69		0.9429	0.9426	-0.5	4.49E+06	0.61	0.75	814	3.53E+03		7.43
PCB-89 22'346'-PeCB	26.10		0.9579	0.9574	-0.8	2.46E+05	0.65	0.87	38.3	3.53E+03		6.37
PCB-121 23'45'6'-PeCB	NotFnd		0.9708	-		0.00E+00		1.55	ND	3.53E+03		3.6
PCB-92 22'355'-PeCB	26.78		0.9825	0.9825	0	3.41E+06	0.59	0.81	571	3.53E+03		6.85
PCB-113/90/101 233'5'6-/22'3	27.28	C	0.9999	1.0008	+1.5	2.53E+07	0.61	0.90	3,810	3.53E+03		6.17
PCB-83 22'33'5'-PeCB	27.66	EMPC	1.0155	1.0148	-1.2	1.04E+06	0.52	0.72	198	3.53E+03		7.76
PCB-99 22'44'5'-PeCB	27.77		1.0189	1.0187	-0.3	9.49E+06	0.64	1.16	1,110	3.53E+03		4.8
PCB-112 233'56'-PeCB	NotFnd		1.0227	-		0.00E+00		1.18	ND	3.53E+03		4.69
PCB-108/119/86/97/125/87 233	28.24	C	1.0354	1.0359	+0.8	1.75E+07	0.61	1.11	2,150	3.53E+03		5.03
PCB-117 234'56'-PeCB	28.73		1.0543	1.0539	-0.7	6.22E+05	0.70	0.85	99.2	3.53E+03		6.54
PCB-116/85 23456-/22'344'-Pe	28.81	C	1.0573	1.0569	-0.7	3.18E+06	0.62	1.24	349	3.53E+03		4.5
PCB-110 233'4'6'-PeCB	28.95		1.0625	1.0622	-0.5	2.63E+07	0.62	1.41	2,540	3.53E+03		3.95
PCB-115 2344'6'-PeCB	NotFnd		1.0651	-		0.00E+00		1.08	ND	3.53E+03		5.12
PCB-82 22'33'4'-PeCB	29.22		1.0724	1.0721	-0.5	2.02E+06	0.63	0.87	314	3.53E+03		6.38
PCB-111 233'55'-PeCB	NotFnd		1.0845	-		0.00E+00		1.58	ND	3.53E+03		3.52
PCB-120 23'455'-PeCB	NotFnd		1.0988	-		0.00E+00		1.22	ND	3.53E+03		4.54
PCB-107/124 233'4'5-/2'3455'	30.92	C	0.9908	0.9911	+0.6	7.66E+05	0.69	1.06	97.9	3.53E+03		5.23
PCB-109 233'46'-PeCB	31.12		0.9974	0.9975	+0.2	1.24E+06	0.61	1.19	141	3.53E+03		4.68
PCB-106 233'45'-PeCB	31.27	EMPC	1.0039	1.0024	-2.8	2.40E+05	0.48	1.21	27	3.53E+03		4.61
PCB-122 2'33'45'-PeCB	31.79		1.0100	1.0100	0	2.09E+05	0.60	0.80	33.5	3.53E+03		6.27
PCB-127 33'455'-PeCB	NotFnd		1.0390	-		0.00E+00		1.00	ND	3.53E+03		5.39
PCB-155 22'44'66'-HxCB	27.08	J	1.0008	1.0008	0	1.85E+05	1.40	0.99	19.4	2.48E+03		2.85
PCB-152 22'3566'-HxCB	NotFnd		1.0069	-		0.00E+00		1.18	ND	2.48E+03		2.39
PCB-150 22'34'66'-HxCB	NotFnd		1.0122	-		0.00E+00		1.43	ND	2.48E+03		1.97
PCB-136 22'33'66'-HxCB	27.69		1.0235	1.0236	+0.2	5.13E+06	1.28	0.98	537	2.48E+03		2.86
PCB-145 22'3466'HxCB	NotFnd		1.0329	-		0.00E+00		0.96	ND	2.48E+03		2.92
PCB-148 22'34'56'-HxCB	NotFnd		1.0803	-		0.00E+00		1.25	ND	2.48E+03		2.6
PCB-151/135 22'355'6-/22'33'	29.75	C	1.0995	1.0995	0	9.72E+06	1.25	0.88	1,320	2.48E+03		3.69
PCB-154 22'44'5'6'-HxCB	29.96		1.1069	1.1071	+0.4	3.21E+05	1.32	0.88	43.6	2.48E+03		3.69
PCB-144 22'345'6'-HxCB	30.22		1.1166	1.1170	+0.7	1.54E+06	1.30	0.91	202	2.48E+03		3.55
PCB-147/149 22'34'56-/22'34'	30.52	C	1.1278	1.1281	+0.5	2.15E+07	1.25	1.04	2,480	2.48E+03		3.13
PCB-134 22'33'56'-HxCB	30.70		1.1339	1.1346	+1.3	1.16E+06	1.30	0.68	206	2.48E+03		4.79
PCB-143 22'3456'-HxCB	NotFnd		1.1369	-		0.00E+00		1.25	ND	2.48E+03		2.6
PCB-139/140 22'344'6-/22'344'	31.02	C	1.1466	1.1464	-0.4	3.96E+05	1.40	1.06	44.7	2.48E+03		3.06
PCB-131 22'33'46'-HxCB	31.20		1.1529	1.1531	+0.4	2.56E+05	1.35	0.83	37	2.48E+03		3.92
PCB-142 22'3456-HxCB	NotFnd		1.1578	-		0.00E+00		1.09	ND	2.48E+03		2.98
PCB-132 22'33'46'-HxCB	31.59		1.1672	1.1674	+0.4	7.11E+06	1.29	0.88	962	2.48E+03		3.67
PCB-133 22'33'55'-HxCB	32.02		1.1827	1.1833	+1.2	3.04E+05	1.35	0.84	43.3	2.48E+03		3.87
PCB-165 233'55'6'-HxCB	NotFnd		0.9483	-		0.00E+00		0.91	ND	2.48E+03		3.57
PCB-146 22'34'55'-HxCB	32.56		0.9545	0.9544	-0.2	3.20E+06	1.21	1.13	339	2.48E+03		2.88

## P1977\_7528\_PCB\_001

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	wt DL
PCB-161 233'45'6"-HxCB	NotFnd		0.9578	-		0.00E+00		1.09	ND	2.48E+03	2.97
PCB-153/168 22'44'55'"/-23'44'	33.08	C	0.9703	0.9698	-1.0	2.43E+07	1.24	1.15	2,530	2.48E+03	2.83
PCB-141 22'3455'"-HxCB	33.25		0.9746	0.9747	+0.2	4.79E+06	1.27	0.85	672	2.48E+03	3.8
PCB-130 22'33'45'"-HxCB	33.59		0.9847	0.9848	+0.2	8.91E+05	1.27	0.66	160	2.48E+03	4.89
PCB-137 22'344'5"-HxCB	33.78		0.9902	0.9902	0	7.25E+05	1.37	1.13	76.7	2.48E+03	2.87
PCB-164 233'4'5'6"-HxCB	33.88		0.9930	0.9931	+0.2	1.58E+06	1.22	1.15	164	2.48E+03	2.82
PCB-163/138/129 233'4'56"/-22'	34.14	C	1.0012	1.0007	-1.0	2.10E+07	1.26	0.99	2,550	2.48E+03	3.3
NotFnd			1.0048	-		0.00E+00		1.58	ND	2.48E+03	2.06
PCB-158 233'44'6"-HxCB	34.46		1.0104	1.0103	-0.2	2.59E+06	1.27	1.22	253	2.48E+03	2.65
PCB-128/166 22'33'44'"/-2344'5	35.21	C	0.9601	0.9605	+0.8	1.51E+06	1.22	1.00	254	3.54E+03	6.74
PCB-159 233'455'"-HxCB	36.00	J	0.9829	0.9822	-1.5	1.34E+05	1.42	1.16	19.5	3.54E+03	5.81
NotFnd			0.9895	-		0.00E+00		1.49	ND	3.54E+03	4.52
PCB-162 233'4'55'"-HxCB	NotFnd		1.0007	-		0.00E+00		0.97	ND	2.44E+03	2.35
PCB-188 22'34'566'"-HxCB	NotFnd		1.0096	1.0097	+0.2	4.63E+06	1.02	1.13	342	2.44E+03	2.01
PCB-179 22'33'566'"-HxCB	32.22		1.0236	-		0.00E+00		1.01	ND	2.44E+03	2.24
PCB-184 22'344'66'"-HxCB	NotFnd		1.0330	1.0330	0	0.00E+06	1.15	1.17	107	2.44E+03	1.94
PCB-186 22'34566'"-HxCB	NotFnd		1.0452	-		0.00E+00		0.98	ND	2.44E+03	2.31
PCB-178 22'33'55'6"-HxCB	34.51		1.0814	1.0815	+0.2	1.45E+06	0.98	0.73	166	2.44E+03	3.1
PCB-175 22'33'45'6"-HxCB	35.04		1.0983	1.0982	-0.2	2.66E+05	1.07	0.72	48.6	3.00E+03	6.02
PCB-187 22'34'55'6"-HxCB	35.28		1.1055	1.1055	0	6.73E+06	1.01	1.01	872	3.00E+03	4.27
PCB-182 22'344'56'"-HxCB	NotFnd		1.1109	-		0.00E+00		0.97	ND	3.00E+03	4.46
PCB-183 22'344'5'6"-HxCB	35.80		1.1215	1.1217	+0.4	3.12E+06	1.03	0.89	458	3.00E+03	4.84
PCB-185 22'3455'6"-HxCB	35.89		1.1242	1.1247	+1.1	2.31E+05	1.06	0.95	31.8	3.00E+03	4.54
PCB-174 22'33'456'"-HxCB	36.00		1.1280	1.1280	0	4.10E+06	0.95	0.95	569	3.00E+03	4.57
PCB-177 22'33'4'56"-HxCB	36.37		1.1396	1.1396	0	2.05E+06	1.00	0.90	298	3.00E+03	4.79
PCB-181 22'344'56"-HxCB	NotFnd		1.1501	-		0.00E+00		0.77	ND	3.00E+03	5.58
PCB-171/173 22'33'44'6"/-22'3	36.89	C	1.1559	1.1562	+0.7	1.33E+06	1.11	0.82	214	3.00E+03	5.3
PCB-172 22'33'455'"-HxCB	38.26		0.9006	0.9006	0	5.91E+05	0.94	0.75	103	3.00E+03	5.73
PCB-192 233'455'6"-HxCB	NotFnd		0.9062	-		0.00E+00		1.00	ND	3.00E+03	4.31
PCB-180/193 22'344'55'"/-233'	38.82	C	0.9130	0.9136	+1.4	8.29E+06	1.04	0.73	1,480	3.00E+03	5.89
PCB-191 233'44'5'6"-HxCB	39.11		0.9206	0.9206	0	1.56E+05	0.94	0.96	21.4	3.00E+03	4.52
PCB-170 22'33'44'5"-HxCB	39.88		0.9387	0.9386	-0.2	2.30E+06	0.97	1.36	289	3.00E+03	4.3
PCB-190 233'44'56"-HxCB	40.33		0.9492	0.9491	-0.2	6.35E+05	1.00	1.31	83	3.00E+03	4.48
PCB-202 22'33'55'66'"-OCCB	36.47		1.0006	1.0006	0	9.58E+05	0.85	0.87	120	2.14E+03	3.1
PCB-201 22'33'45'66'"-OCCB	37.25		1.0220	1.0219	-0.2	6.48E+05	0.96	0.81	87.6	2.14E+03	3.34
PCB-204 22'344'566'"-OCCB	NotFnd		1.0376	-		0.00E+00		1.00	ND	2.14E+03	2.71
PCB-197 22'33'44'66'"-OCCB	38.00		1.0429	1.0426	-0.7	1.85E+05	0.91	0.96	21	2.14E+03	2.81
PCB-200 22'33'4566'"-OCCB	38.10		1.0455	1.0453	-0.5	3.85E+05	0.86	0.75	55.9	2.14E+03	3.59
PCB-198/199 22'33'455'6"/-22'	40.47	C	1.1098	1.1103	+1.2	1.67E+06	0.85	0.75	242	2.14E+03	3.57
PCB-196 22'33'44'56'"-OCCB	41.02		1.1255	1.1255	0	6.98E+05	0.89	0.69	111	2.14E+03	3.92
PCB-203 22'344'55'6"-OCCB	41.18		1.1300	1.1300	0	9.42E+05	0.91	0.88	117	2.14E+03	3.06
PCB-195 22'33'44'56"-OCCB	42.30		0.9475	0.9473	-0.5	2.91E+05	0.97	0.97	59.2	2.55E+03	6.02
PCB-194 22'33'44'55'"-OCCB	44.28		0.9915	0.9916	+0.3	5.14E+05	0.86	1.01	100	2.55E+03	5.75
NotFnd			1.0004	-		0.00E+00		0.97	ND	2.55E+03	6.01
PCB-208 22'33'455'66'"-NoCB	42.09		1.0005	1.0004	-0.3	2.23E+05	0.78	0.95	43.7	2.57E+03	5.99
PCB-207 22'33'44'566'"-NoCB	42.88	J EMPC	1.0191	1.0193	+0.5	8.68E+04	0.93	1.04	15.5	2.57E+03	5.47
PCB-206 22'33'44'55'6"-NoCB	46.13		1.0004	1.0004	0	2.29E+05	0.70	1.07	62	2.57E+03	7.82

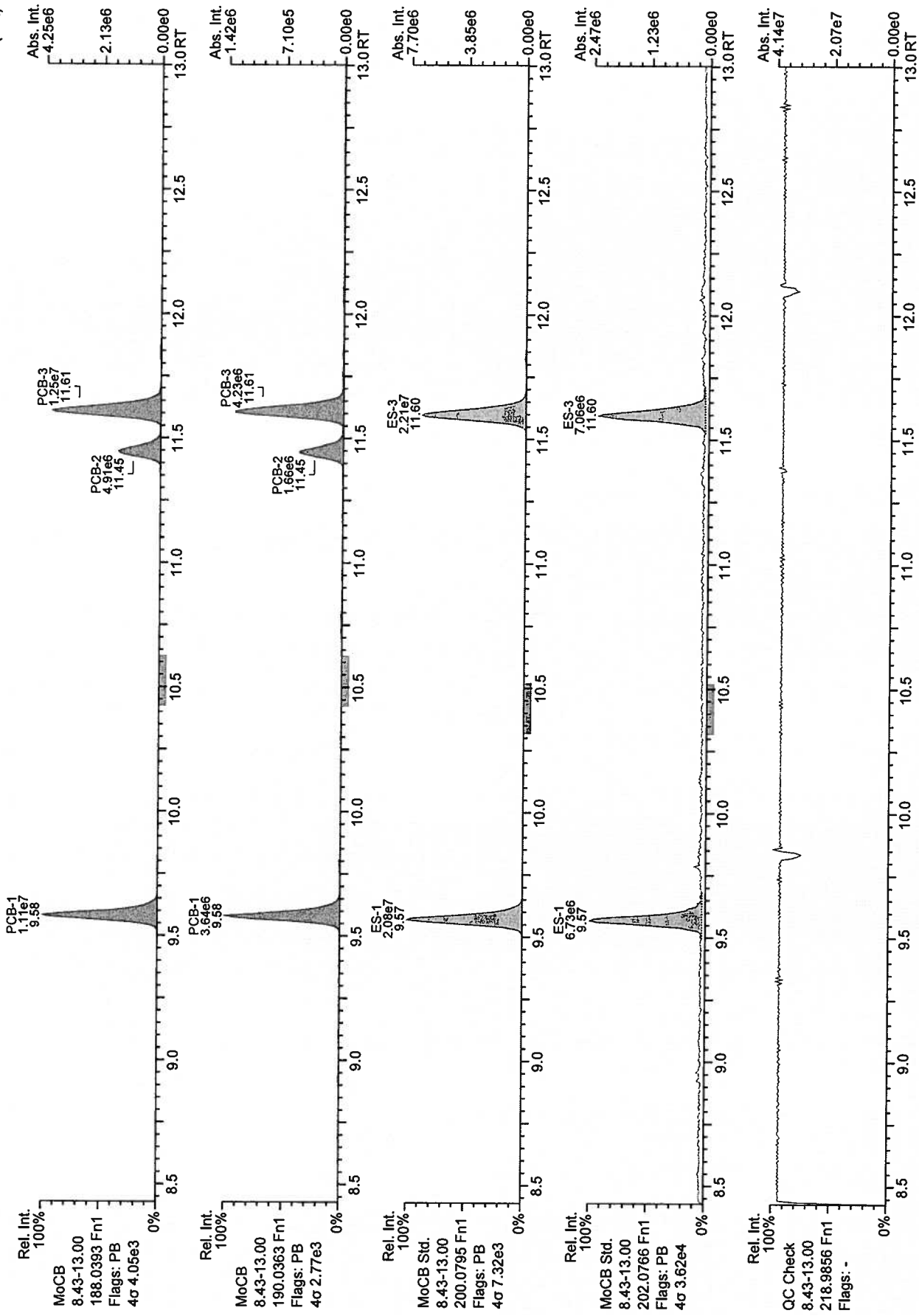




AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

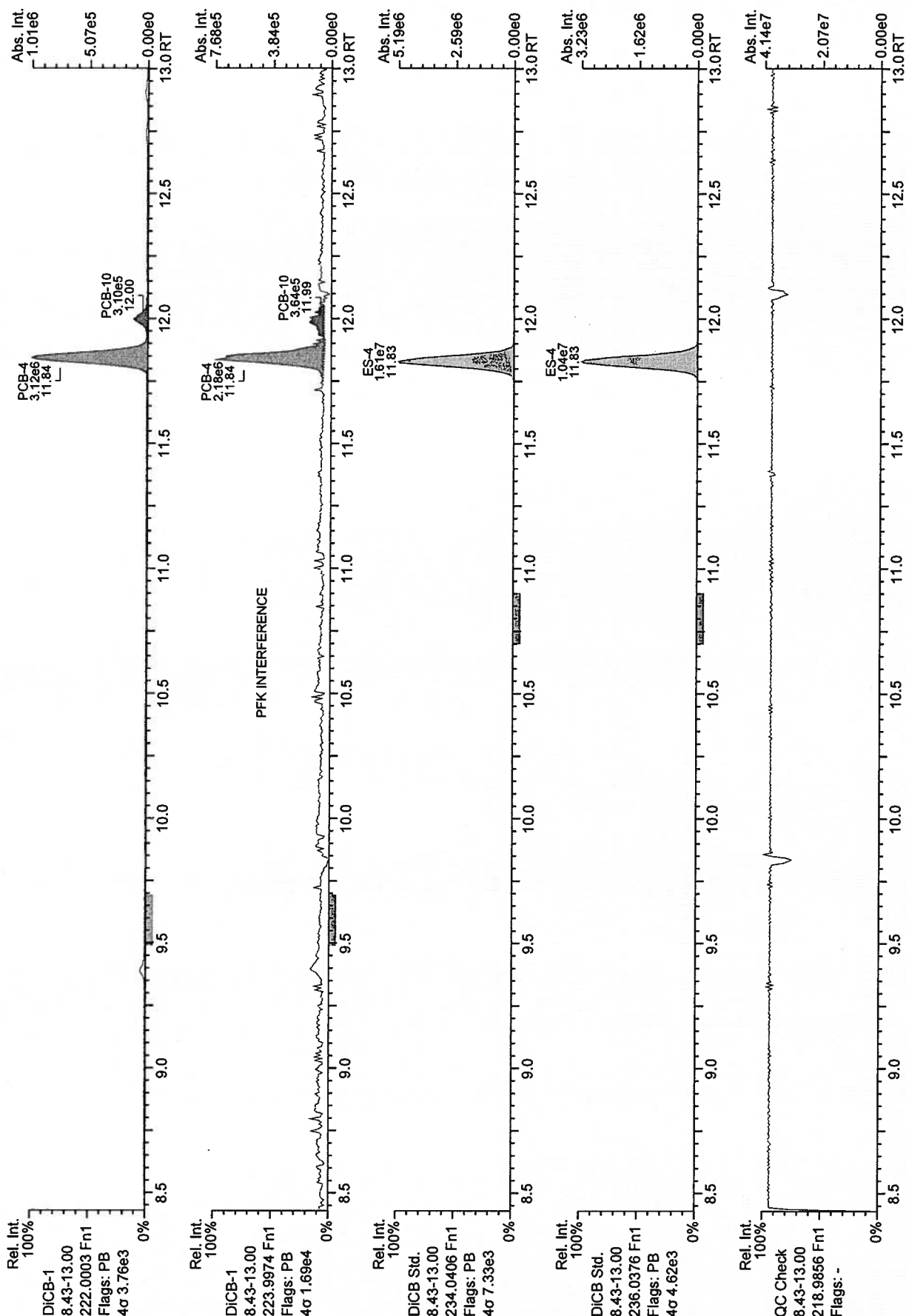
Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



AP Lab ID: P1977\_7528 PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

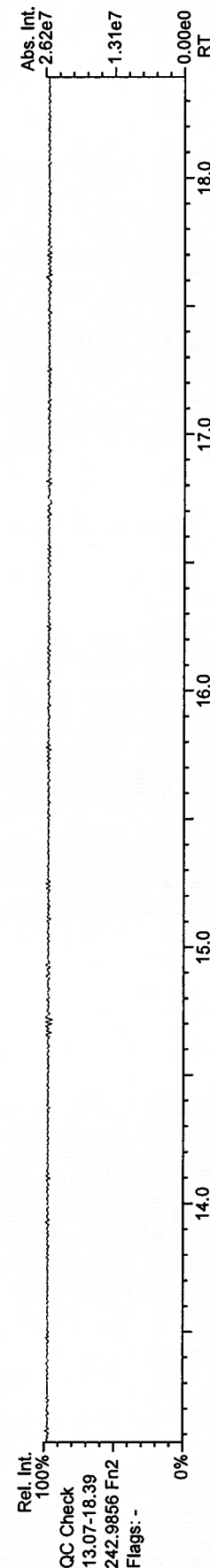
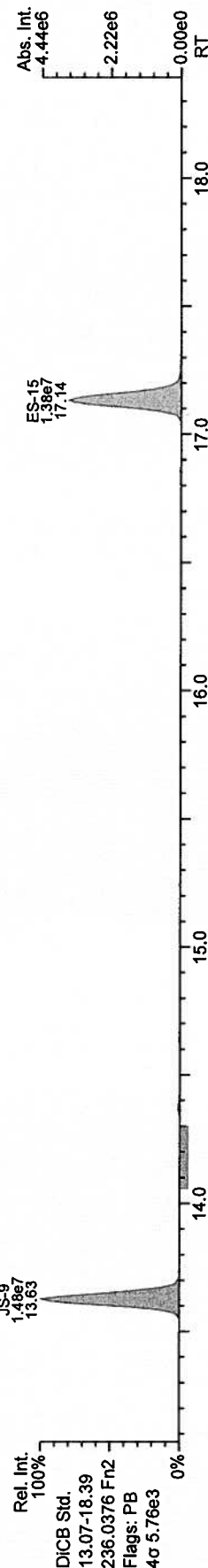
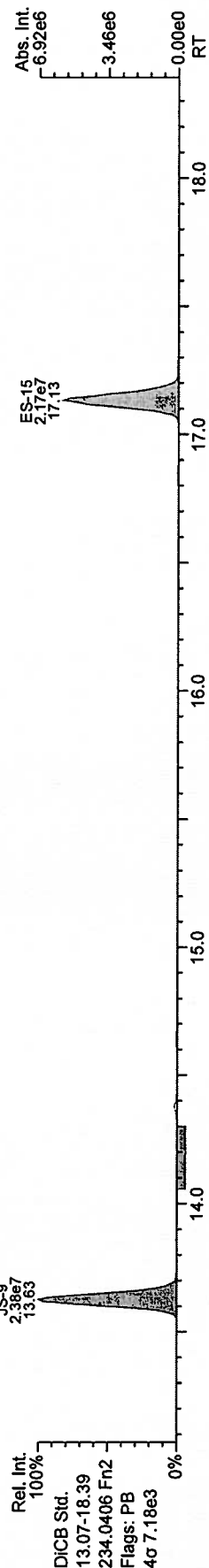
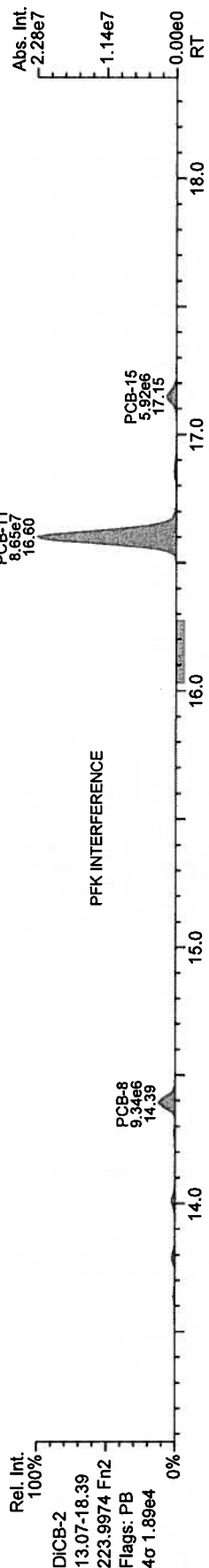
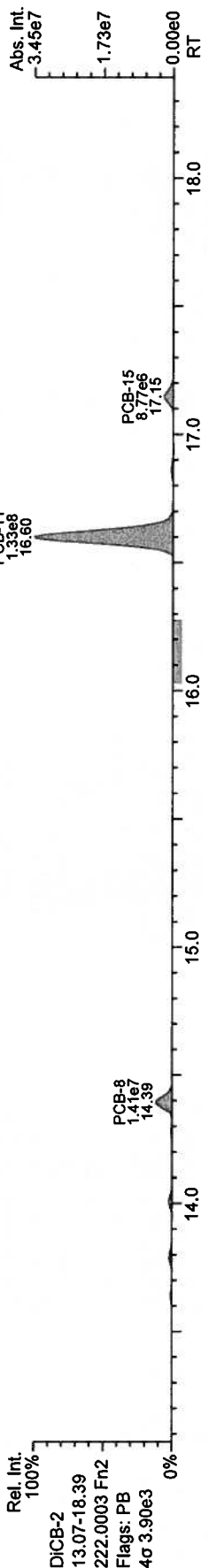
Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

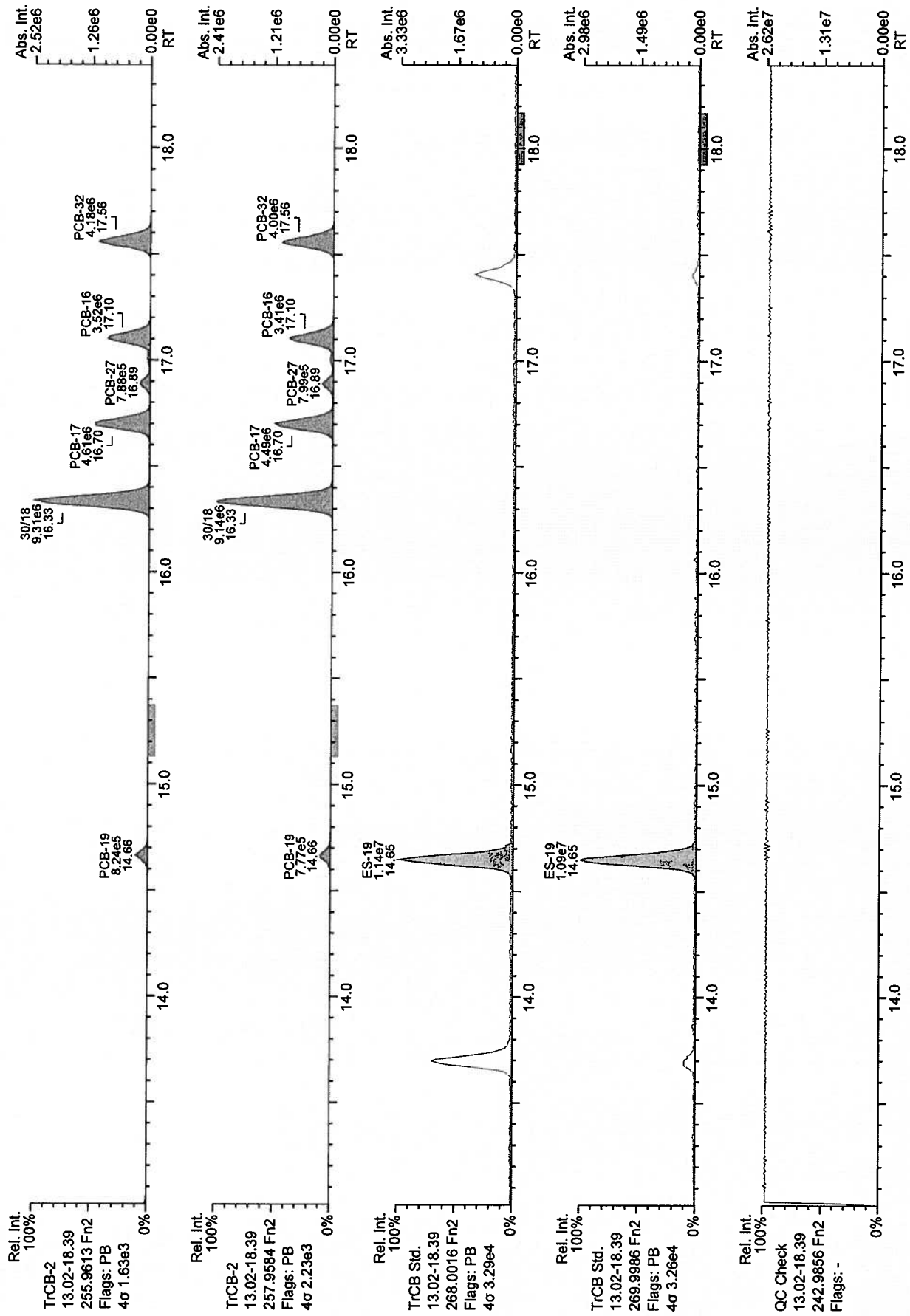


Results: P:\P1900\_P1999\P1977P1977\_7528\_PCBResources\P1977\_7528\_PCB\_001.utp\_res saved 10-Feb-2010 11:50 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 4712, 8290 scc: 347-678  
Revised: 09-Feb-2010 16:09:28 (CW) Printed: 10-Feb-2010 12:10:27 Page 4 of 22

AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 31

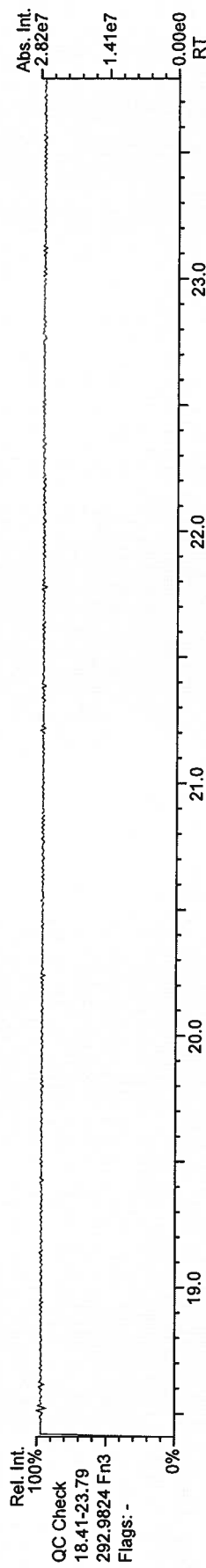
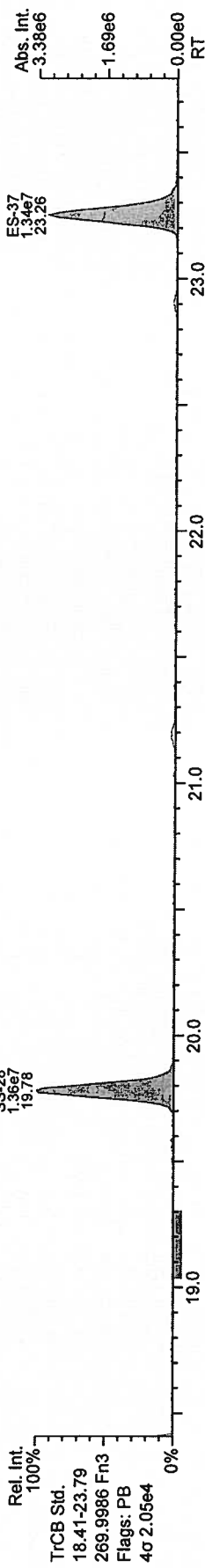
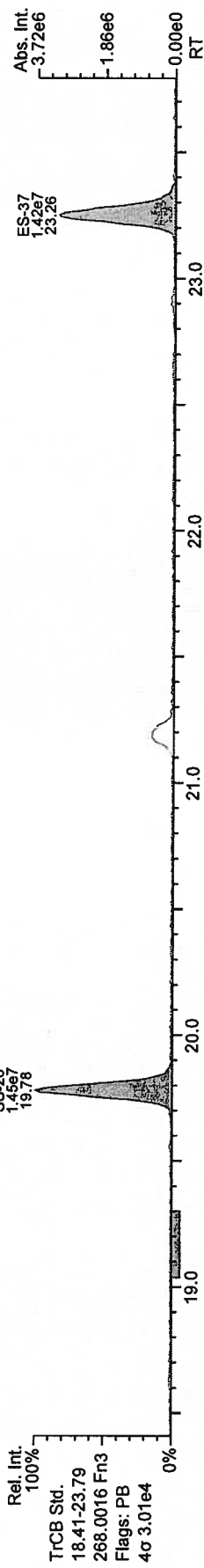
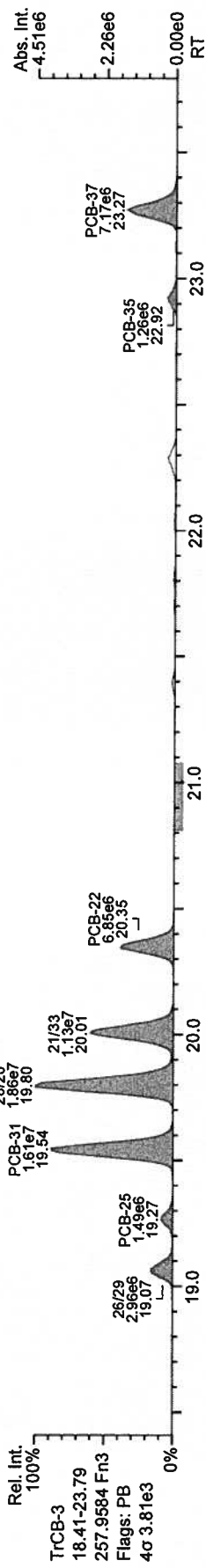
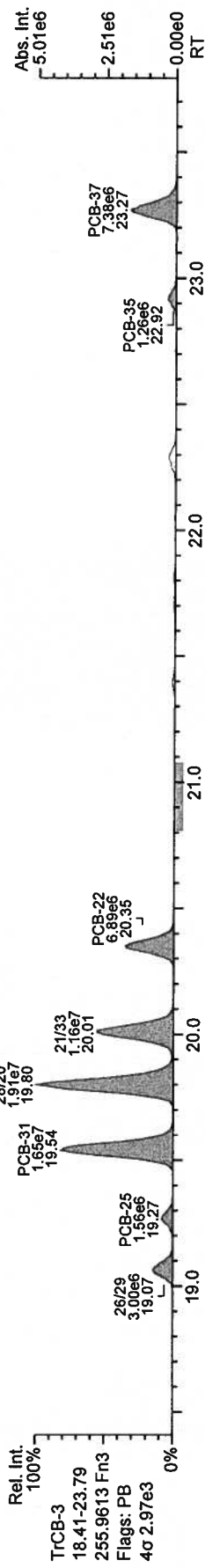
Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima\_MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



Results: P:\P1900\_P1999\P1977P1977\_7528 PCBResources\P1977\_7528\_PCB\_001.ulp\_res, saved 10-Feb-2010 11:50 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 2851, 2994 scc: 347-678

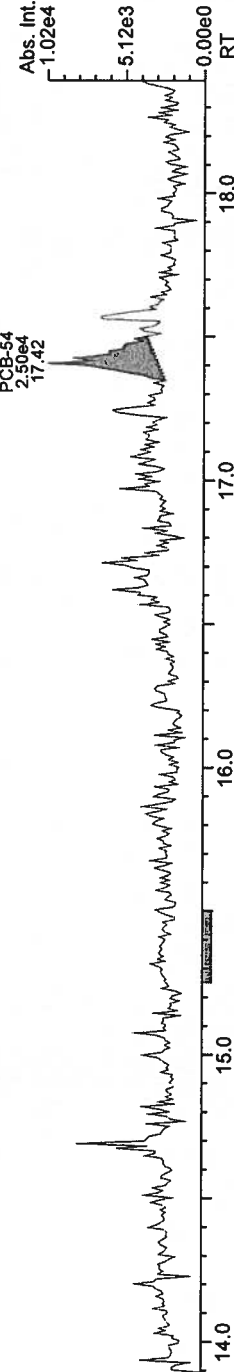
Revised: 09-Feb-2010 16:09:28 (CW) Printed: 10-Feb-2010 12:10:48 Page 6 of 22

AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

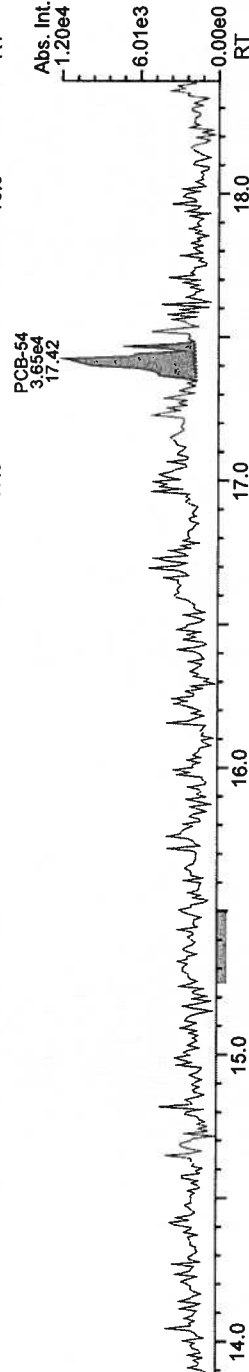
Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_ch1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

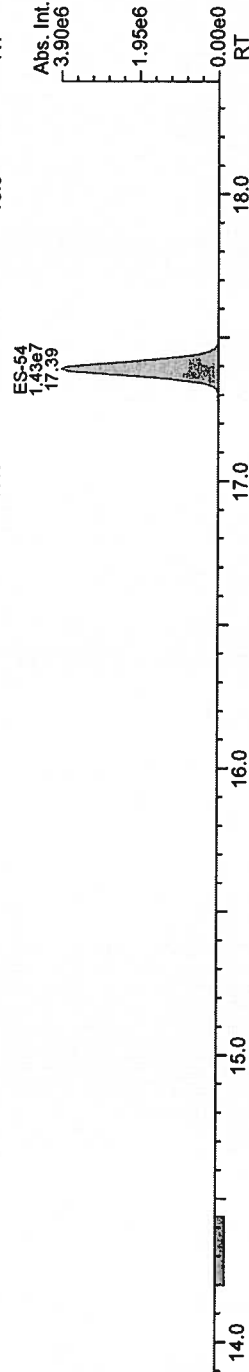
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TeCB-2  
13.02-18.39  
289.9224 Fn2  
Flags: PB  
4σ 1.02e3



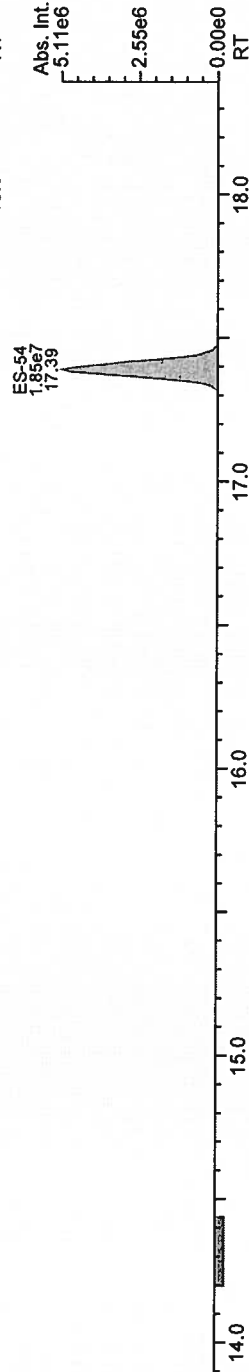
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100%  
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13.02-18.39  
291.9194 Fn2  
Flags: PB  
4σ 1.44e3



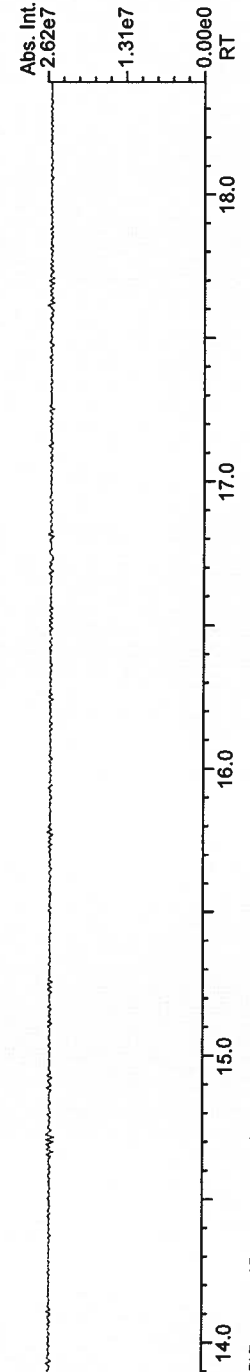
Rel. Int.  
100%  
TeCB Std.  
13.02-18.39  
301.9626 Fn2  
Flags: PB  
4σ 4.05e3



Rel. Int.  
100%  
TeCB Std.  
13.02-18.39  
303.9597 Fn2  
Flags: PB  
4σ 2.23e3



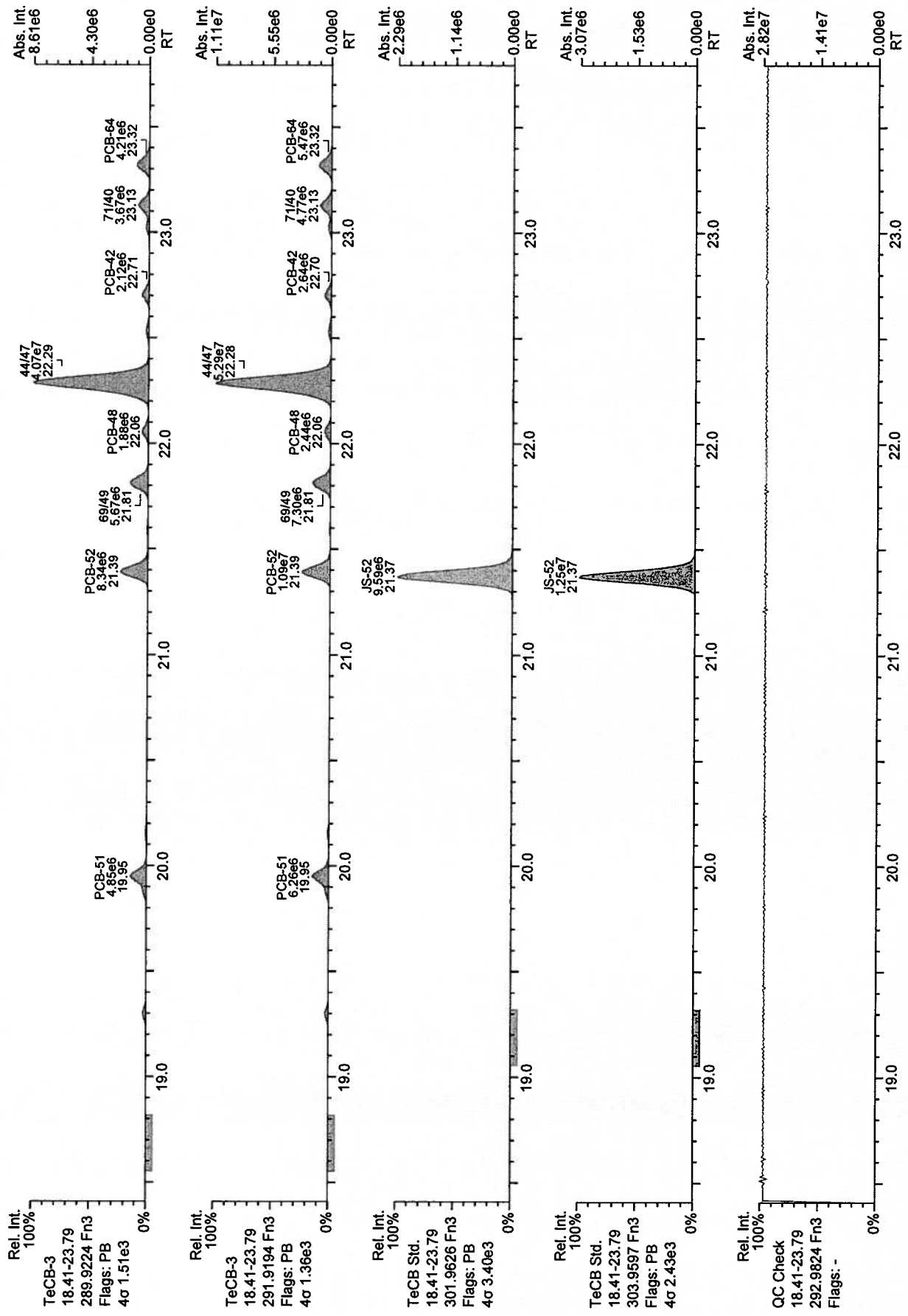
Rel. Int.  
100%  
QC Check  
13.02-18.39  
242.9856 Fn2  
Flags: -



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



Results: P:\P1900\_P1999\P1977\_P1977\_7528\_PCB\_001.res, saved 10-Feb-2010 11:50 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CWIT-045 cc: 9986, 5430 scc: 347-678

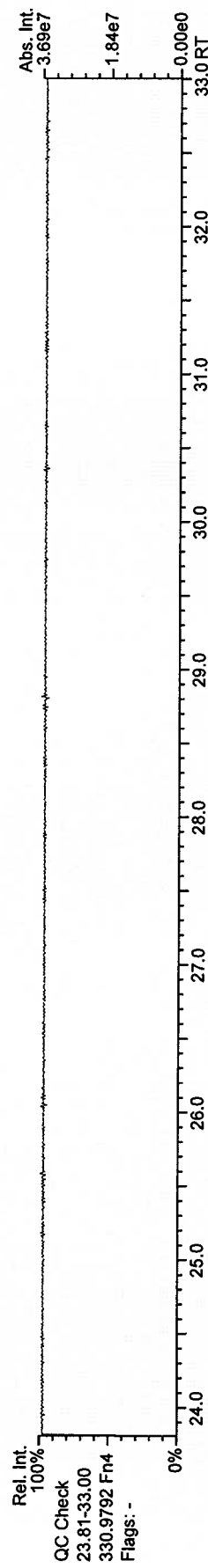
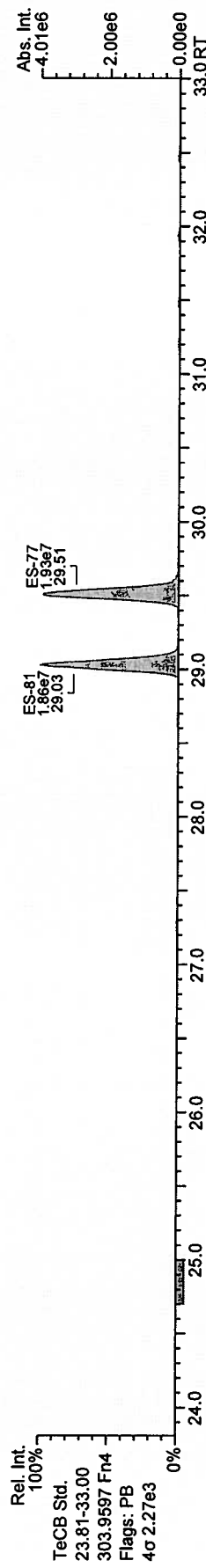
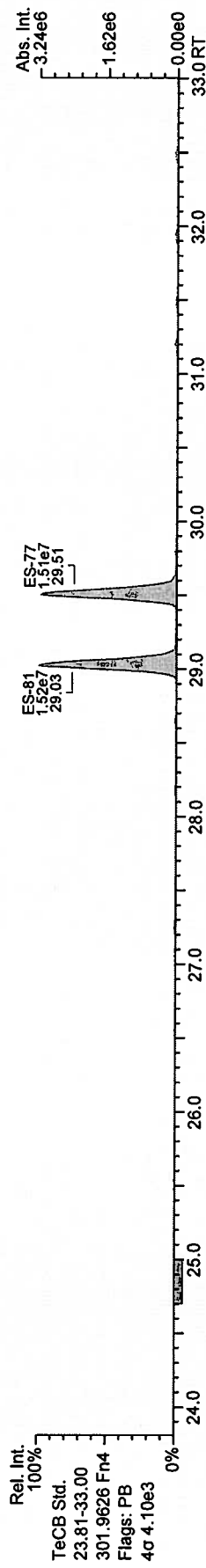
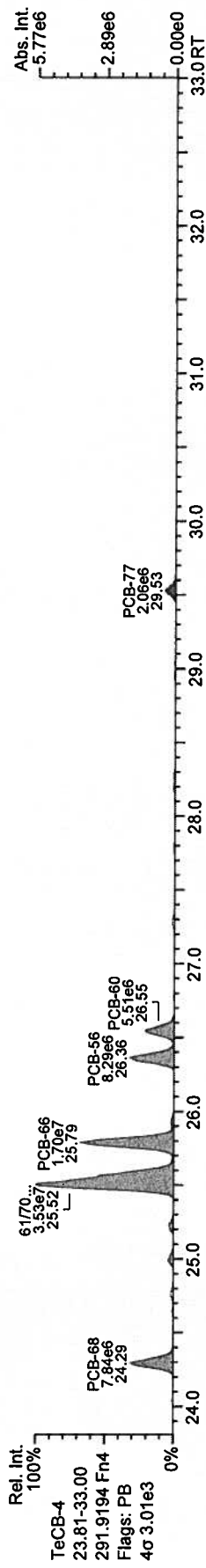
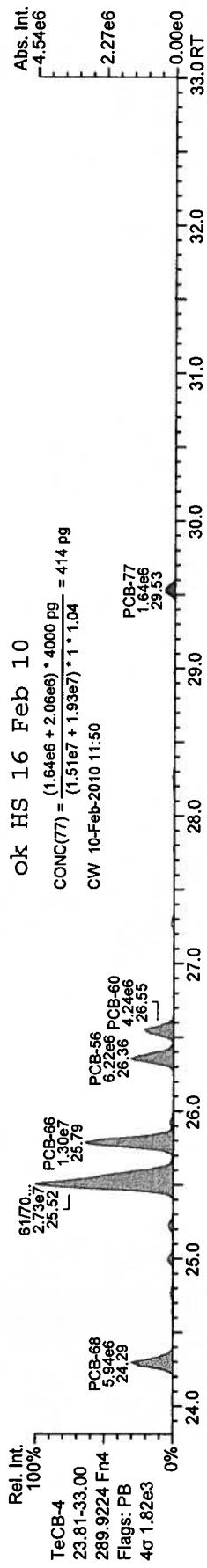
Revised: 09-Feb-2010 16:08:28 (CW) Printed: 10-Feb-2010 12:11:08 Page 8 of 22



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

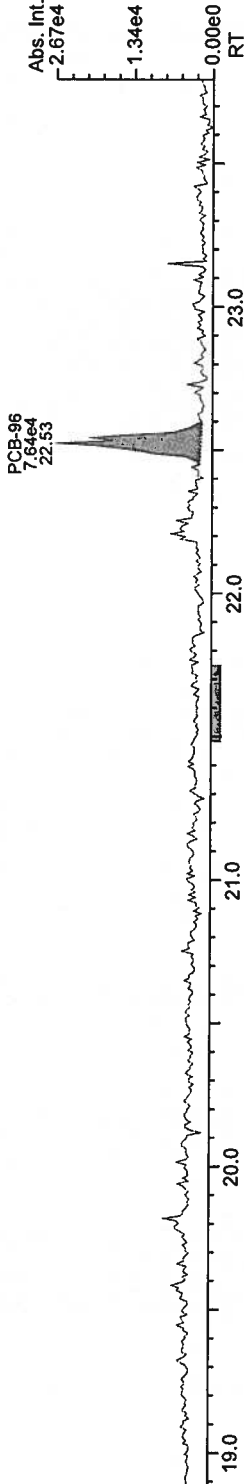


AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima\_MM4

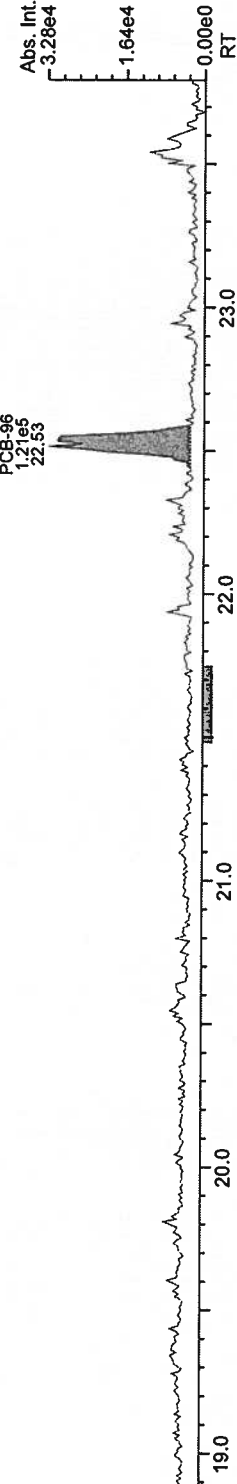
Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

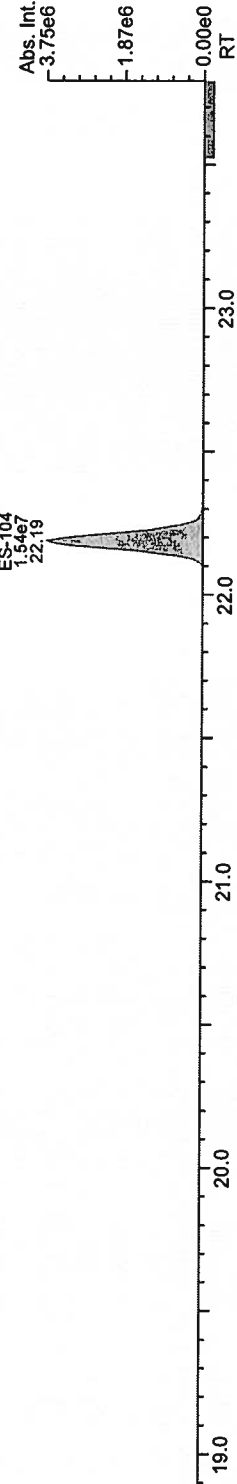
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18.41-23.79  
323.8834 Fn3  
Flags: PB  
4σ 1.14e3



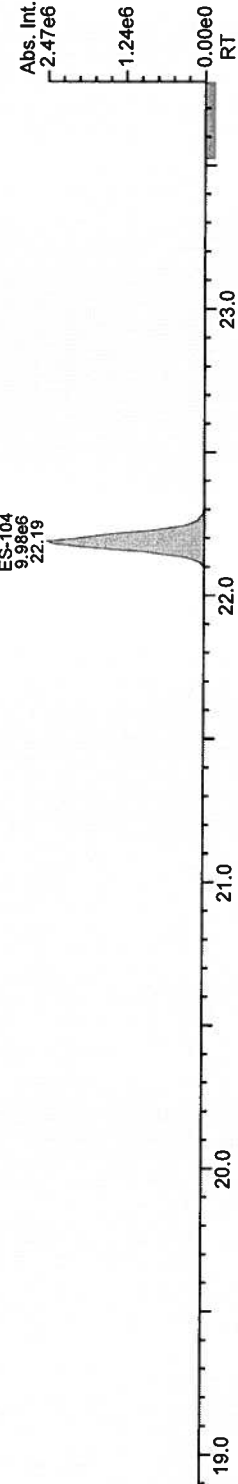
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18.41-23.79  
325.8804 Fn3  
Flags: PB  
4σ 1.41e3



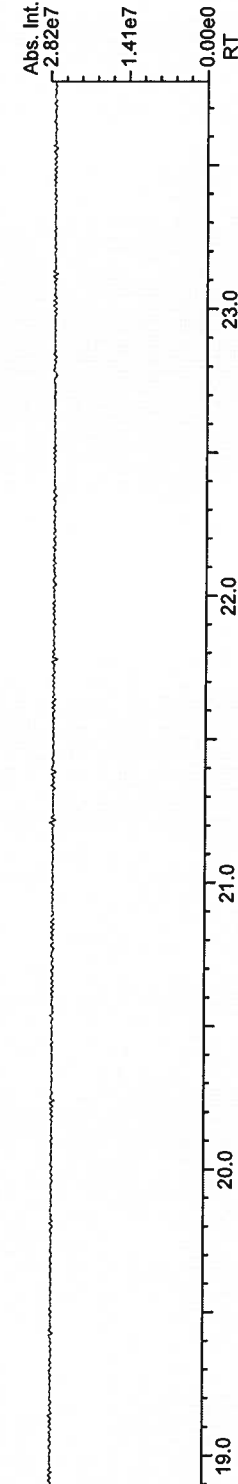
Rel. Int.  
100%  
PeCB Std.  
18.41-23.79  
337.9207 Fn3  
Flags: PB  
4σ 2.13e3



Rel. Int.  
100%  
PeCB Std.  
18.41-23.79  
339.9177 Fn3  
Flags: PB  
4σ 2.19e3



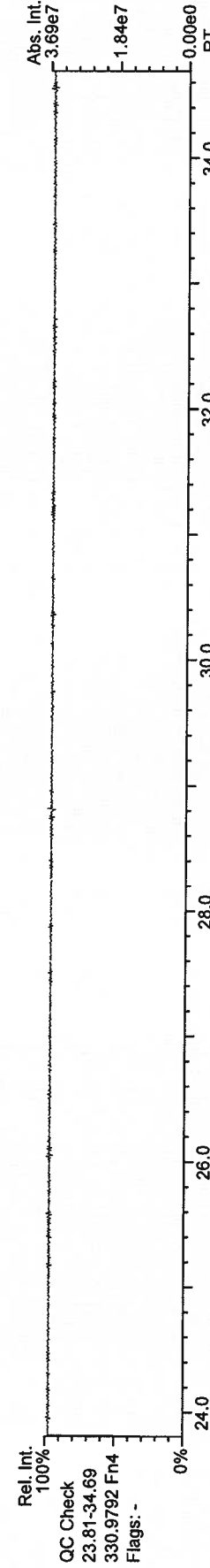
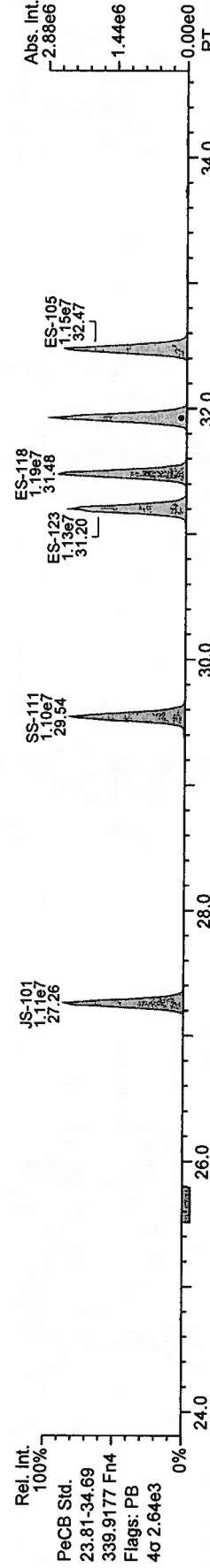
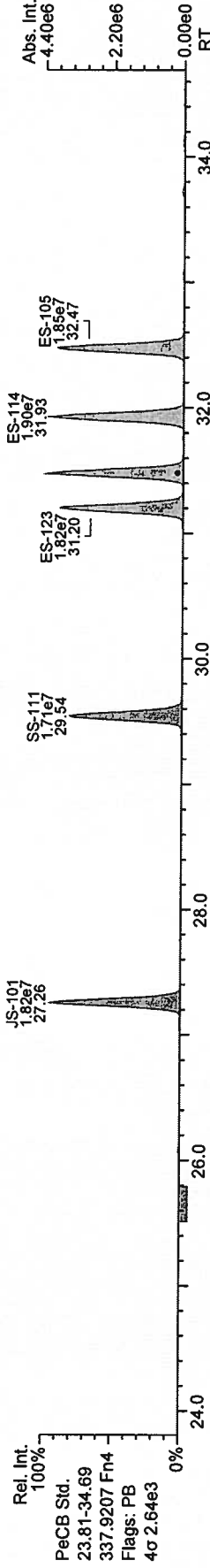
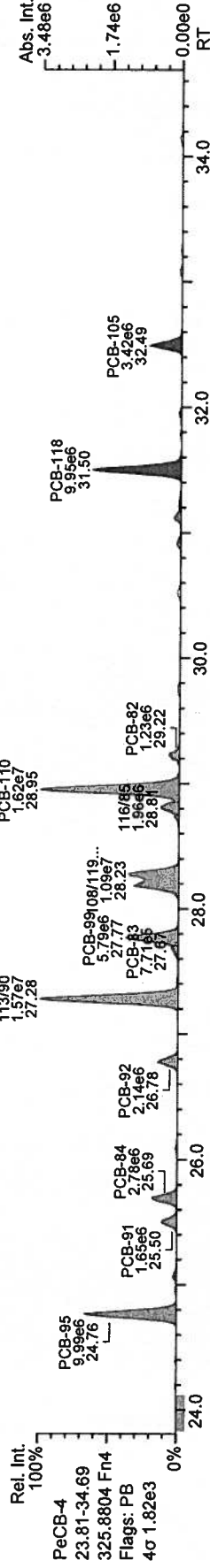
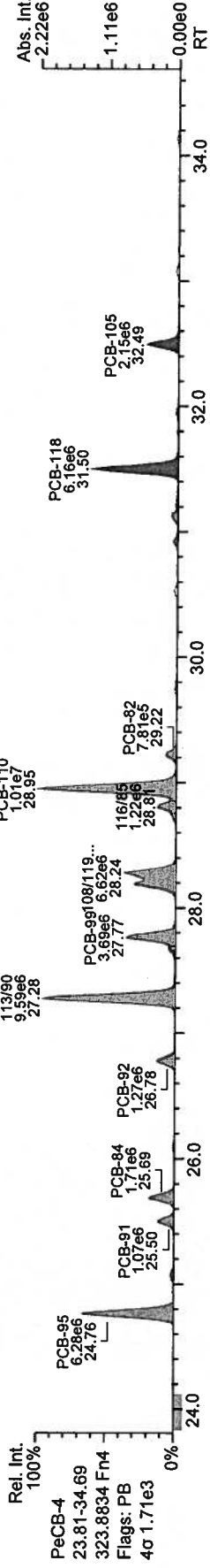
Rel. Int.  
100%  
QC Check  
18.41-23.79  
292.9824 Fn3  
Flags: -



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima\_MM4

Sample ID: SSI #1-Blank  
VSR expt: pcb0405\_c17-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

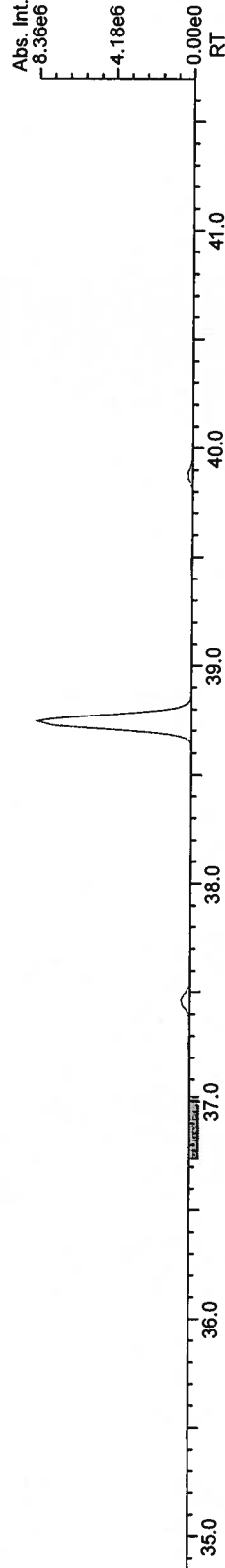


AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

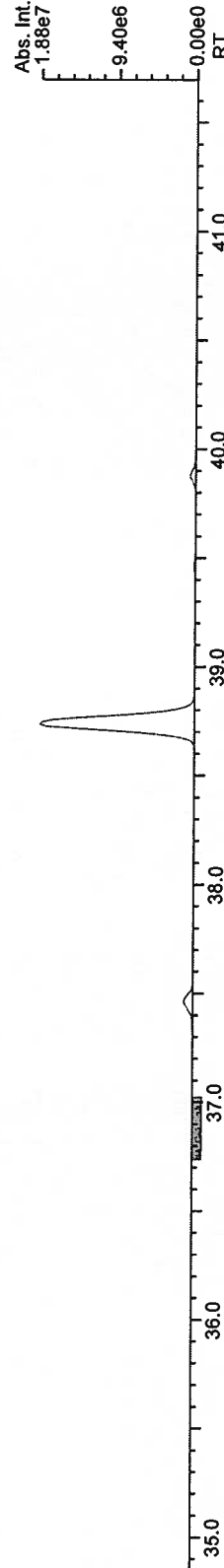
Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

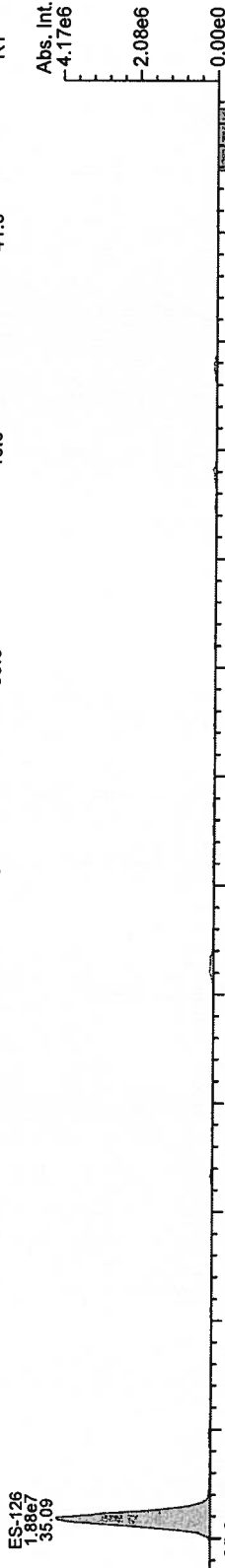
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34.71-41.70  
323.8834 Fn5  
Flags: PB  
4σ 2.47e3



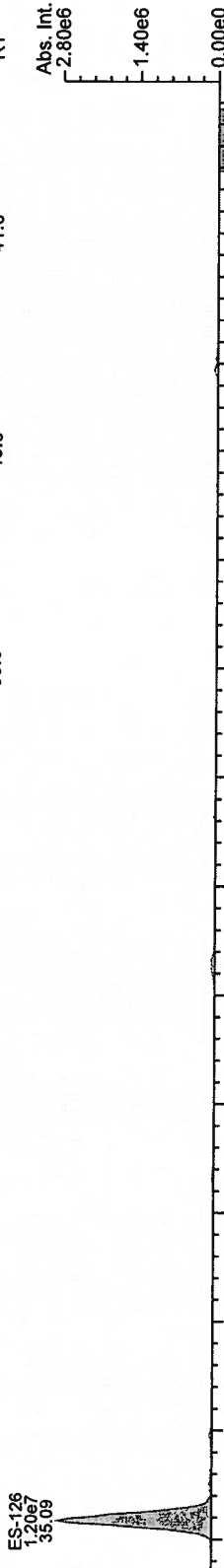
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325.8804 Fn5  
Flags: PB  
4σ 2.82e3



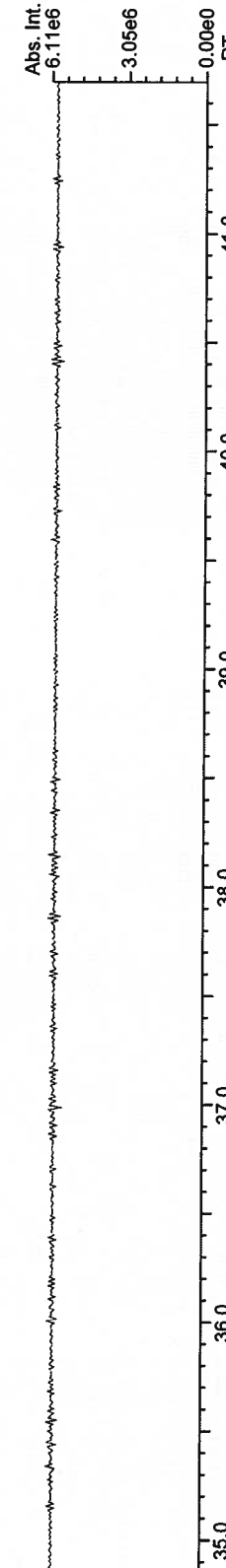
Rel. Int.  
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PeCB Std.  
34.71-41.70  
337.9207 Fn5  
Flags: PB  
4σ 4.54e3



Rel. Int.  
100%  
PeCB Std.  
34.71-41.70  
339.9177 Fn5  
Flags: PB  
4σ 2.27e3



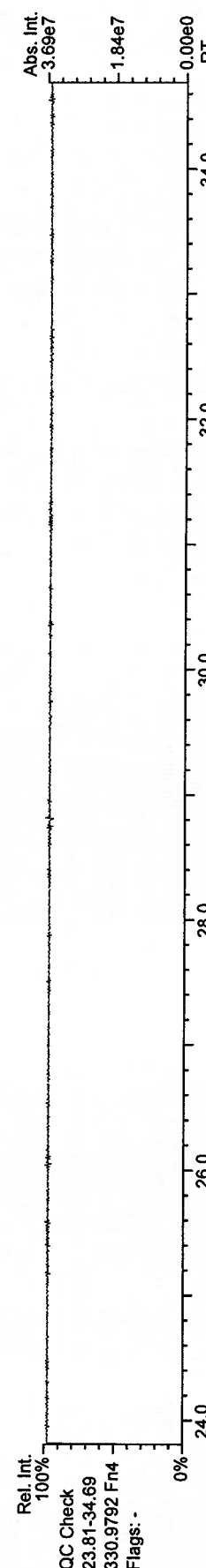
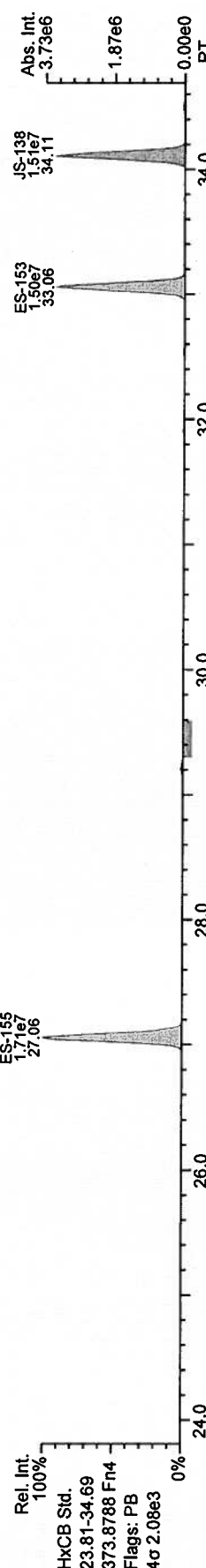
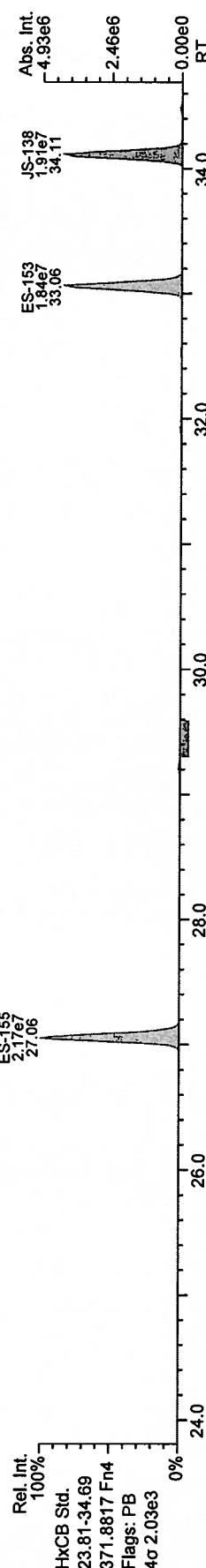
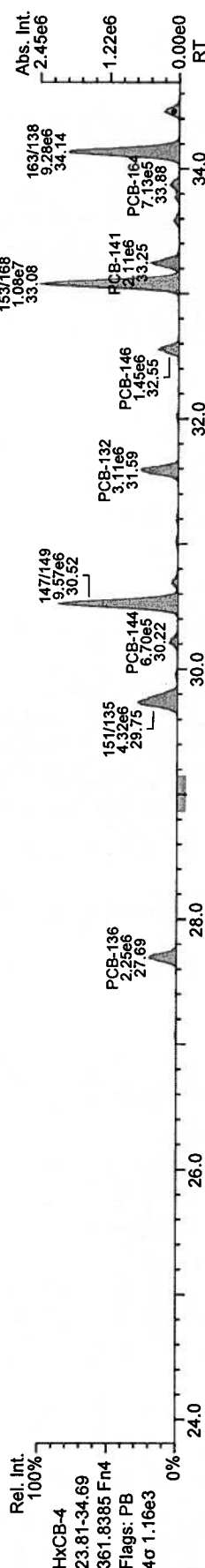
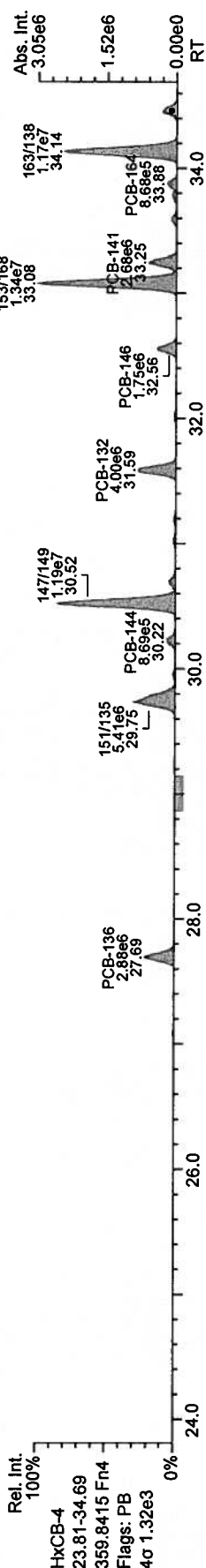
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100%  
QC Check  
34.71-41.70  
366.9792 Fn5  
Flags: -



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

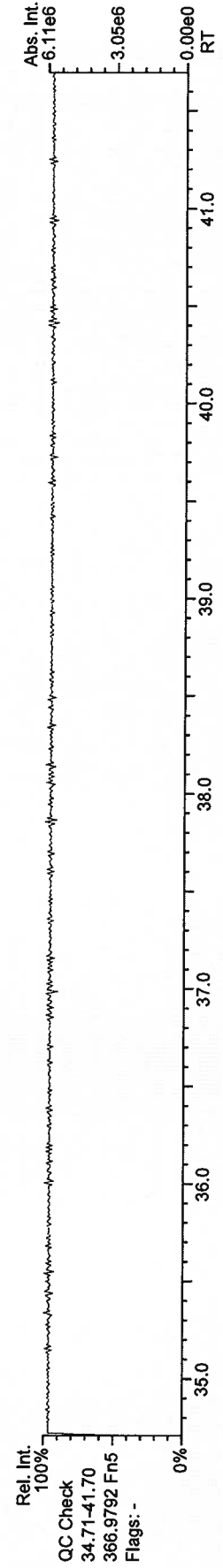
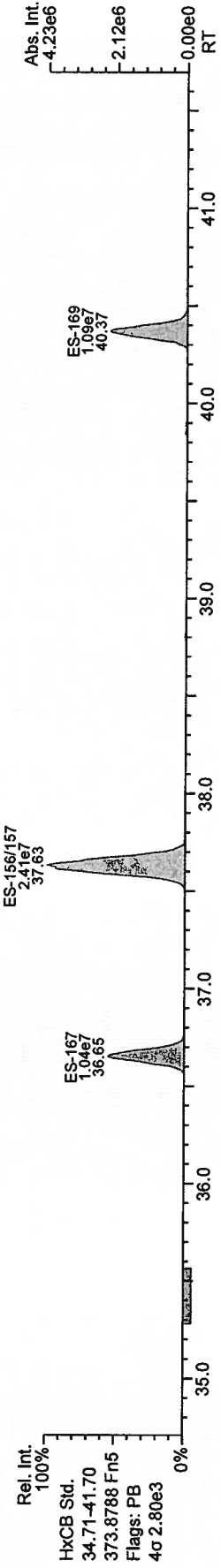
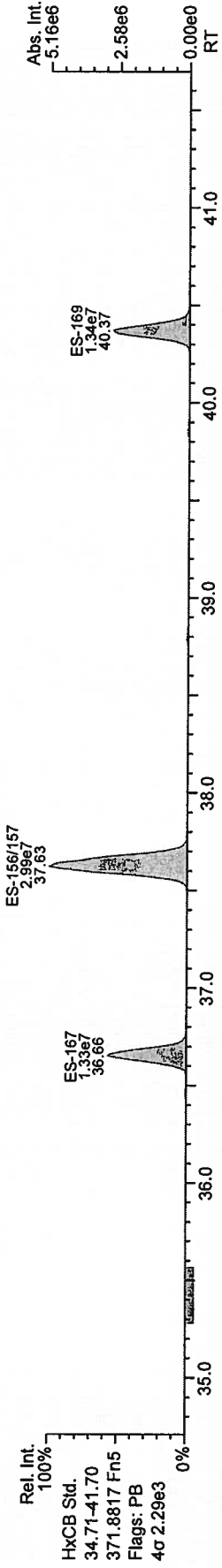
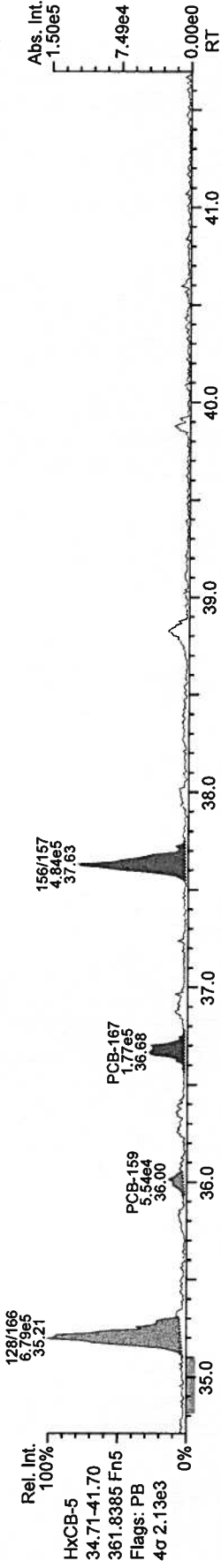
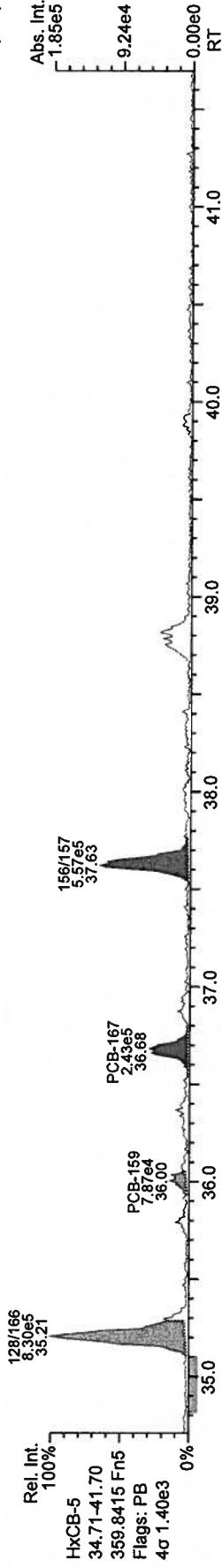
Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 31

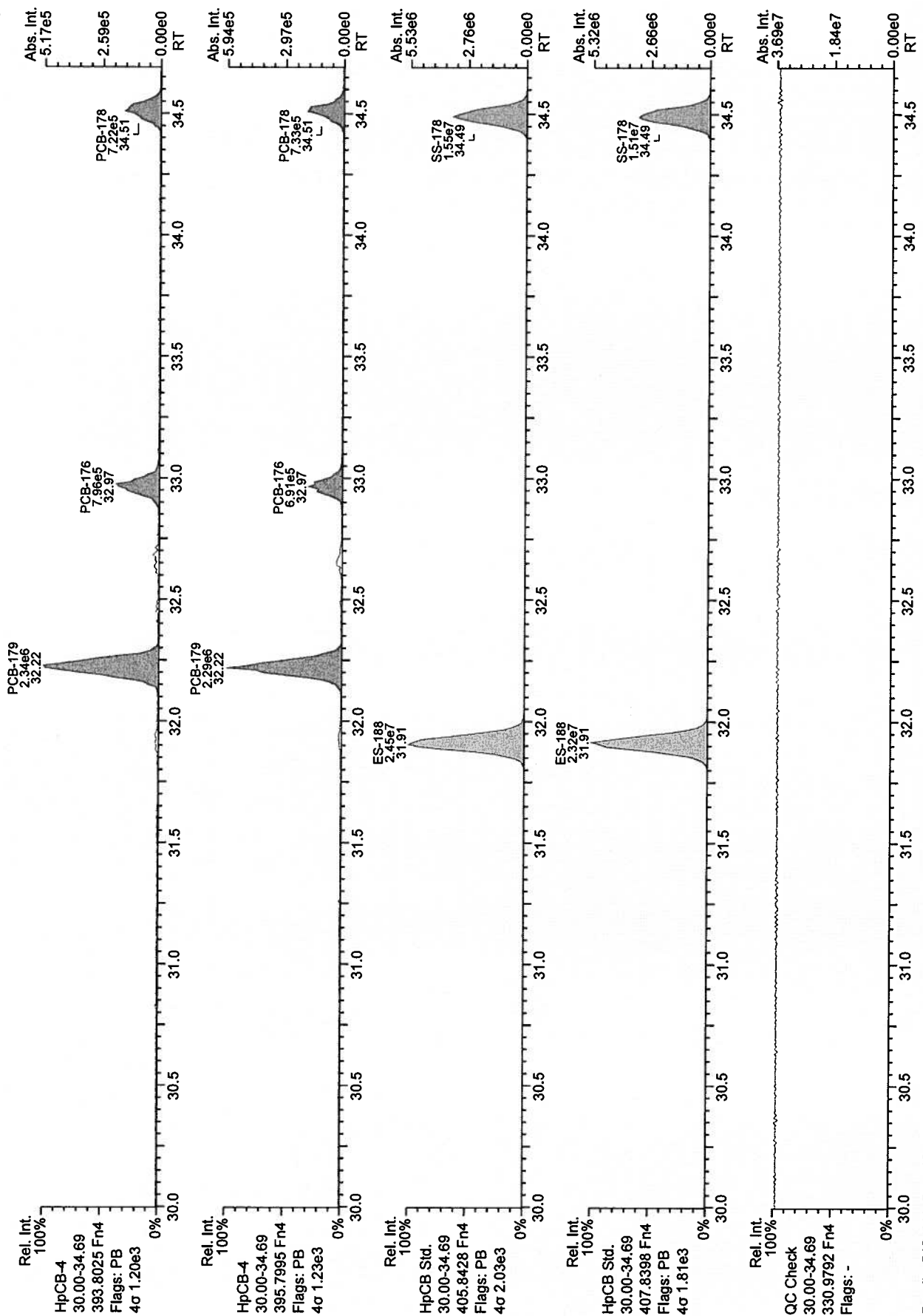
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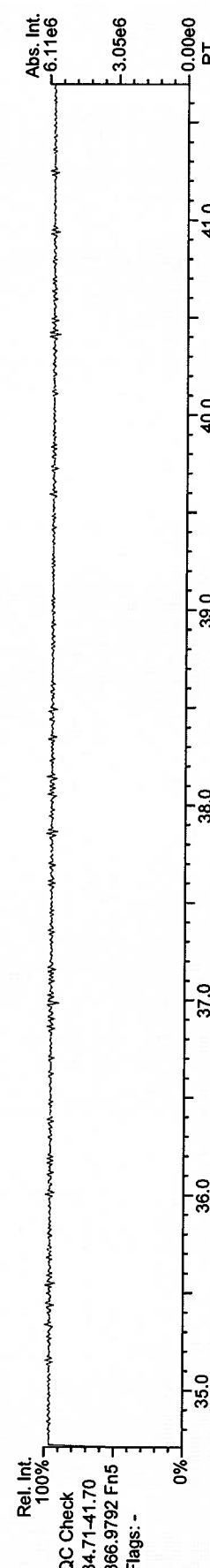
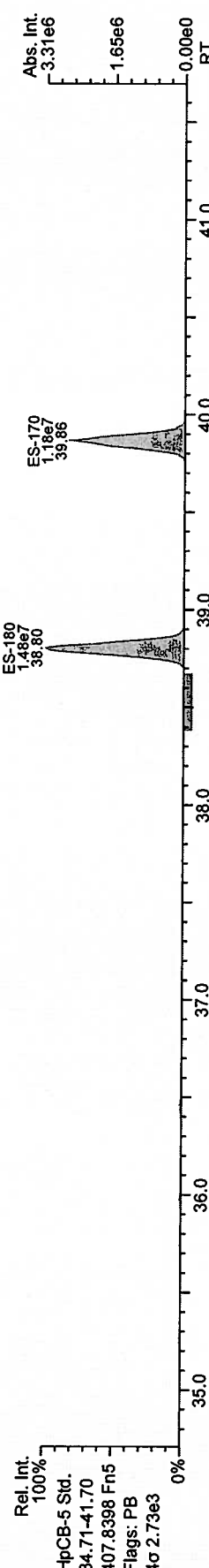
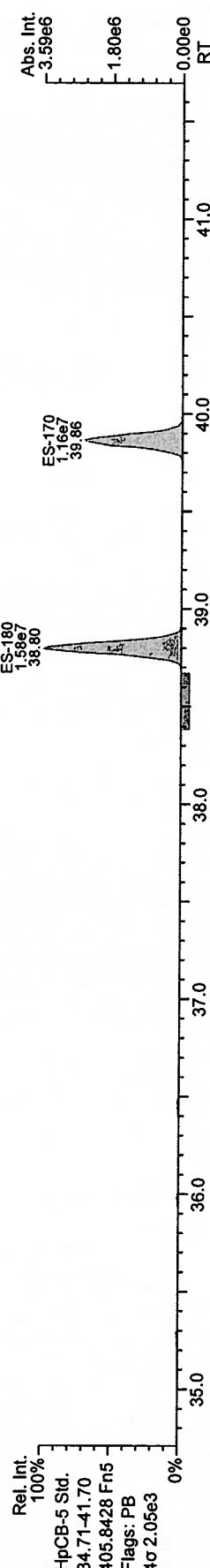
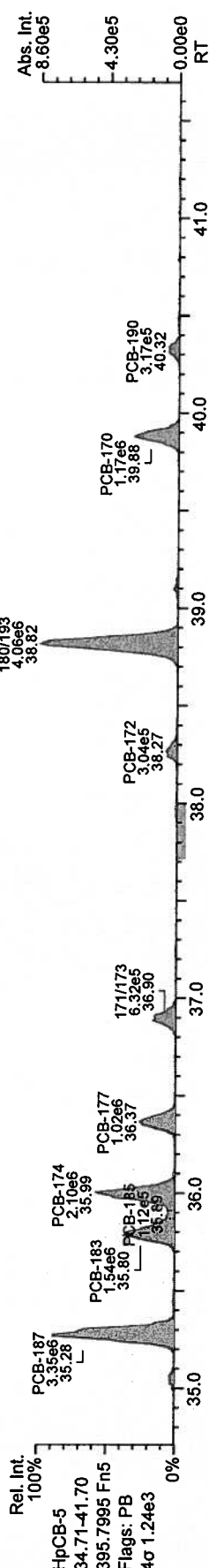
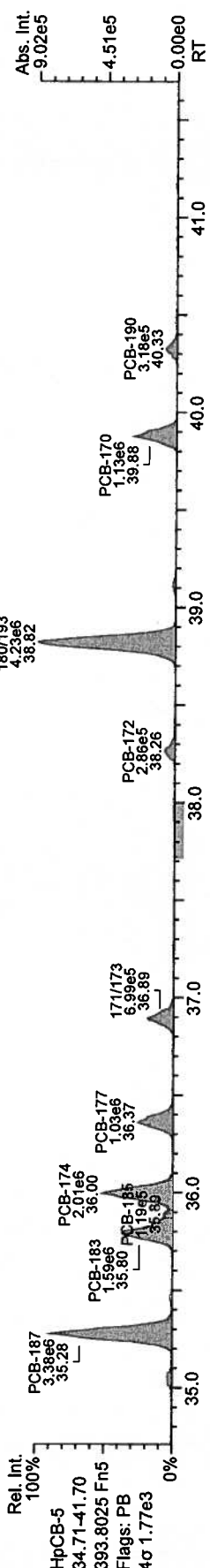


AP Lab ID: P1977\_7528 PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



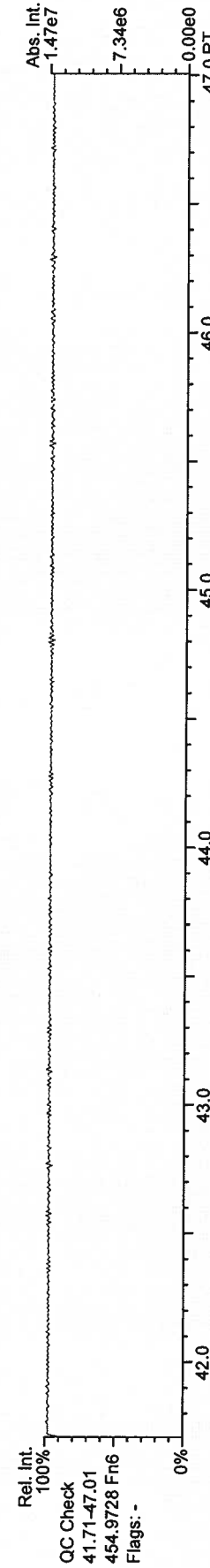
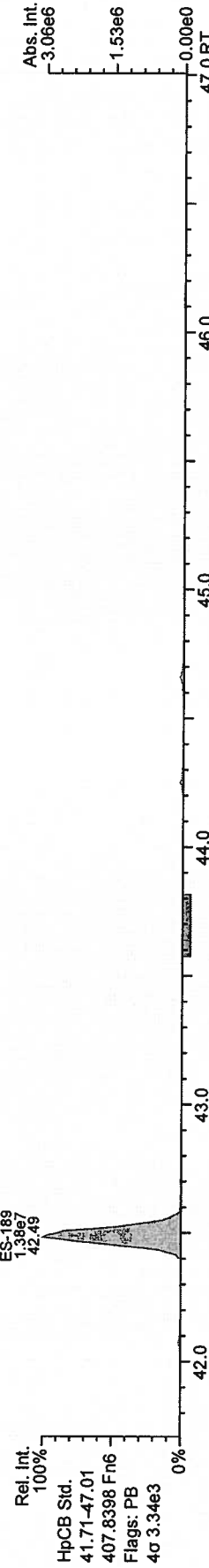
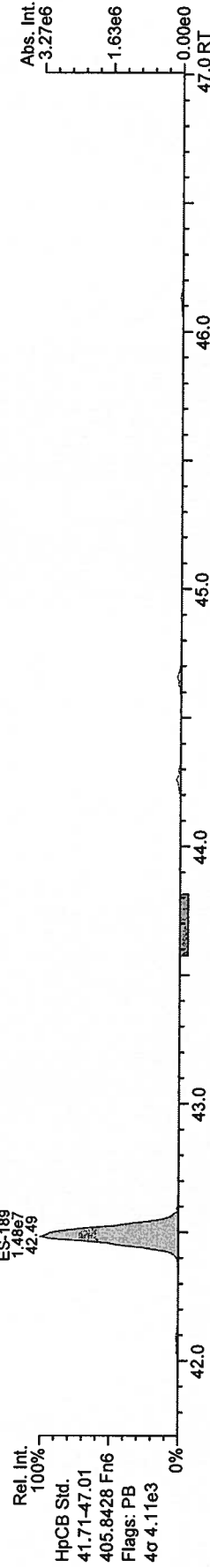
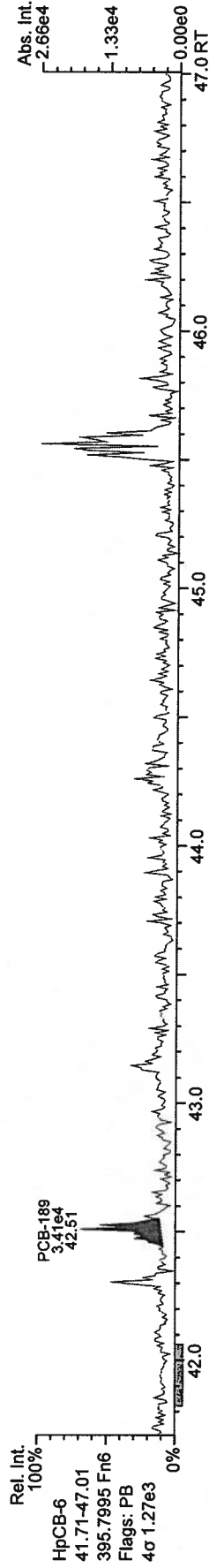
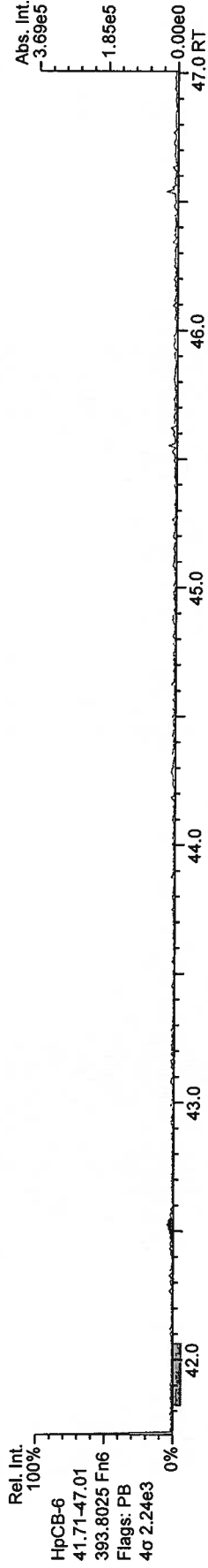




AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

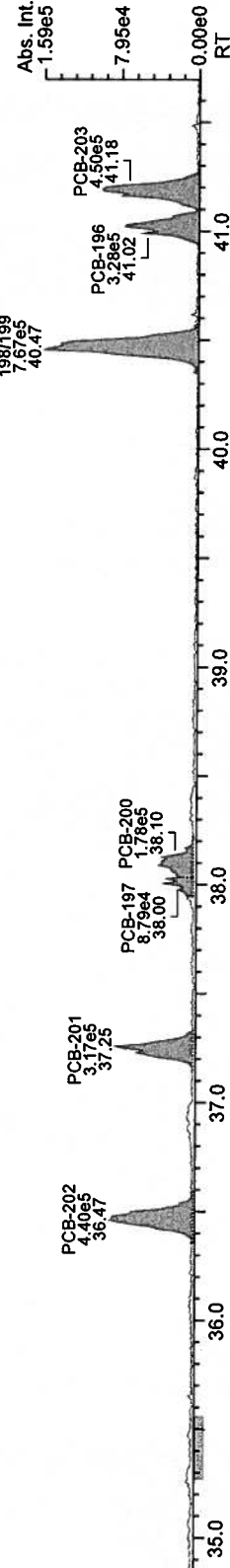


AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

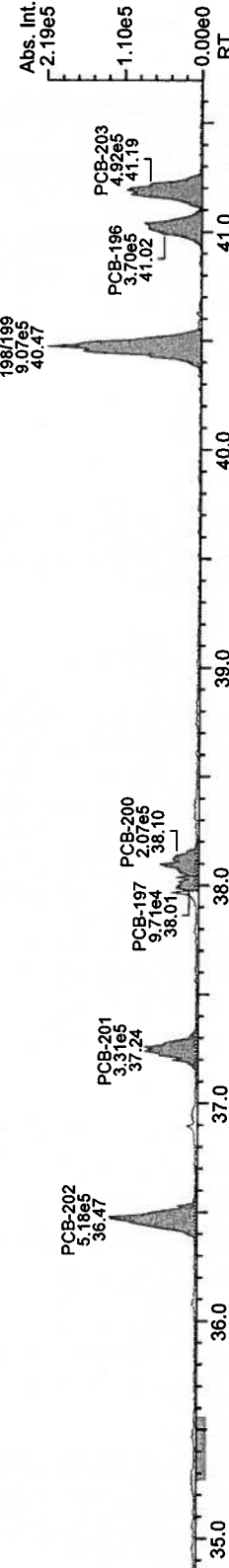
Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

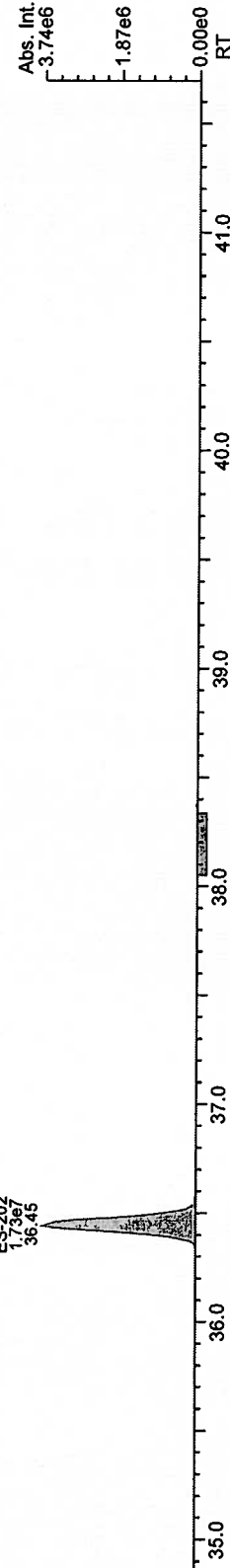
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34.71-41.70  
427.7635 Fn5  
Flags: PB  
4σ 1.04e3



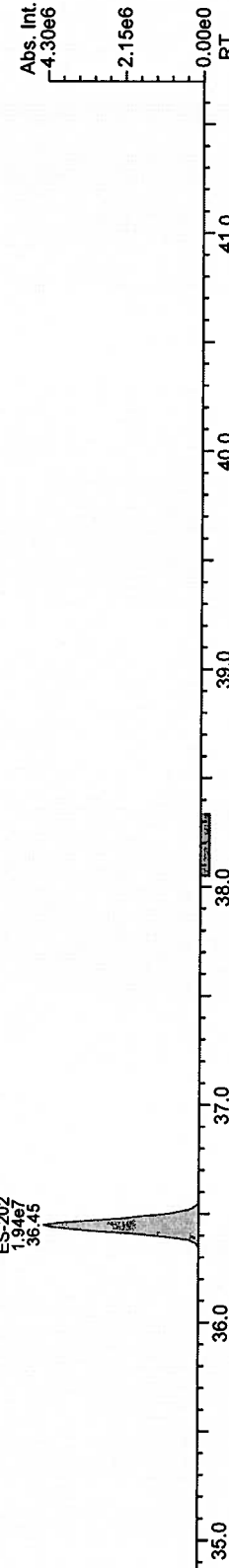
Rel. Int.  
100%  
OoCB-5  
34.71-41.70  
429.7606 Fn5  
Flags: PB  
4σ 1.09e3



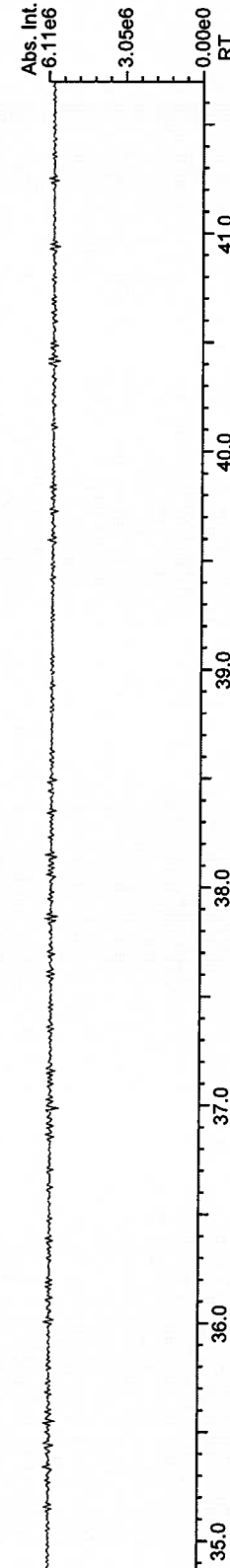
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100%  
OoCB Std.  
34.71-41.70  
439.8038 Fn5  
Flags: PB  
4σ 1.57e3

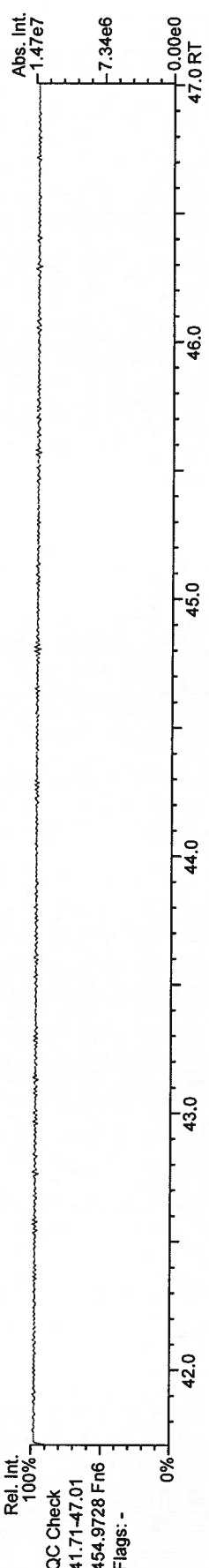
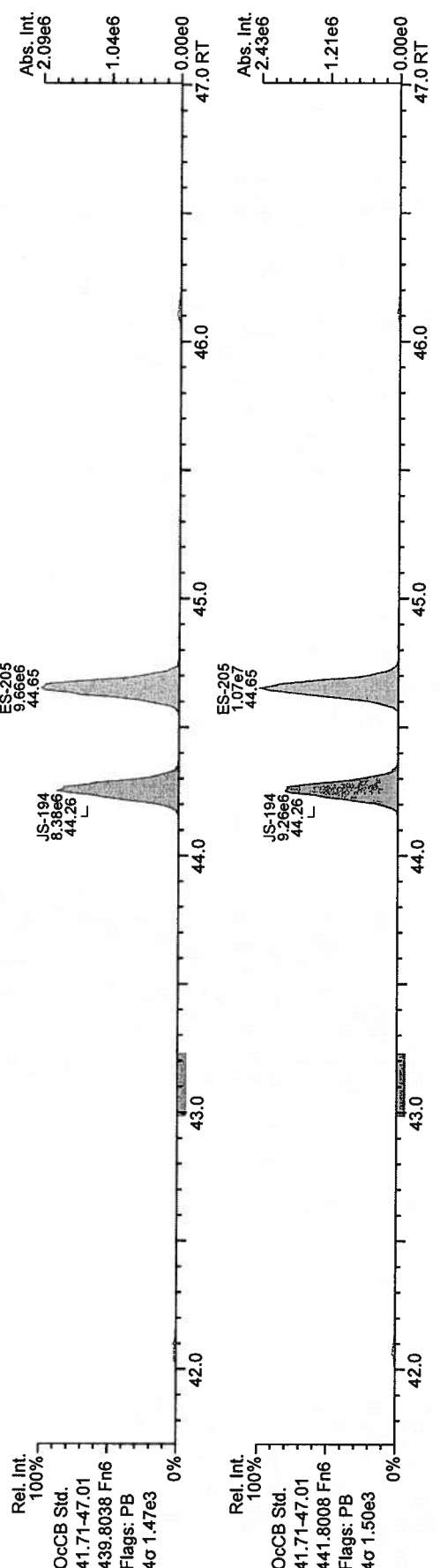
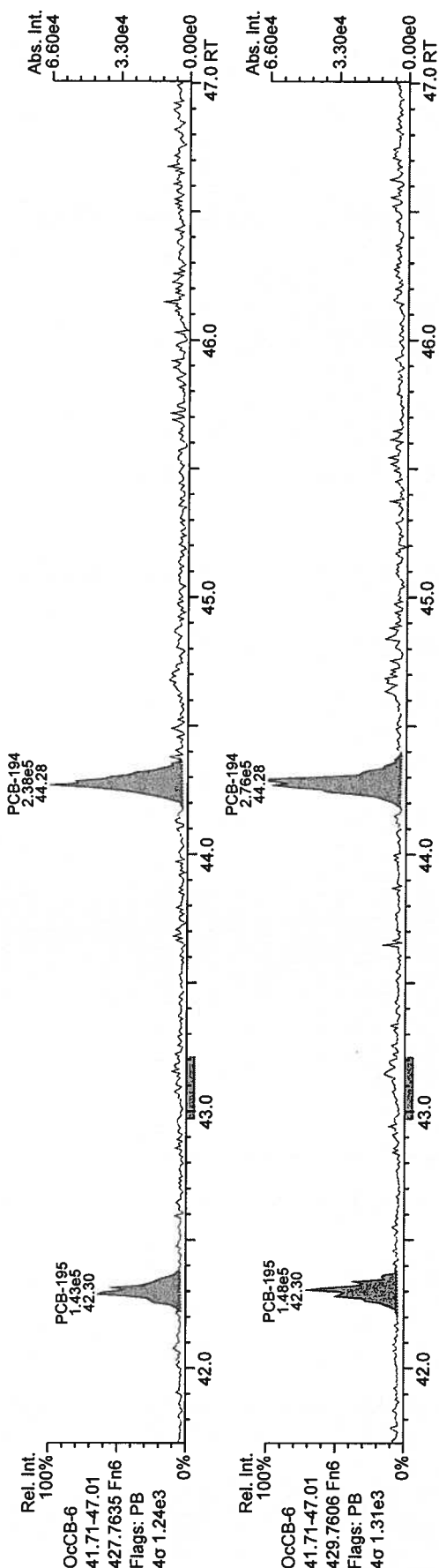


Rel. Int.  
100%  
OoCB Std.  
34.71-41.70  
441.8008 Fn5  
Flags: PB  
4σ 1.52e3



Rel. Int.  
100%  
QC Check  
34.71-41.70  
366.9792 Fn5  
Flags: -

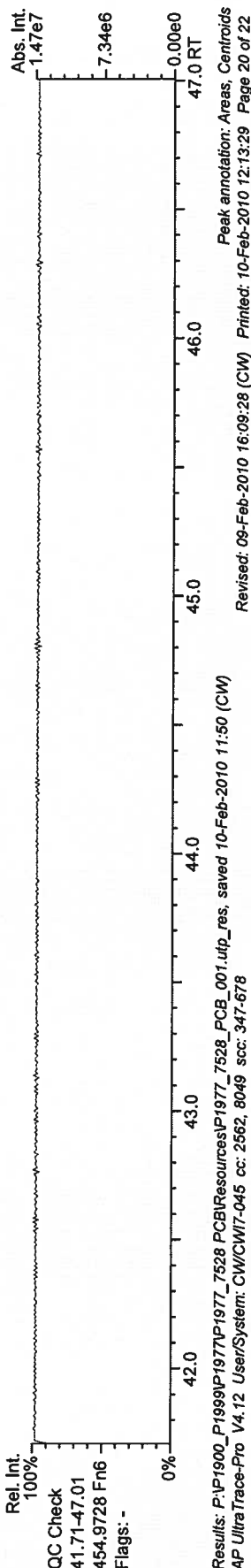
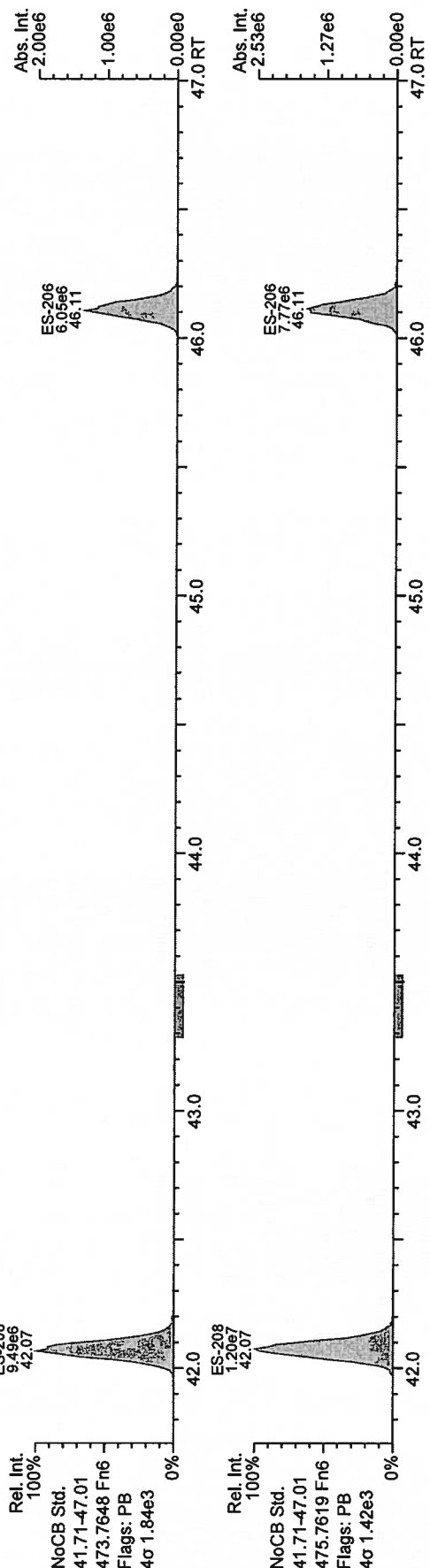
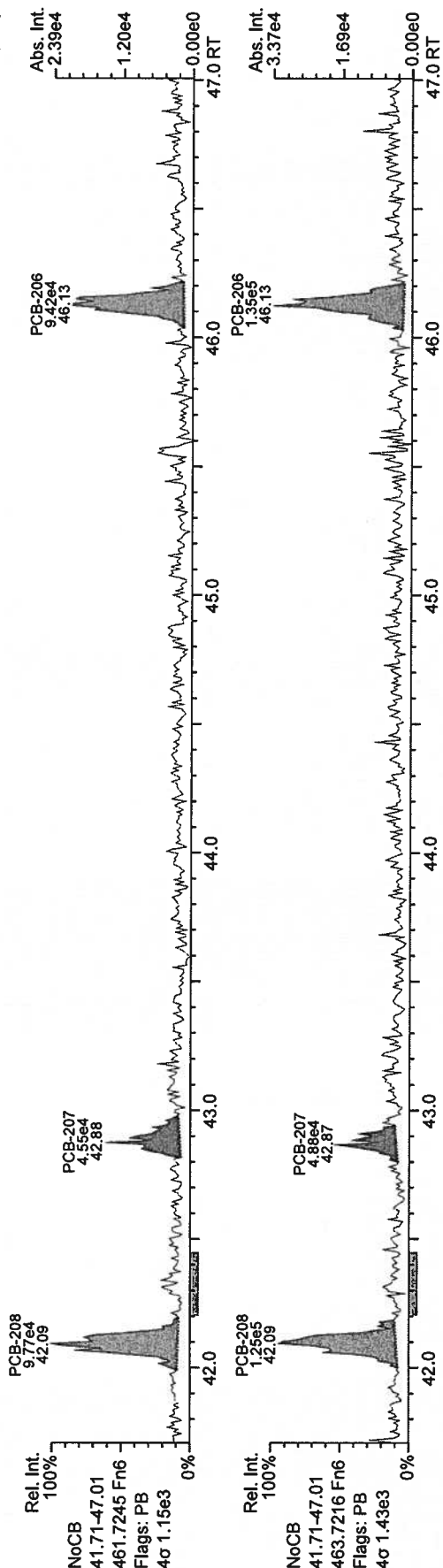




AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 31

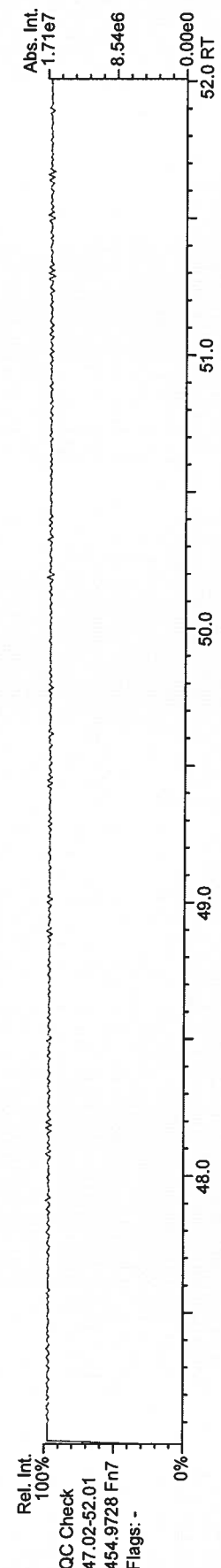
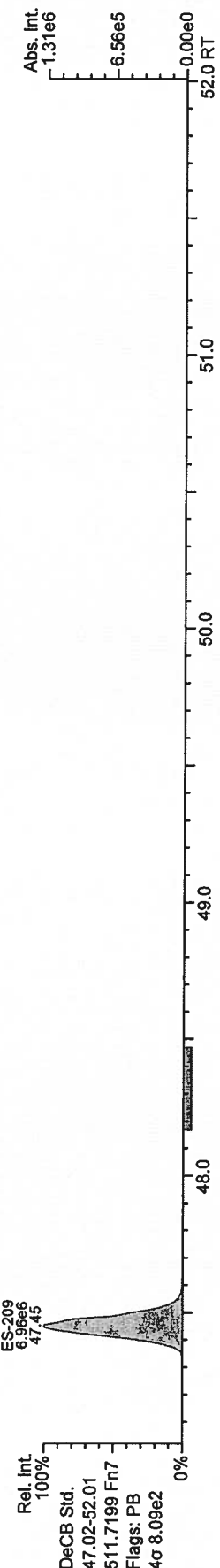
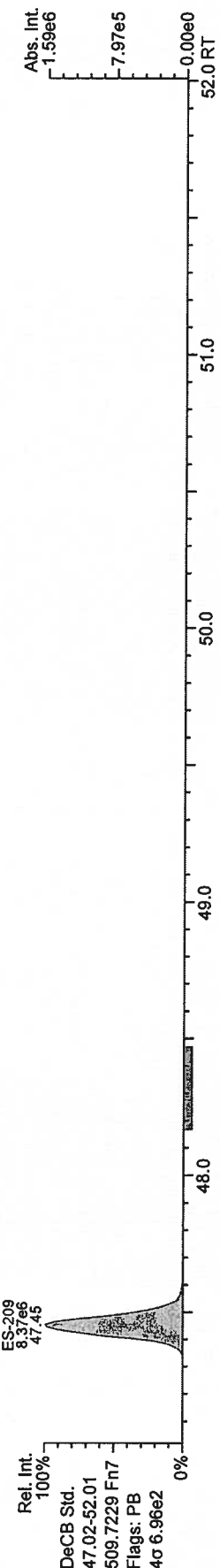
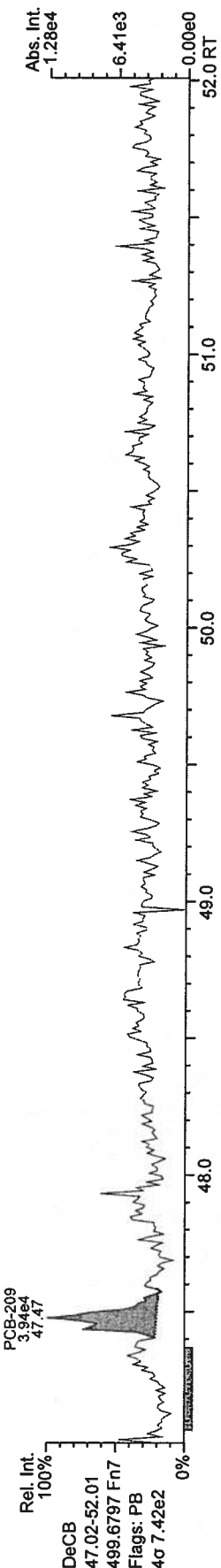
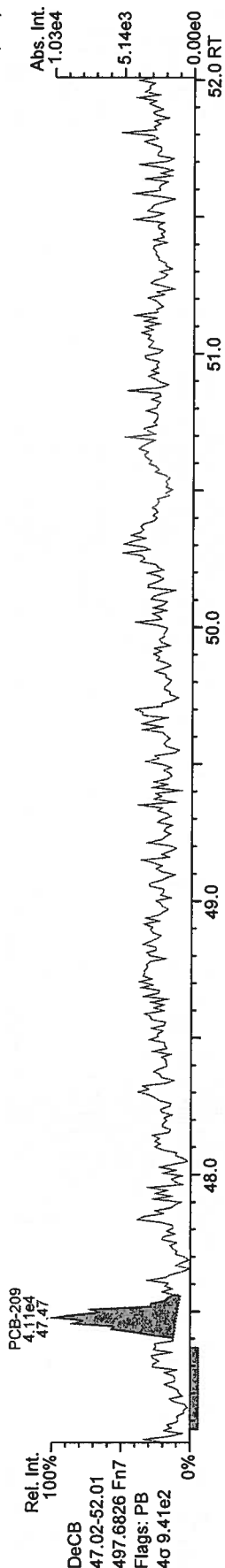
Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 31

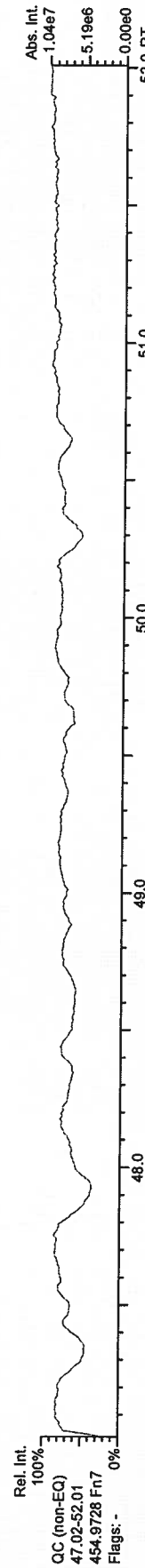
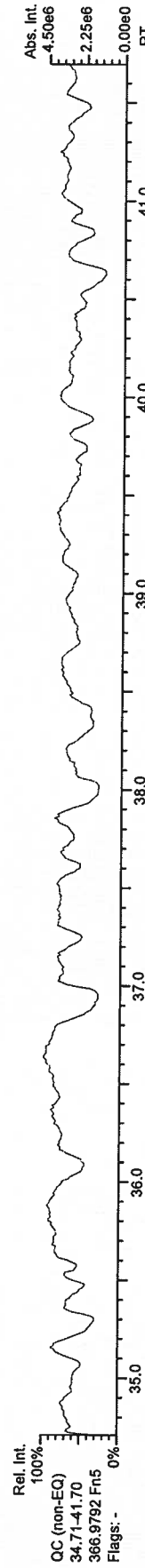
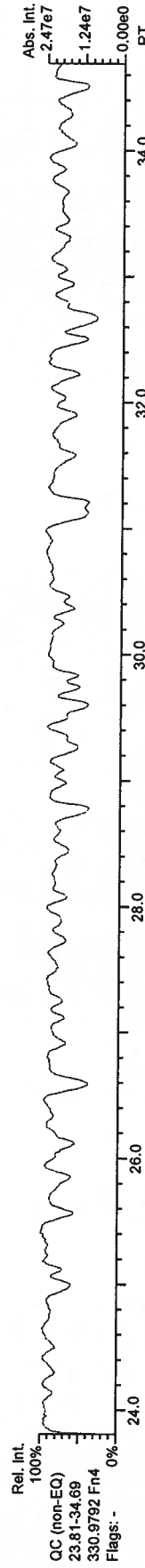
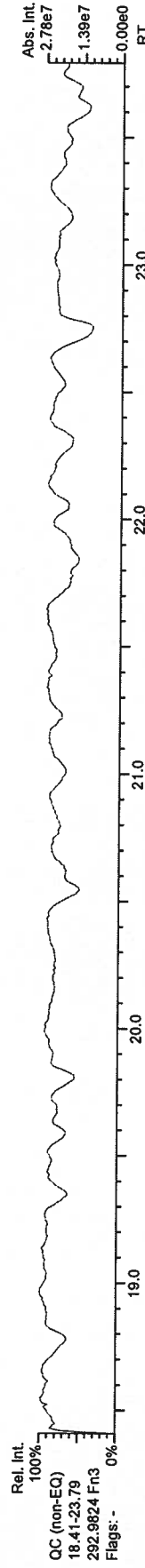
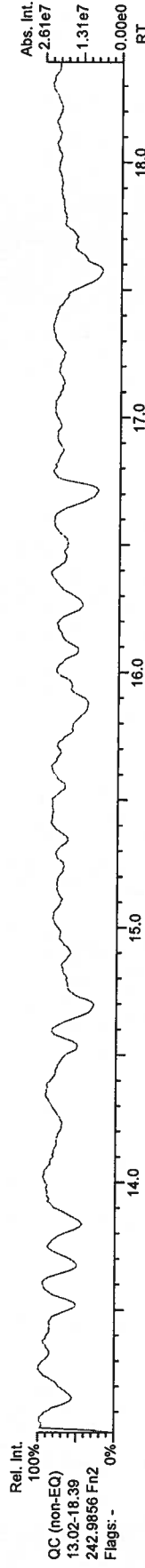
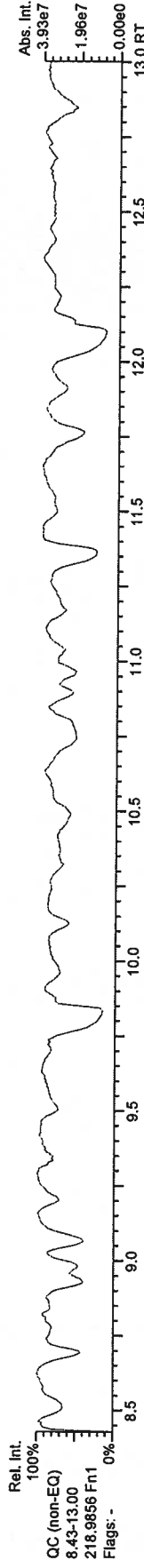
AP Lab ID: P1977\_7528 PCB\_001  
Instr: AutoSpec-Ultima MM4



AP Lab ID: P1977\_7528\_PCB\_001  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-Blank  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 31

Acq: 05-Feb-2010 01:37:11  
User: CW Datafile: 100204S13 (EQ)



Results: P:\P1900\_P1999\P1977\P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_001.utp\_res, saved 10-Feb-2010 11:50 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 scc: 347-678

Peak annotation: Areas, Centroids  
Revised: 09-Feb-2010 16:09:28 (CW) Printed: 10-Feb-2010 12:13:52 Page 22 of 22

P1977_7528_PCB_002		Actual	QC	Pred	Actual	Diff	Response	Ra	RRF	Conc	Checkcode:	
Name	RT			RRT	RRT	Secs					Noise	DL
PCB-77 33'44'-TeCB	29.46			1.0006	1.0006	0	1.96E+06	0.77	1.04	260	4.53E+03	6.39
PCB-81 344'5'-TeCB	28.98		J	1.0008	1.0005	-0.5	1.39E+05	0.77	1.05	18.4	4.53E+03	6.37
PCB-105 233'44'-PeCB	32.43			1.0007	1.0006	-0.2	2.44E+06	0.61	0.94	409	4.73E+03	8.19
PCB-114 2344'5'-PeCB	31.88			1.0007	1.0007	0	1.91E+05	0.66	0.93	32	4.73E+03	8.06
PCB-118 23'44'5'-PeCB	31.43			1.0007	1.0007	0	6.83E+06	0.62	0.95	1,120	4.73E+03	7.69
PCB-123 2'344'5'-PeCB	31.15			1.0006	1.0007	+0.2	1.58E+05	0.65	0.98	25.2	4.73E+03	7.8
PCB-126 33'44'5'-PeCB	NotFnd			1.0005	-		0.00E+00		0.95	ND	4.94E+03	8.82
PCB-156/157 233'44'5'/233'44'5'	37.56		C	1.0005	1.0001	-0.9	3.89E+05	1.14	0.93	81.2	3.49E+03	11.2
PCB-167 23'44'55'-HxCB	36.60			1.0006	1.0006	0	1.79E+05	1.19	0.96	39.1	3.49E+03	8.1
PCB-169 33'44'55'-HxCB	NotFnd			1.0005	-		0.00E+00		0.89	ND	3.49E+03	8.81
PCB-189 233'44'55'-HpCB	42.42		J	1.0004	1.0003	-0.3	3.18E+04	0.94	0.87	6.87	2.84E+03	6.6
PCB-209 DecB	47.40			1.0004	1.0005	+0.3	3.33E+04	1.00	1.05	12.7	2.86E+03	14
Recv.												
ES PCB-1	9.55			0.7029	0.7026	-0.2	2.88E+07	3.15	0.97	91.4	25	150
ES PCB-3	11.58			0.8512	0.8513	+0.1	3.02E+07	3.13	0.99	94.2	25	150
ES PCB-4	11.81			0.8680	0.8684	+0.3	2.65E+07	1.54	0.74	110	25	150
ES PCB-15	17.10			1.2558	1.2573	+1.5	3.54E+07	1.58	1.07	102	25	150
ES PCB-19	14.62			1.0748	1.0751	+0.3	2.43E+07	1.04	0.60	124	25	150
ES PCB-37	23.20			1.0877	1.0881	+0.6	3.14E+07	1.05	1.68	91.4	25	150
ES PCB-54	17.36			0.8143	0.8140	-0.3	3.31E+07	0.76	1.55	105	25	150
ES PCB-77	29.44			1.3802	1.3808	+1.1	2.90E+07	0.78	1.36	105	25	150
ES PCB-81	28.96			1.3579	1.3583	+0.7	2.87E+07	0.80	1.36	103	25	150
ES PCB-104	22.14			0.8145	0.8141	-0.5	2.83E+07	1.57	1.53	92.4	25	150
ES PCB-105	32.40			1.1915	1.1916	+0.2	2.54E+07	1.58	1.28	99.4	25	150
ES PCB-114	31.86			1.1714	1.1715	+0.2	2.56E+07	1.60	1.35	95.1	25	150
ES PCB-118	31.41			1.1548	1.1550	+0.4	2.56E+07	1.57	1.35	95	25	150
ES PCB-123	31.13			1.1446	1.1448	+0.4	2.56E+07	1.61	1.23	104	25	150
ES PCB-126	35.01			1.2874	1.2876	+0.4	2.47E+07	1.61	1.46	84.3	25	150
ES PCB-153	32.99			0.9690	0.9690	0	2.73E+07	1.25	1.18	101	25	150
ES PCB-155	27.00			0.7934	0.7930	-0.6	3.20E+07	1.26	1.45	96.7	25	150
ES PCB-156/157	37.56			1.1032	1.1033	+0.2	4.12E+07	1.27	1.13	80.1	25	150
ES PCB-167	36.58			1.0745	1.0746	+0.2	1.91E+07	1.26	1.11	75.4	25	150
ES PCB-169	40.29			1.1834	1.1835	+0.2	1.99E+07	1.23	1.09	79.8	25	150
ES PCB-170	39.79			0.9007	0.9006	-0.2	1.86E+07	1.04	1.30	128	25	150
ES PCB-180	38.72			0.8766	0.8766	0	2.41E+07	1.08	1.72	126	25	150
ES PCB-188	31.84			0.7211	0.7208	-0.6	3.75E+07	1.08	1.56	105	25	150
ES PCB-189	42.41			0.9600	0.9600	0	2.14E+07	1.04	2.04	93.9	25	150
ES PCB-202	36.38			0.8237	0.8234	-0.7	2.68E+07	0.90	1.26	93.3	25	150
ES PCB-205	44.57			1.0090	1.0090	0	1.52E+07	0.92	1.41	96.6	25	150
ES PCB-206	46.04			1.0422	1.0421	-0.3	1.05E+07	0.80	0.93	100	25	150
ES PCB-208	42.00			0.9510	0.9507	-0.8	1.57E+07	0.78	1.32	106	25	150
ES PCB-209	47.38			1.0729	1.0725	-1.1	1.00E+07	1.20	1.01	88.7	25	150

## P1977\_7528\_PCB\_002

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	$\beta\omega$ DL
SS PCB-28	19.74		0.9258	0.9256	-0.2	3.25E+07	1.04	1.04	99.8 %	30%	135%
SS PCB-111	29.47		1.0837	1.0837	0	2.42E+07	1.61	1.01	93.5 %	30%	135%
SS PCB-178	34.42		1.0113	1.0112	-0.2	2.42E+07	1.09	0.63	103 %	30%	135%
CS PCB-28	19.74		0.9258	0.9256	-0.2	3.25E+07	1.04	1.74	91.2 %	30%	135%
CS PCB-111	29.47		1.0837	1.0837	0	2.42E+07	1.61	1.25	96.9 %	30%	135%
CS PCB-178	34.42		1.0113	1.0112	-0.2	2.42E+07	1.09	0.98	108 %	30%	135%

## JS PCB-9

JS PCB-52	13.60					3.26E+07	1.60				
JS PCB-101	21.32					2.05E+07	0.79				
JS PCB-138	27.19					2.00E+07	1.59				
JS PCB-194	34.04					2.29E+07	1.27				
	44.18					1.12E+07	0.92				

Checkcode:

 $\beta\omega$ 

Totals

Mono-CBs 3,400

Di-CBs 26,100

Tri-CBs 15,200

Tetra-CB. 23,400

Penta-CB. 9,100

Hexa-CBs 6,310

Hepta-CB. 2,320

Octa-CBs 412

Nona-CBs 47.7

EMPC

3,400

26,100

15,200

23,400

9,160

6,310

2,320

421

47.7

DL

6.71

11.4

8.22

5.08

7.36

7.9

5.7

9.15

10.8

## PCB-1 2-MoCB

PCB-2 3-MoCB	9.56		1.0012	1.0011	-0.1	1.12E+07	3.12	1.18	1,320	8.35E+03	6.35
PCB-3 4-MoCB	11.42		0.9869	0.9869	0	5.51E+06	3.21	1.37	532	8.35E+03	6.04
PCB-4 22'-DiCB	11.59		1.0010	1.0010	0	1.37E+07	3.04	1.17	1,550	8.35E+03	7.07
PCB-10 26-DiCB	11.82	SI	1.0012	1.0012	0	5.46E+06	SI*	0.87	948	5.88E+03	7.69
PCB-9 25-DiCB	11.99	SI	1.0146	1.0153	+0.5	6.86E+05	SI*	1.27	81.7	5.88E+03	5.28
PCB-7 24-DiCB	13.61	SI	1.0011	1.0011	0	1.35E+06	SI*	1.22	125	1.52E+04	12.2
PCB-6 23'-DiCB	13.76	SI	1.0120	1.0120	0	2.79E+06	SI*	0.96	328	1.52E+04	15.4
PCB-5 23-DiCB	13.98	SI	1.0278	1.0280	+0.2	2.95E+06	SI*	1.22	274	1.52E+04	12.2
PCB-8 24'-DiCB	14.25	SI	1.0479	1.0480	+0.1	9.69E+05	SI*	0.92	119	1.52E+04	16.2
PCB-14 35-DiCB	14.37	SI	1.0562	1.0564	+0.2	1.55E+07	SI*	1.22	1,440	1.52E+04	12.2
PCB-11 33'-DiCB	NotFnd		0.9257	-		0.00E+00		1.00	ND	1.52E+04	14.9
PCB-13/12 34'-/34-DiCB	16.57	SI	0.9689	0.9688	-0.1	1.77E+08	SI*	0.95	21,100	1.52E+04	15.7
PCB-15 44'-DiCB	16.83	C SI	0.9851	0.9843	-0.8	2.97E+06	SI*	1.02	328	1.52E+04	14.5
PCB-19 22'-6-TrCB	17.11	SI	1.0008	1.0008	0	1.15E+07	SI*	0.98	1,320	1.52E+04	15.1
PCB-30/18 246-/22'5-TrCB	14.65		1.0011	1.0023	+1.1	2.36E+06	0.90	0.95	408	4.70E+03	6.66
PCB-17 22'4-TrCB	16.30	C	1.1132	1.1149	+1.7	1.33E+07	1.02	1.39	1,570	4.70E+03	4.56
PCB-27 23'6-TrCB	16.66		1.1393	1.1398	+0.5	6.44E+06	1.05	1.03	1,030	4.70E+03	6.14
PCB-24 236-TrCB	16.85		1.1522	1.1527	+0.5	1.17E+06	1.09	1.40	137	4.70E+03	4.51
PCB-16 22'3-TrCB	16.97		1.1602	1.1604	+0.2	3.33E+05	0.92	1.33	41.2	4.70E+03	4.75
	17.07		1.1668	1.1674	+0.6	4.79E+06	1.06	1.09	721	4.70E+03	5.78



## P1977\_7528\_PCB\_002

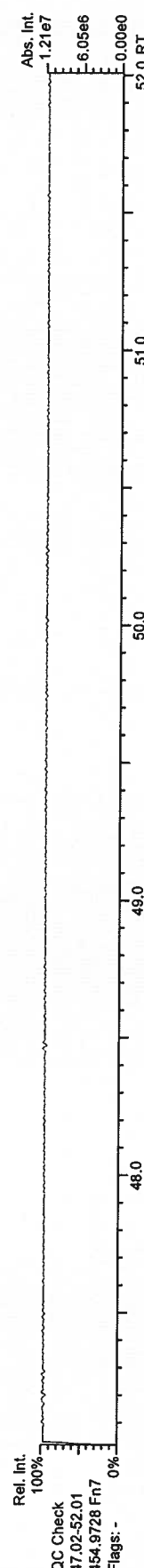
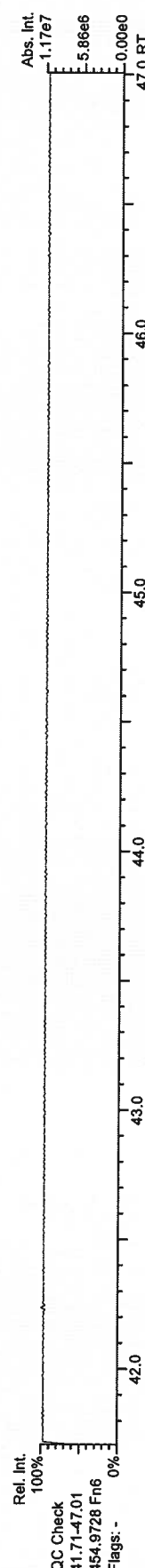
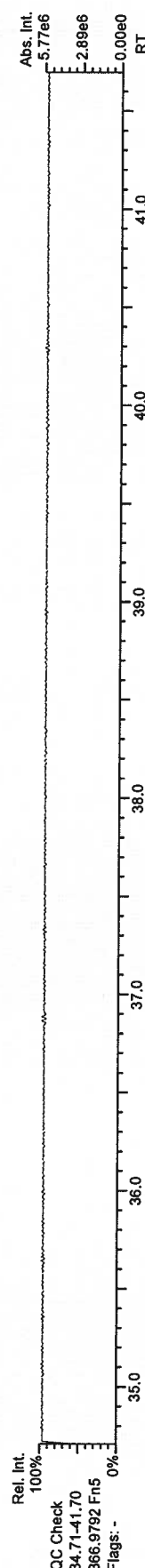
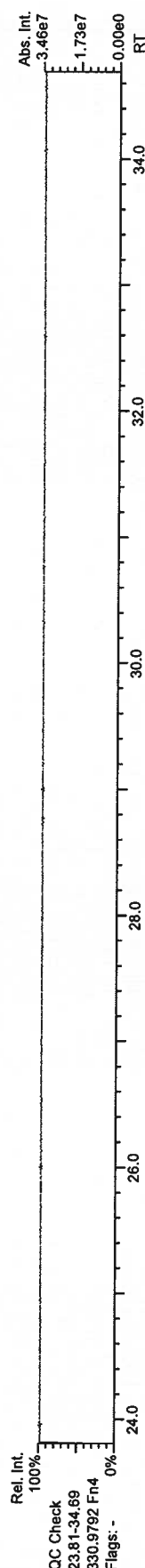
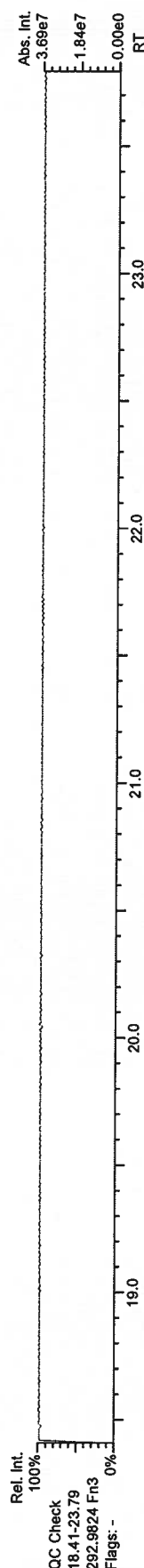
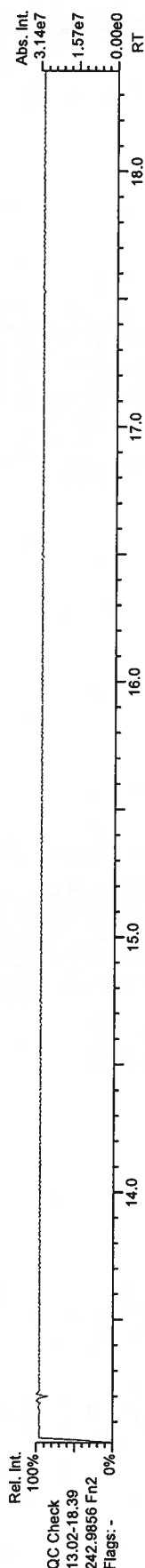
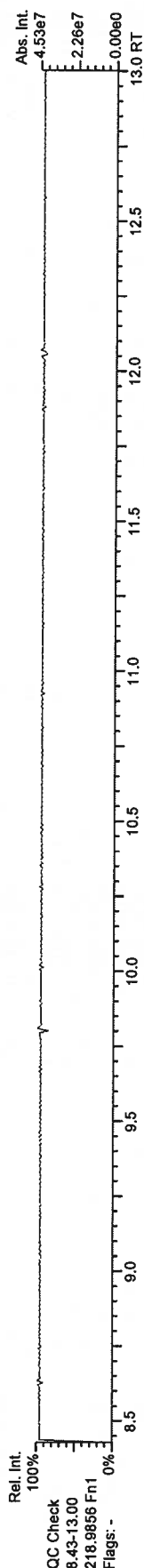
Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	βw DL
17.52		1.1978	1.1986	+0.8	5.97E+06	1.02	1.48	665	4.70E+03	4.29
18.63	J EMPC	0.8033	0.8030	-0.3	9.92E+04	0.81	1.04	12.2	6.71E+03	8.04
18.76	J	0.8090	0.8085	-0.6	9.97E+04	0.97	1.47	8.65	6.71E+03	5.69
19.03	C	0.8210	0.8200	-1.1	4.51E+06	1.03	1.09	530	6.71E+03	7.7
19.23		0.8292	0.8288	-0.5	2.15E+06	1.03	1.40	196	6.71E+03	5.97
19.50		0.8409	0.8405	-0.5	2.30E+07	1.03	1.13	2,600	6.71E+03	7.42
19.76	C	0.8524	0.8515	-1.1	2.72E+07	1.03	1.21	2,850	6.71E+03	6.89
19.96	C	0.8598	0.8605	+0.8	9.81E+06	1.04	1.19	1,650	6.71E+03	7.05
20.31		0.8755	0.8752	-0.4	3.63E+05	0.93	1.28	974	6.71E+03	6.51
21.66		0.9336	0.9334	-0.3	2.31E+05	0.92	1.27	36.4	6.71E+03	6.57
21.98	J	0.9469	0.9475	+0.8	1.28E+05	0.95	1.60	18.4	6.71E+03	5.23
22.47	J	0.9688	0.9684	-0.5	2.02E+06	1.00	1.02	288	6.71E+03	8.21
22.87		0.9856	0.9856	0	9.97E+06	1.05	0.85	1,490	6.71E+03	9.79
23.22		1.0008	1.0008	0	4.26E+04	0.81	0.95	5.38	2.67E+03	2.93
17.38	J	1.0010	1.0012	+0.2	1.41E+06	0.77	0.69	285	2.61E+03	5.58
19.26	C	0.9043	0.9032	-1.3	1.25E+06	0.72	0.65	268	2.61E+03	5.95
19.83		0.9305	0.9300	-0.6	6.51E+06	0.76	0.69	1,310	2.61E+03	5.58
19.91		0.9338	0.9335	-0.4	6.17E+05	0.79	0.62	138	2.61E+03	6.18
20.11		0.9435	0.9433	-0.2	1.30E+07	0.77	0.94	1,940	2.61E+03	4.11
21.35		1.0010	1.0010	0	0.00E+00	0.83	0.83	ND	2.61E+03	4.65
NotFnd		1.0067	-		4.14E+05	0.81	0.70	82.2	2.61E+03	5.49
21.55		1.0106	1.0105	-0.1	7.95E+06	0.77	0.97	1,150	2.61E+03	3.99
21.76	C	1.0198	1.0207	+1.2	2.71E+06	0.77	0.75	502	2.61E+03	5.13
22.01		1.0323	1.0322	-0.1	4.97E+07	0.77	0.83	8,360	2.61E+03	4.64
22.23	C	1.0420	1.0426	+0.8	1.44E+06	0.77	1.14	175	2.61E+03	3.36
22.48	C	1.0544	1.0544	0	3.03E+06	0.78	0.70	608	2.61E+03	5.54
22.66		1.0624	1.0624	0	1.32E+06	0.78	0.60	307	2.61E+03	6.4
22.97		1.0773	1.0773	0	5.28E+06	0.78	0.90	818	2.61E+03	4.28
23.08	C	1.0822	1.0822	0	6.16E+06	0.77	1.25	687	2.61E+03	3.08
23.27		1.0912	1.0912	0	1.14E+05	0.71	1.36	11.7	4.53E+03	4.92
23.99	J	0.8282	0.8284	+0.3	5.32E+06	0.78	1.73	429	4.53E+03	3.87
24.24		0.8368	0.8368	0	1.42E+05	0.83	1.12	17.7	4.53E+03	5.99
24.59	J	0.8491	0.8491	0	0.00E+00	0.76	1.29	ND	4.53E+03	5.19
NotFnd		0.8562	-		8.23E+05	0.76	1.48	77.4	4.53E+03	4.51
24.94		0.8612	0.8612	0	6.92E+05	0.81	1.53	63.3	4.53E+03	4.38
25.17		0.8690	0.8689	-0.2	2.80E+07	0.77	1.28	3,050	4.53E+03	5.22
25.47	C	0.8788	0.8793	+0.8	1.39E+07	0.78	1.38	1,400	4.53E+03	4.84
25.73		0.8884	0.8884	0	4.59E+05	0.82	1.20	53.5	4.53E+03	5.59
25.87		0.8933	0.8933	0	7.24E+06	0.76	1.36	743	4.53E+03	4.92
26.30		0.9081	0.9081	0	4.90E+06	0.79	1.16	588	4.53E+03	5.76
26.49		0.9145	0.9145	0	0.00E+00	0.71	1.74	ND	4.53E+03	3.85
NotFnd		0.9263	-		2.04E+05	0.71	1.49	19.1	4.53E+03	4.48
28.13	J	0.9712	0.9712	0	0.00E+00	0.99	1.21	ND	4.53E+03	5.52
NotFnd		0.9876	-		1.00E+00	0.56	0.99	ND	2.63E+03	3.6
NotFnd		1.0009	-		2.06E+05	0.56	1.11	16.1	2.63E+03	3.19
22.48	J	1.0152	1.0153	+0.1	8.04E+04	0.56	0.94	13.4	4.73E+03	8.19
24.14	J	0.8879	0.8876	-0.4						

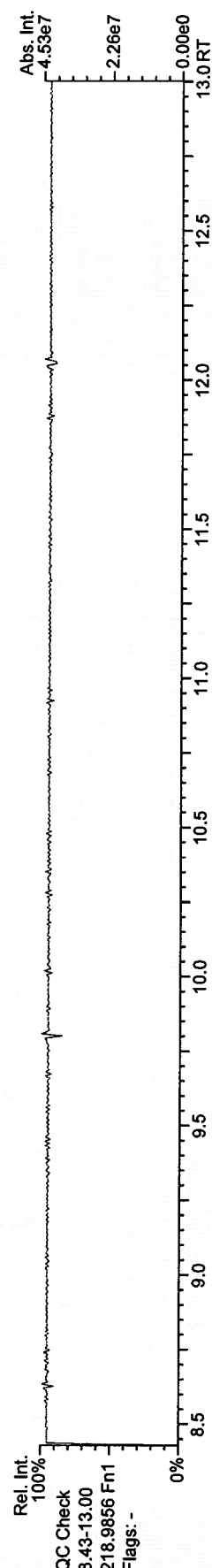
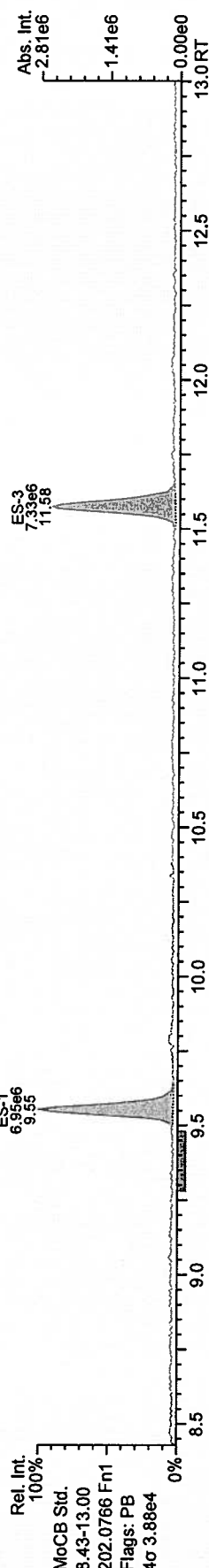
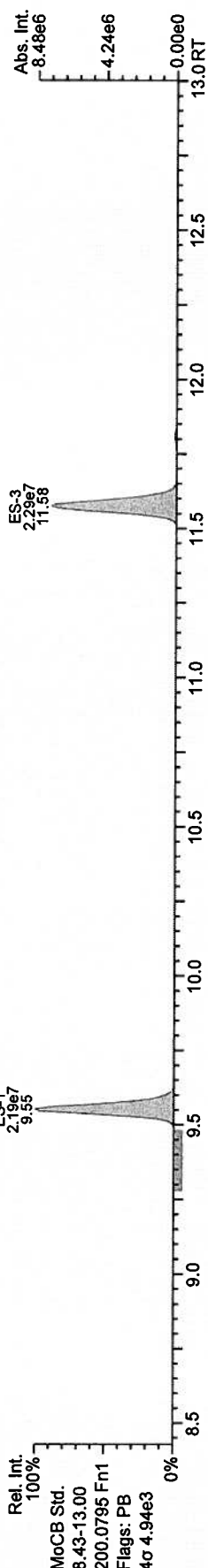
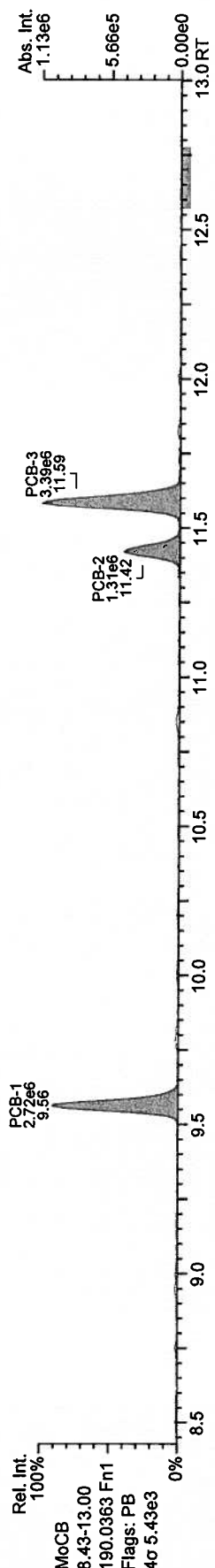
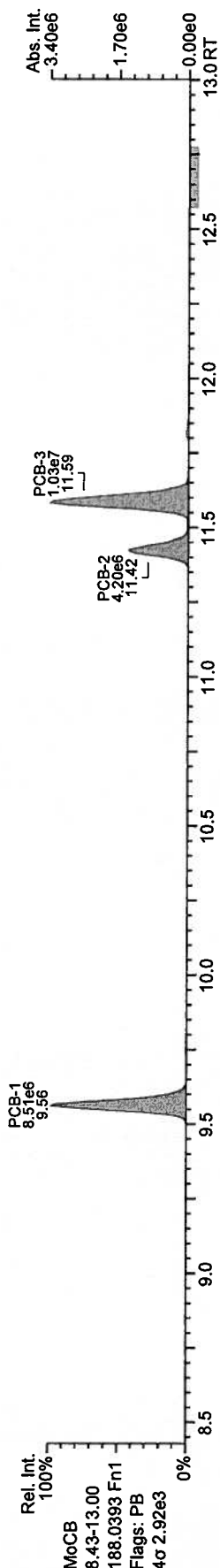
## P1977\_7528\_PCB\_002

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	Checkcode:	βw DL
PCB-94 22'356'-PeCB	NotFnd		0.8949	-		0.00E+00		1.11	ND	4.73E+03		6.93
PCB-95 22'35'6'-PeCB	24.71		0.9088	0.9086	-0.3	6.99E+06	0.64	0.89	1,230	4.73E+03		8.65
PCB-100/93 22'44'6-/22'356-P	24.89	J C	0.9159	0.9152	-1.0	8.71E+04	0.60	0.82	16.7	4.73E+03		9.39
PCB-102 22'456'-PeCB	25.02		0.9200	0.9199	-0.2	2.90E+05	0.54	0.75	60.5	4.73E+03		10.2
PCB-98 22'3'46-PeCB	NotFnd		0.9224	-		0.00E+00		1.03	ND	4.73E+03		7.41
PCB-88 22'346-PeCB	NotFnd		0.9330	-		0.00E+00		1.05	ND	4.73E+03		7.31
PCB-91 22'34'6-PeCB	25.44		0.9359	0.9357	-0.3	1.19E+06	0.63	1.11	167	4.73E+03		6.89
PCB-84 22'33'6-PeCB	25.64		0.9429	0.9427	-0.3	1.98E+06	0.61	0.75	414	4.73E+03		10.2
PCB-89 22'346'-PeCB	26.04		0.9579	0.9576	-0.5	1.23E+05	0.64	0.87	22	4.73E+03		8.79
PCB-121 23'45'6-PeCB	NotFnd		0.9708	-		0.00E+00		1.55	ND	4.73E+03		4.96
PCB-92 22'355'-PeCB	26.72		0.9825	0.9825	0	1.44E+06	0.58	0.81	278	4.73E+03		9.45
PCB-113/90/101 233'5'6-/22'3	27.22	C	0.9999	1.0008	+1.5	1.04E+07	0.61	0.90	1,810	4.73E+03		8.51
PCB-83 22'33'5-PeCB	27.59		1.0155	1.0147	-1.3	5.59E+05	0.53	0.72	122	4.73E+03		10.7
PCB-99 22'44'5-PeCB	27.70		1.0189	1.0187	-0.3	4.00E+06	0.61	1.16	540	4.73E+03		6.61
PCB-112 233'56-PeCB	NotFnd		1.0227	-		0.00E+00		1.18	ND	4.73E+03		6.47
PCB-108/119/86/97/125/87 233	28.17	C	1.0354	1.0359	+0.8	7.81E+06	0.59	1.11	1,100	4.73E+03		6.93
PCB-117 234'56-PeCB	28.67	EMPC	1.0543	1.0541	-0.3	2.24E+05	0.72	0.85	41.1	4.73E+03		9.01
PCB-116/85 23456-/22'344'-Pe	28.75	C	1.0573	1.0571	-0.3	1.47E+06	0.59	1.24	186	4.73E+03		6.2
PCB-110 233'4'6-PeCB	28.89		1.0625	1.0623	-0.3	1.11E+07	0.61	1.41	1,230	4.73E+03		5.44
PCB-115 2344'6-PeCB	NotFnd		1.0651	-		0.00E+00		1.08	ND	4.73E+03		7.06
PCB-82 22'33'4-PeCB	29.16		1.0724	1.0721	-0.5	8.48E+05	0.62	0.87	152	4.73E+03		8.8
PCB-111 233'55'-PeCB	NotFnd		1.0845	-		0.00E+00		1.58	ND	4.73E+03		4.85
PCB-120 23'455'-PeCB	NotFnd		0.9988	-		0.00E+00		1.22	ND	4.73E+03		6.26
PCB-107/124 233'4'5-/2'3455'	30.85	C	0.9908	0.9910	+0.4	3.43E+05	0.62	1.06	50.5	4.73E+03		7.22
PCB-109 233'46-PeCB	31.05		0.9974	0.9975	+0.2	5.42E+05	0.66	1.19	71.3	4.73E+03		6.45
PCB-106 233'45-PeCB	31.22	J EMPC	1.0039	1.0029	-1.9	1.15E+05	0.43	1.21	14.9	4.73E+03		6.36
PCB-122 2'33'45-PeCB	31.72	J	1.0100	1.0100	0	9.67E+04	0.69	0.80	18.9	4.73E+03		9.41
PCB-127 33'455'-PeCB	NotFnd		1.0390	-		0.00E+00		1.00	ND	4.73E+03		7.66
PCB-155 22'44'66'-HxCB	27.02		1.0008	1.0008	0	2.00E+05	1.16	0.99	25.3	2.62E+03		3.45
PCB-152 22'3566'-HxCB	NotFnd		1.0069	-		0.00E+00		1.18	ND	2.62E+03		2.89
PCB-150 22'34'66'-HxCB	27.33	J	1.0122	1.0123	+0.2	4.69E+04	1.24	1.43	4.11	2.62E+03		2.38
PCB-136 22'33'66'-HxCB	27.63		1.0235	1.0237	+0.3	2.05E+06	1.26	0.98	261	2.62E+03		3.46
PCB-145 22'3466'HxCB	NotFnd		1.0329	-		0.00E+00		0.96	ND	2.62E+03		3.54
PCB-148 22'34'56'-HxCB	NotFnd		1.0803	-		0.00E+00		1.25	ND	2.62E+03		3.11
PCB-151/135 22'355'6-/22'33'	29.68	C	1.0995	1.0995	0	3.71E+06	1.28	0.88	617	2.62E+03		4.42
PCB-154 22'44'5'6-HxCB	29.89		1.1069	1.1070	+0.2	1.31E+05	1.11	0.88	21.7	2.62E+03		4.42
PCB-144 22'345'6-HxCB	30.15		1.1166	1.1170	+0.7	6.13E+05	1.30	0.91	98.1	2.62E+03		4.26
PCB-147/149 22'34'56-/22'34'	30.45	C	1.1278	1.1281	+0.5	8.30E+06	1.22	1.04	1,170	2.62E+03		3.75
PCB-134 22'33'56-HxCB	30.63		1.1339	1.1346	+1.3	4.40E+05	1.26	0.68	94.9	2.62E+03		5.74
PCB-143 22'3456'-HxCB	NotFnd		1.1369	-		0.00E+00		1.25	ND	2.62E+03		3.12
PCB-139/140 22'344'6-/22'344'	30.95	J C	1.1466	1.1466	0	1.87E+05	1.40	1.06	25.7	2.62E+03		3.67
PCB-131 22'33'46-HxCB	31.13	J	1.1529	1.1532	+0.6	1.12E+05	1.12	0.83	19.9	2.62E+03		4.7
PCB-142 22'3456-HxCB	NotFnd		1.1578	-		0.00E+00		1.09	ND	2.62E+03		3.57
PCB-132 22'33'46'-HxCB	31.52		1.1672	1.1677	+0.9	2.65E+06	1.22	0.88	438	2.62E+03		4.4
PCB-133 22'33'55'-HxCB	31.94		1.1827	1.1833	+1.1	1.19E+05	1.35	0.84	20.7	2.62E+03		4.63
PCB-165 233'55'6-HxCB	NotFnd		0.9483	-		0.00E+00		0.91	ND	2.62E+03		4.28
PCB-146 22'34'55'-HxCB	32.49		0.9545	0.9543	-0.4	1.23E+06	1.19	1.13	159	2.62E+03		3.45

P1977\_7528\_PCB\_002

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	βw DL
PCB-161 233'45'6"-HxCB	NotFnd		0.9578	-		0.00E+00		1.09	ND	2.62E+03	3.56
PCB-153/168 22'44'55'"/-23'44'	33.01	C	0.9703	0.9696	-1.4	9.52E+06	1.29	1.15	1,210	2.62E+03	3.39
PCB-141 22'3455'-HxCB	33.18		0.9746	0.9746	0	1.85E+06	1.24	0.85	316	2.62E+03	4.56
PCB-130 22'33'45'-HxCB	33.52		0.9847	0.9847	0	4.01E+05	1.34	0.66	88.3	2.62E+03	5.86
PCB-137 22'344'5"-HxCB	33.70		0.9902	0.9901	-0.2	3.09E+05	1.16	1.13	39.9	2.62E+03	3.44
PCB-164 233'4'5'6"-HxCB	33.80		0.9930	0.9930	0	6.79E+05	1.34	1.15	86.2	2.62E+03	3.38
PCB-163/138/129 233'4'56'"/-22'	34.07	C	1.0012	1.0008	-0.8	8.22E+06	1.24	0.99	1,220	2.62E+03	3.95
PCB-160 233'456"-HxCB	NotFnd		1.0048	-		0.00E+00		1.58	ND	2.62E+03	2.47
PCB-158 233'44'6"-HxCB	34.39		1.0104	1.0104	0	1.09E+06	1.28	1.22	130	2.62E+03	3.18
PCB-128/166 22'33'44'"/-2344'5	35.14	C	0.9601	0.9606	+1.1	6.63E+05	1.29	1.00	139	3.49E+03	7.75
PCB-159 233'455'-HxCB	NotFnd		0.9829	-		0.00E+00		1.16	ND	3.49E+03	6.68
PCB-162 233'4'55'-HxCB	NotFnd		0.9895	-		0.00E+00		1.49	ND	3.49E+03	5.19
PCB-188 22'34'566'"-HxCB	31.87	J	1.0007	1.0007	0	3.74E+04	1.10	0.97	4.11	2.89E+03	3.32
PCB-179 22'33'566'"-HxCB	32.15		1.0096	1.0097	+0.2	1.62E+06	1.08	1.13	152	2.89E+03	2.83
PCB-184 22'344'66'-HxCB	32.60	J	1.0236	1.0237	+0.2	1.12E+05	1.16	1.01	11.8	2.89E+03	3.17
PCB-176 22'33'466'-HxCB	32.90		1.0330	1.0332	+0.4	4.90E+05	1.04	1.17	44.7	2.89E+03	2.74
PCB-186 22'34566'-HxCB	NotFnd		1.0452	-		0.00E+00		0.98	ND	2.89E+03	3.26
PCB-178 22'33'55'6"-HxCB	34.44		1.0814	1.0815	+0.2	5.47E+05	1.03	0.73	79.5	2.89E+03	4.38
PCB-175 22'33'45'6"-HxCB	34.98		1.0983	1.0984	+0.2	8.85E+04	1.16	0.72	20.5	2.69E+03	6.59
PCB-187 22'34'55'6"-HxCB	35.20		1.1055	1.1055	0	2.44E+06	1.01	1.01	400	2.69E+03	4.68
PCB-182 22'344'56'-HxCB	NotFnd		1.1109	-		0.00E+00		0.97	ND	2.69E+03	4.88
PCB-183 22'344'5'6"-HxCB	35.72		1.1215	1.1217	+0.4	1.05E+06	1.01	0.89	196	2.69E+03	5.3
PCB-185 22'3455'6"-HxCB	35.81		1.1242	1.1245	+0.6	1.41E+05	0.99	0.95	24.6	2.69E+03	4.97
PCB-174 22'33'456'-HxCB	35.93		1.1280	1.1282	+0.4	1.44E+06	0.99	0.95	253	2.69E+03	5.01
PCB-177 22'33'4'56"-HxCB	36.30		1.1396	1.1398	+0.4	7.28E+05	1.02	0.90	134	2.69E+03	5.24
PCB-181 22'344'56"-HxCB	NotFnd		1.1501	-		0.00E+00		0.77	ND	2.69E+03	6.11
PCB-171/173 22'33'44'6'"/-22'3	36.82	C	1.1559	1.1564	+1.1	5.15E+05	1.10	0.82	105	2.69E+03	5.8
PCB-172 22'33'455'-HxCB	38.19		0.9006	0.9006	0	2.19E+05	1.01	0.75	48.3	2.69E+03	6.28
PCB-192 233'455'6"-HxCB	NotFnd		0.9062	-		0.00E+00		1.00	ND	2.69E+03	4.73
PCB-180/193 22'344'55'"/-233'	38.74	C	0.9130	0.9135	+1.2	2.92E+06	1.01	0.73	661	2.69E+03	6.45
PCB-191 233'44'5'6"-HxCB	39.04	J	0.9206	0.9206	0	6.46E+04	1.16	0.96	11.2	2.69E+03	4.95
PCB-170 22'33'44'5"-HxCB	39.81		0.9387	0.9387	0	8.56E+05	0.95	1.36	135	2.69E+03	4.51
PCB-190 233'44'56"-HxCB	40.25		0.9492	0.9490	-0.5	2.28E+05	1.07	1.31	37.3	2.69E+03	4.7
PCB-202 22'33'55'66'-OCCB	36.40		1.0006	1.0006	0	2.97E+05	0.93	0.87	51	4.43E+03	8.13
PCB-201 22'33'45'66'-OCCB	37.17		1.0220	1.0219	-0.2	1.73E+05	0.80	0.81	32	4.43E+03	8.76
PCB-204 22'344'566' "-OCCB	NotFnd		1.0376	-		0.00E+00		1.00	ND	4.43E+03	7.09
PCB-197 22'33'44'66'-OCCB	37.93	J EMPC	1.0429	1.0426	-0.7	5.56E+04	0.70	0.96	8.63	4.43E+03	7.35
PCB-200 22'33'4566' "-OCCB	38.03		1.0455	1.0456	+0.2	1.19E+05	0.94	0.75	23.6	4.43E+03	9.4
PCB-198/199 22'33'455'6'"/-22'	40.39	C	1.1098	1.1105	+1.7	5.97E+05	0.99	0.75	118	4.43E+03	9.36
PCB-196 22'33'44'56'-OCCB	40.94		1.1255	1.1255	0	2.39E+05	0.97	0.69	51.9	4.43E+03	10.3
PCB-203 22'344'55'6"-OCCB	41.11		1.1300	1.1300	0	3.54E+05	0.90	0.88	60	4.43E+03	8.02
PCB-195 22'33'44'56"-OCCB	42.22		0.9475	0.9472	-0.8	1.06E+05	0.85	0.97	28.8	3.36E+03	10.2
PCB-194 22'33'44'55'-OCCB	44.19		0.9915	0.9914	-0.3	1.80E+05	0.98	1.01	46.7	3.36E+03	9.73
PCB-205 233'44'55'6"-OCCB	NotFnd		1.0004	-		0.00E+00		0.97	ND	3.36E+03	10.2
PCB-208 22'33'455'66' "-NoCB	42.02	J	1.0005	1.0004	-0.3	7.03E+04	0.70	0.95	18.9	2.98E+03	9.29
PCB-207 22'33'44'566' "-NoCB	NotFnd		1.0191	-		0.00E+00		1.04	ND	2.98E+03	8.48
PCB-206 22'33'44'55'6"-NoCB	46.05		1.0004	1.0003	-0.3	8.05E+04	0.81	1.07	28.8	2.98E+03	12.3

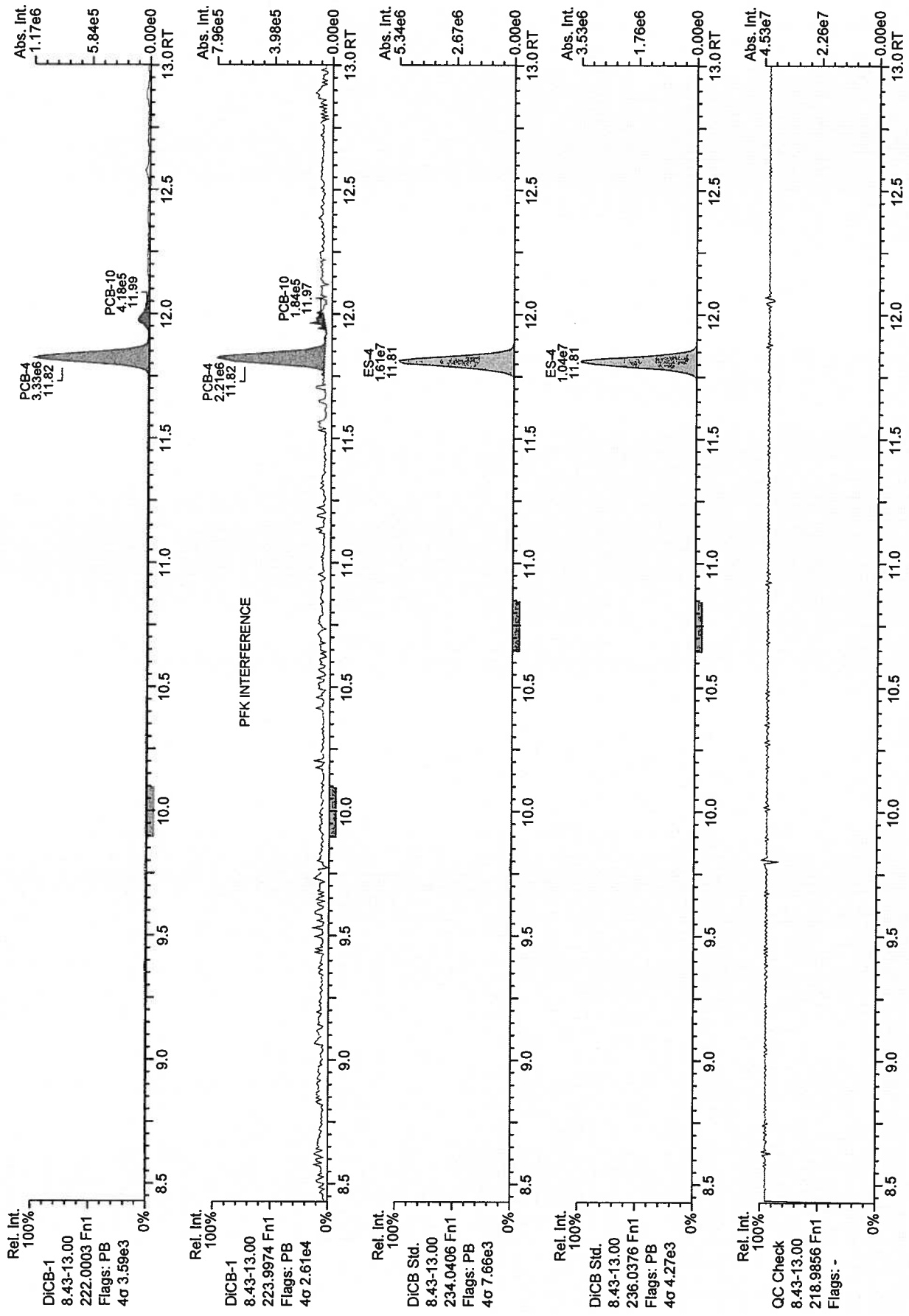




AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 32

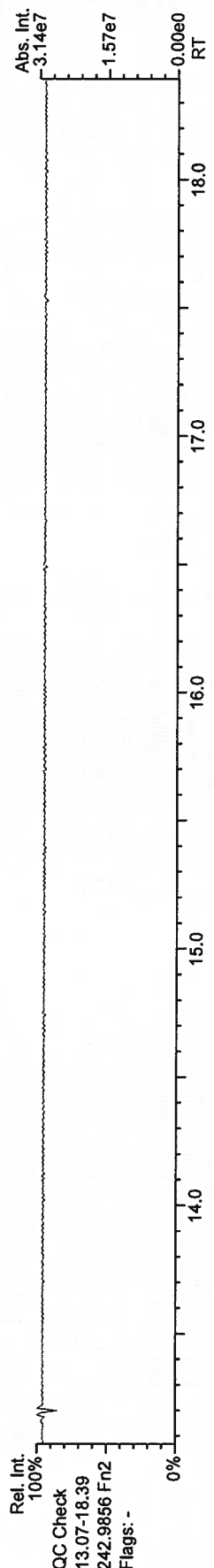
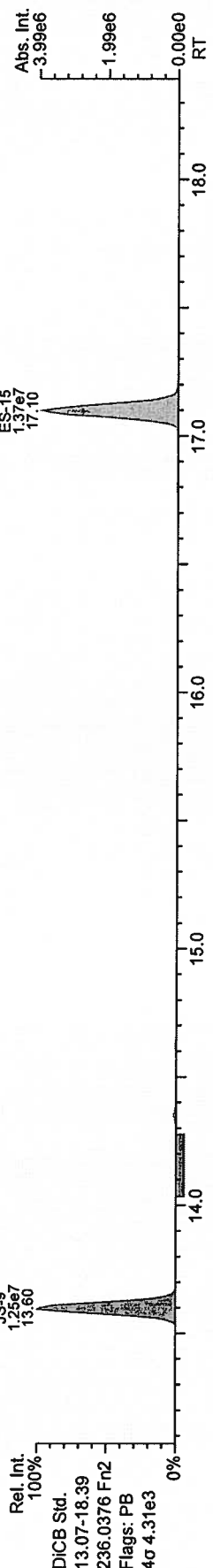
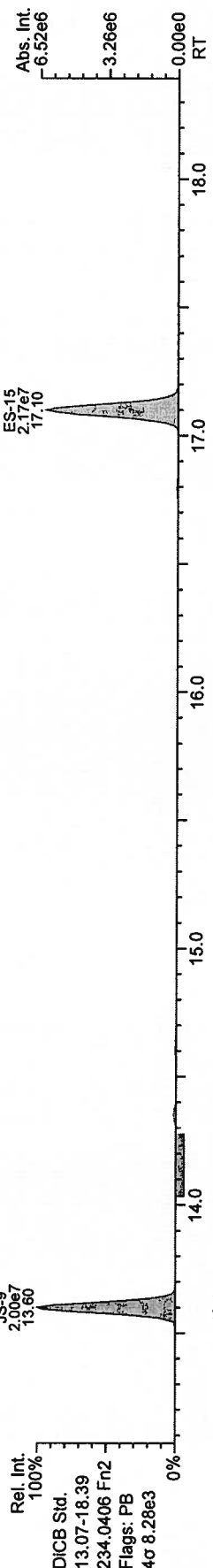
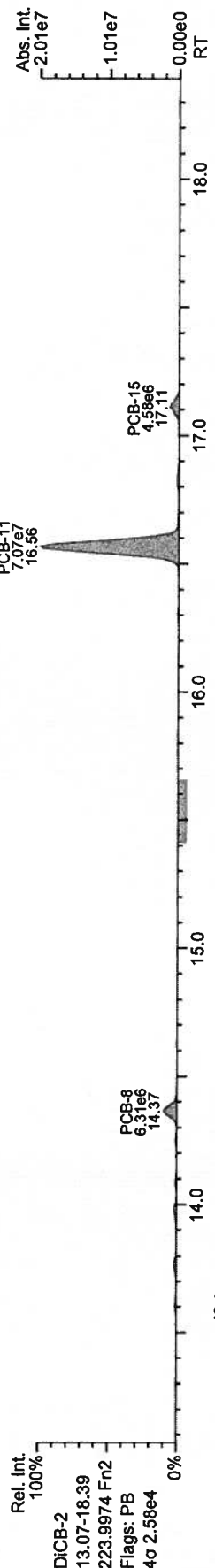
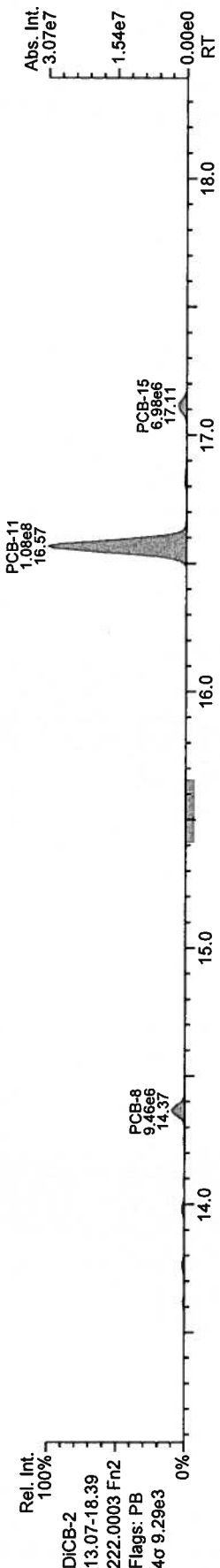
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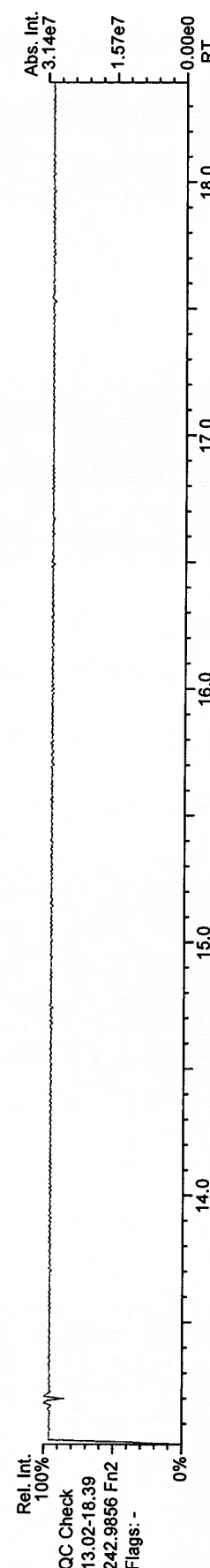
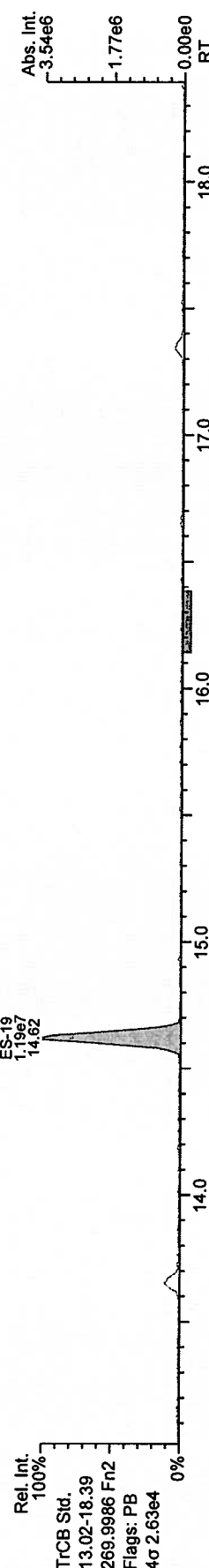
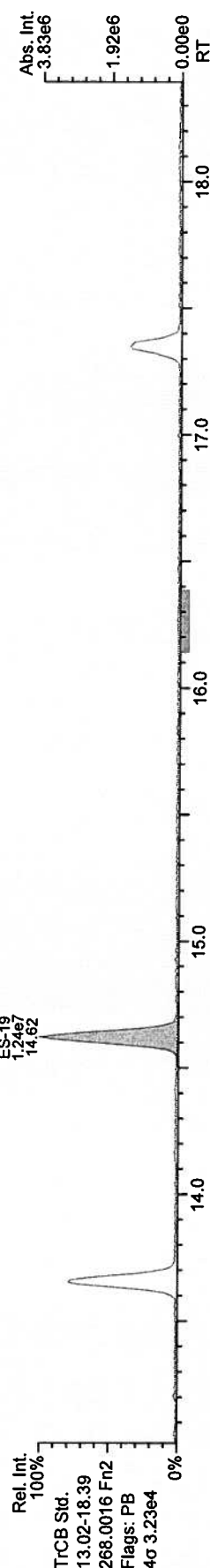
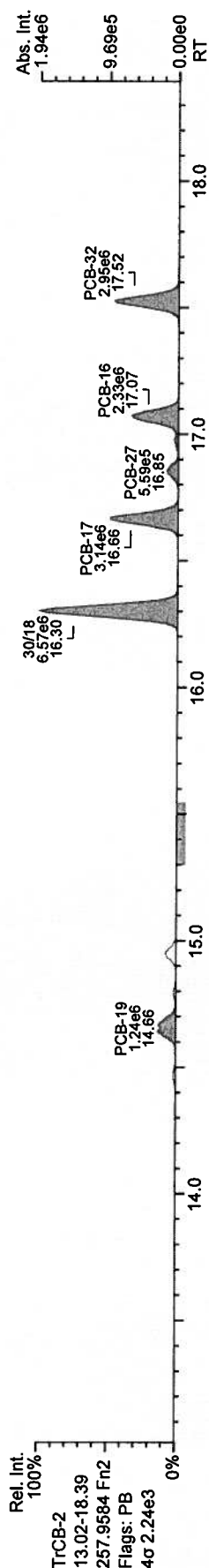
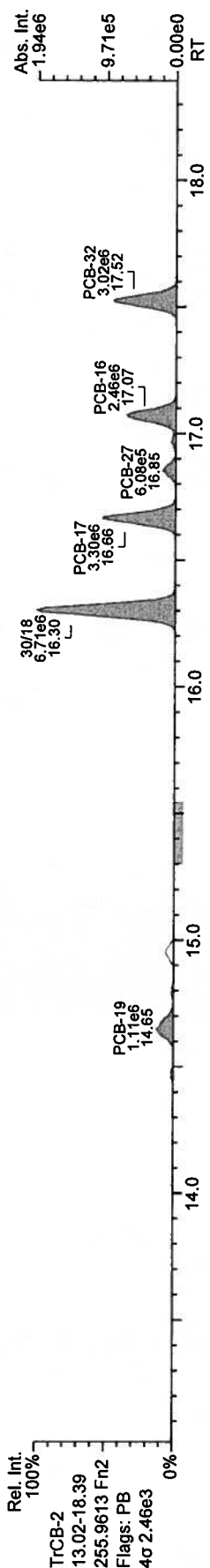


AP Lab ID: P1977\_7528\_PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)



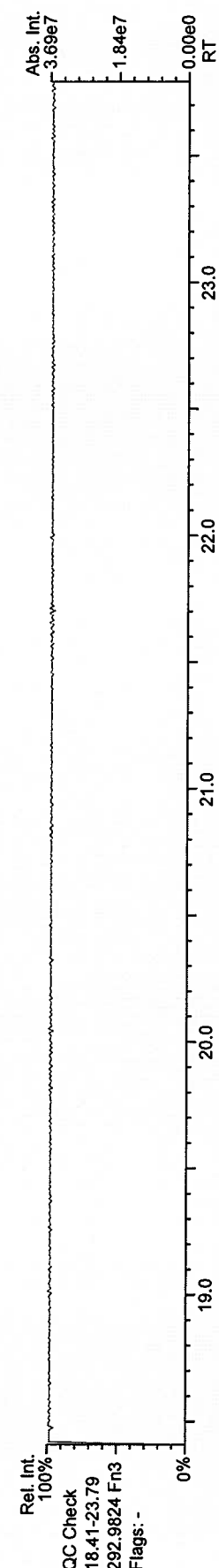
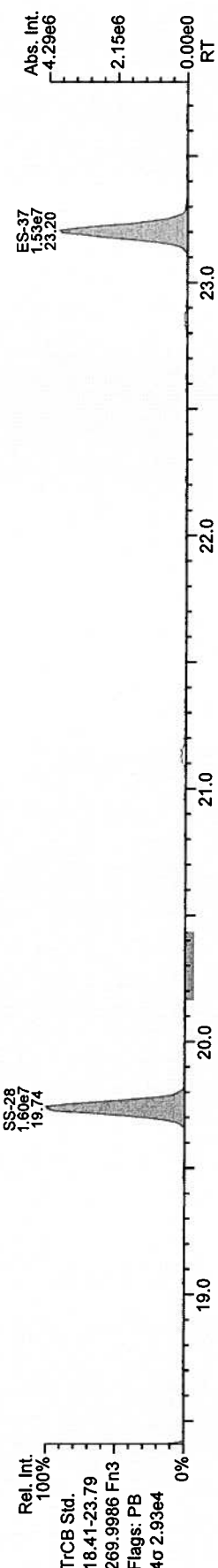
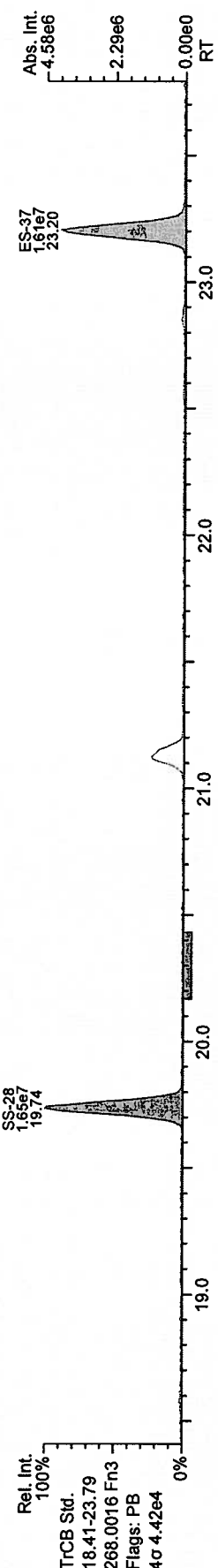
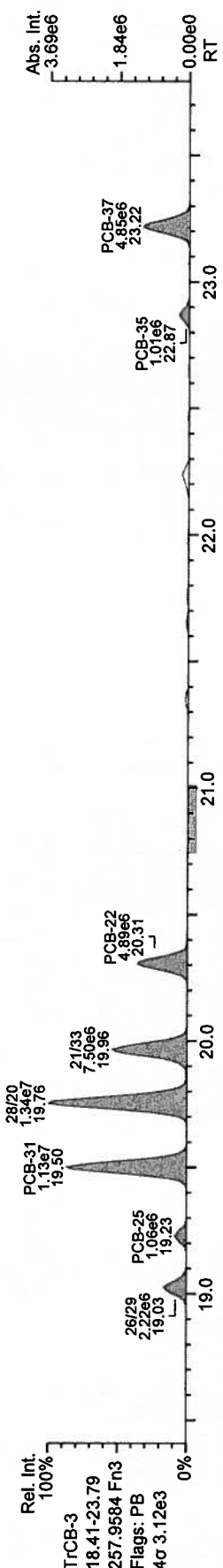
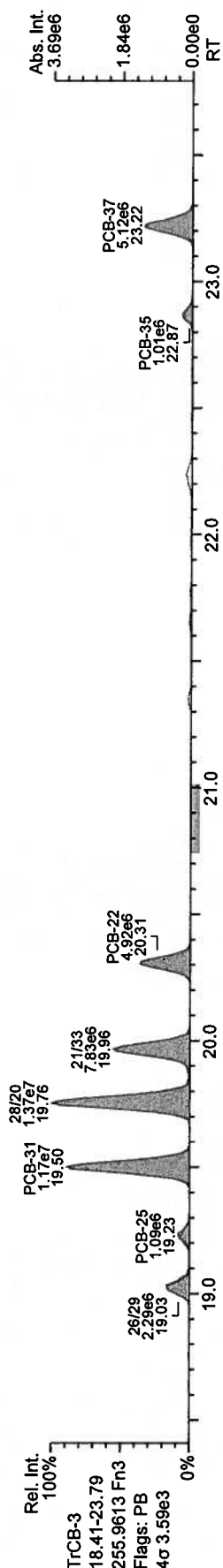




Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 32

AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

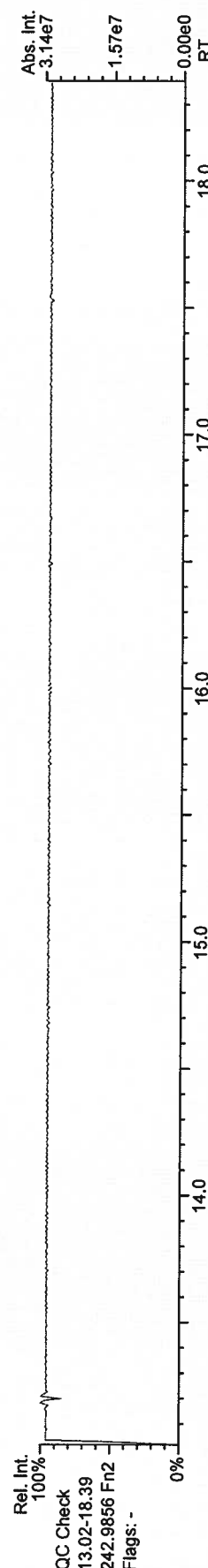
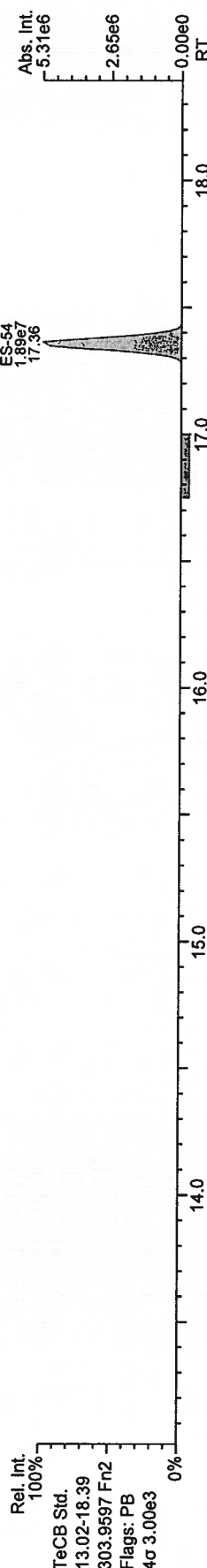
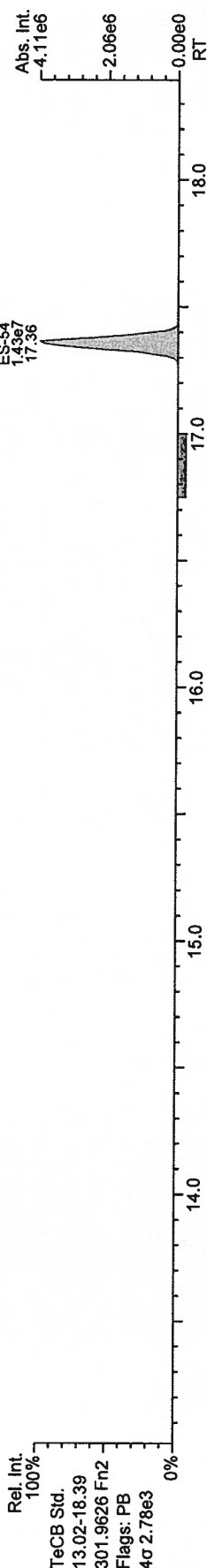
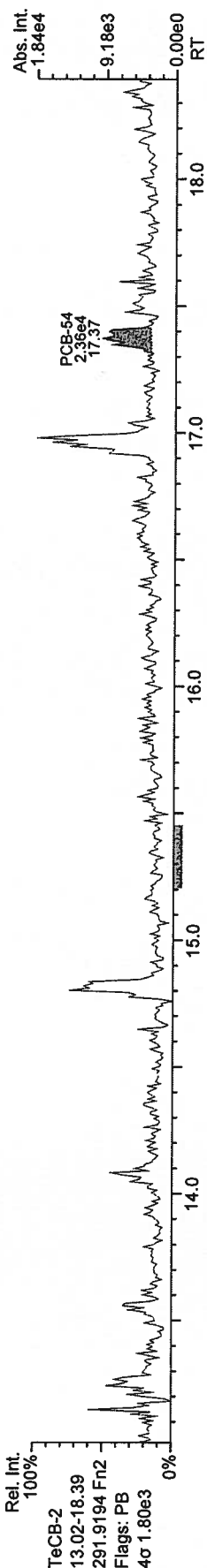
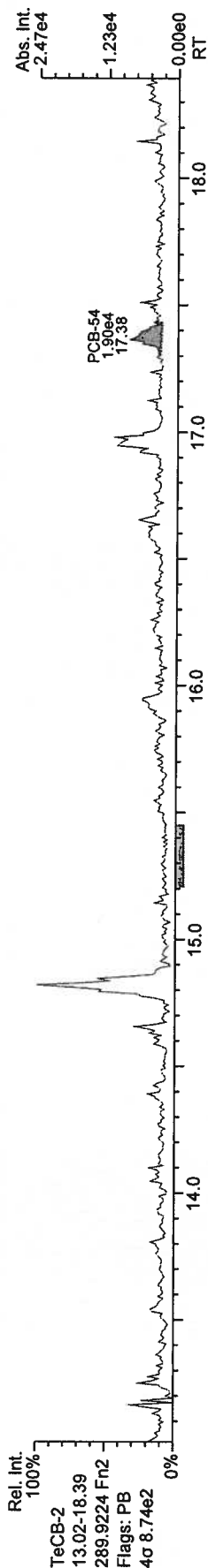


Results: P:\P1900\_P1999P1977P1977\_7528 PCBResources\1977\_7528\_PCB\_002.ult\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 8323, 2448 scc: 488-646  
Peak annotation: Areas, Centroids  
Revised: 09-Feb-2010 16:09:48 (CW) Printed: 10-Feb-2010 12:15:00 Page 6 of 22

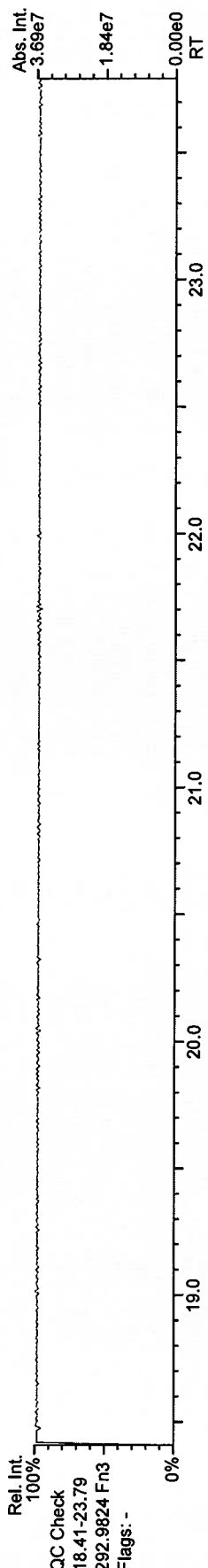
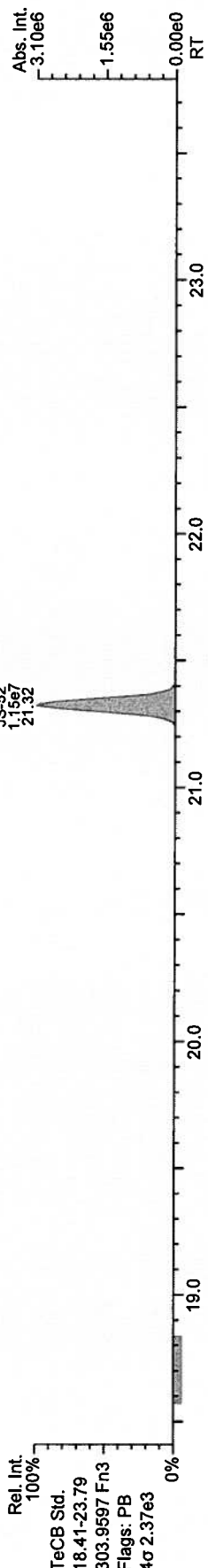
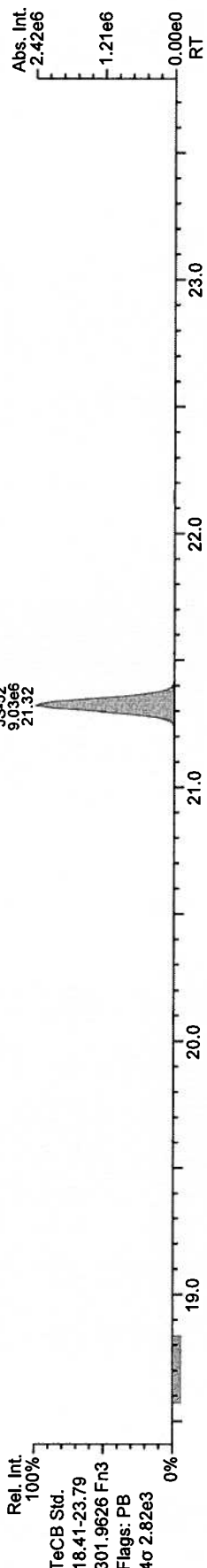
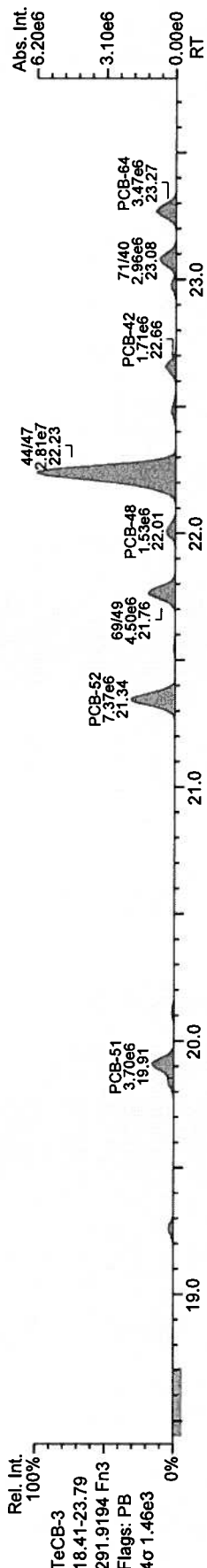
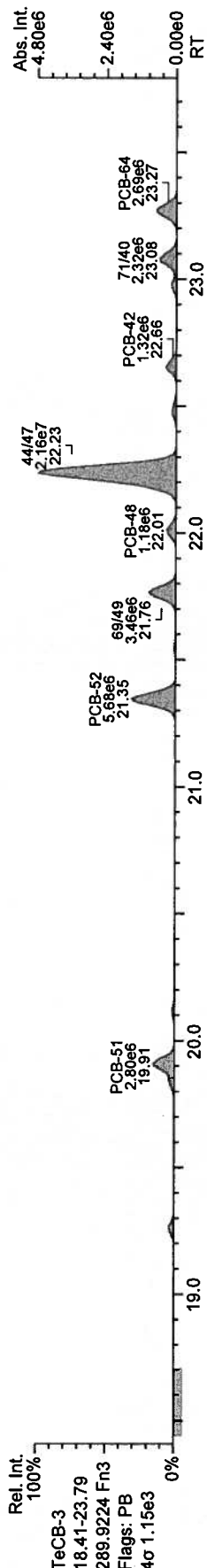
AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)



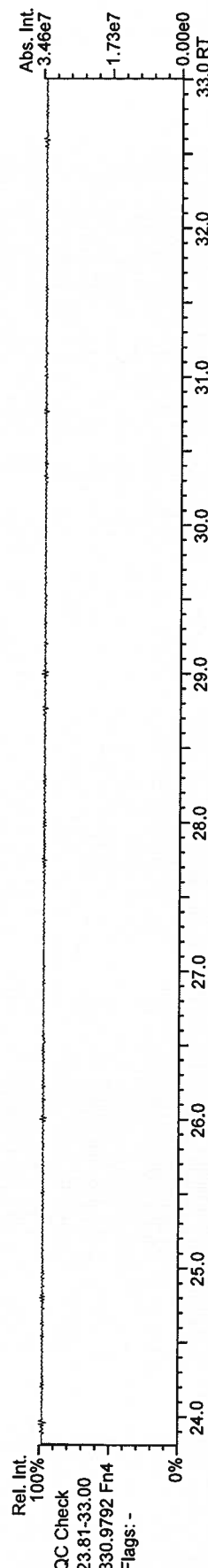
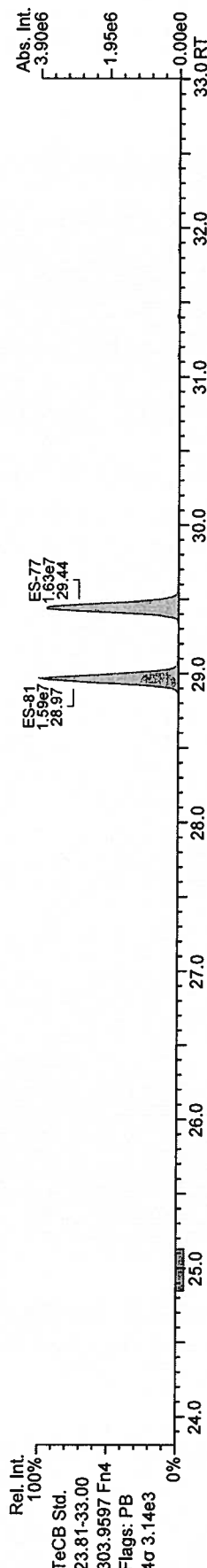
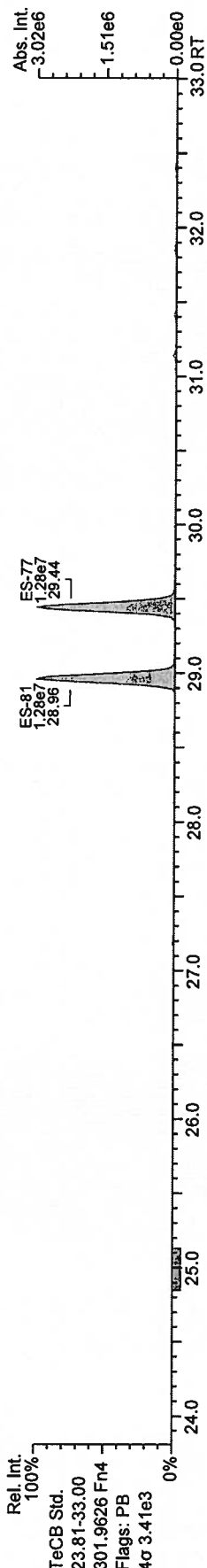
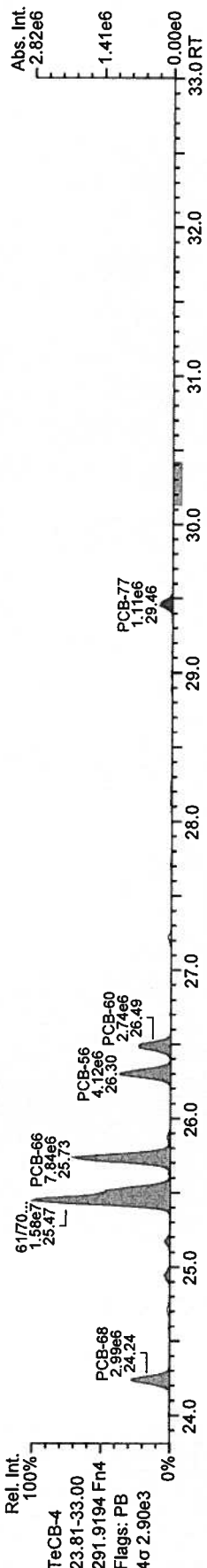
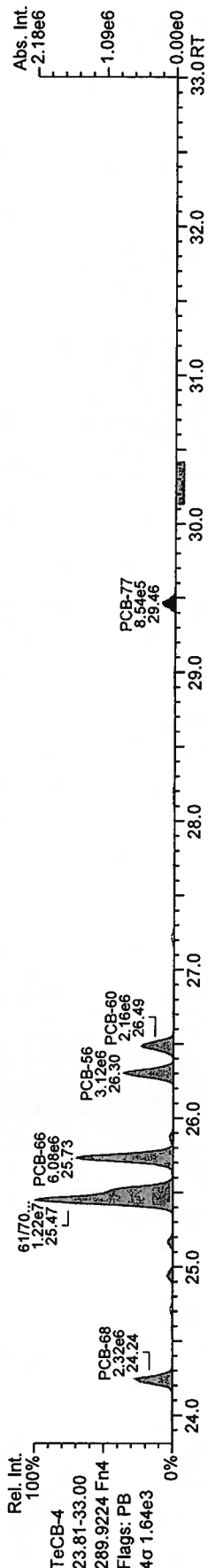
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AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 9115, 1226 scc: 488-646  
Revised: 09-Feb-2010 16:36:34 (CW) Printed: 10-Feb-2010 12:15:10 Page 7 of 22



Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c/l-10 GC: pcbx100\_a BI Vial: 32

AP Lab ID: P1977\_7528\_PCB\_002  
Instr: AutoSpec-Ultima MM4



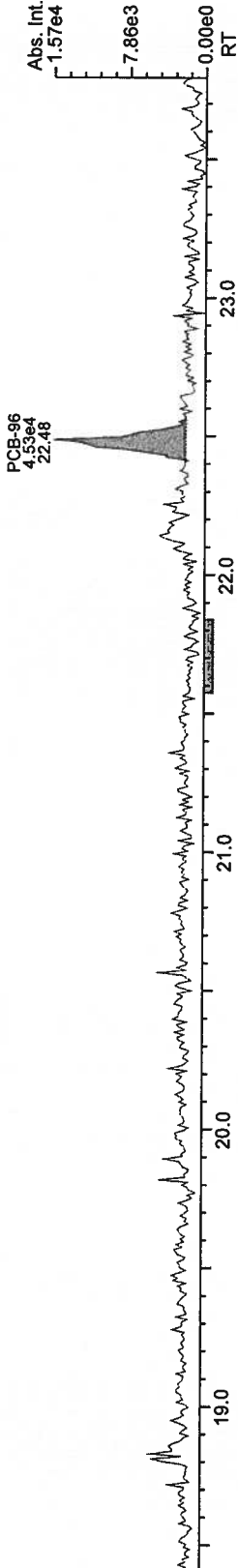
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AP UltraTrace-Pro V4.12 User/System: CW/CWIT-045 cc: 9113, 1330 scc: 488-646  
Revised: 09-Feb-2010 16:09:48 (CW) Printed: 10-Feb-2010 12:15:35 Page 9 of 22  
Peak annotation: Areas, Centroids

AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

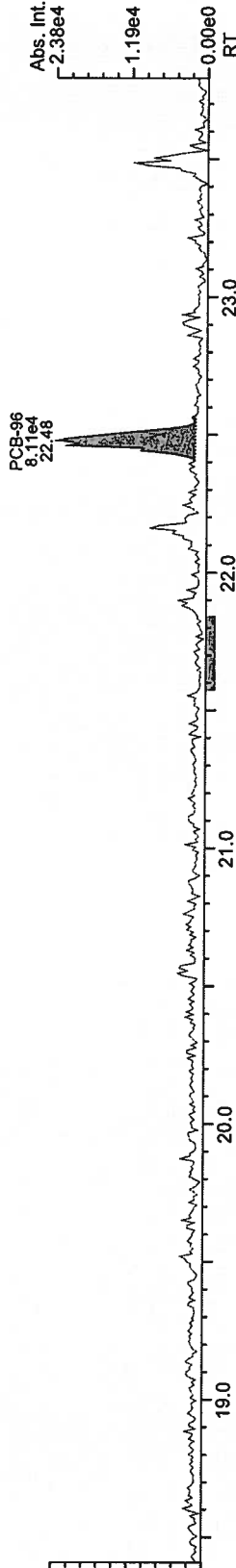
Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)

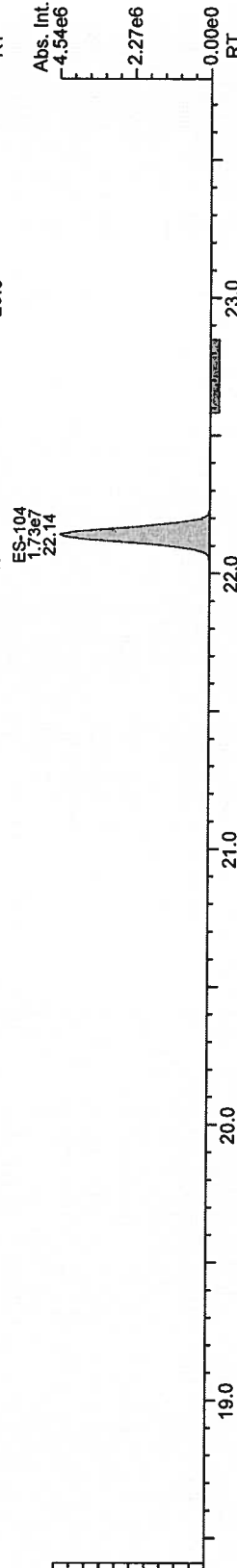
Rel. Int.  
100%  
PeCB-3  
18.41-23.79  
323.8834 Fn3  
Flags: PB  
4σ 1.51e3



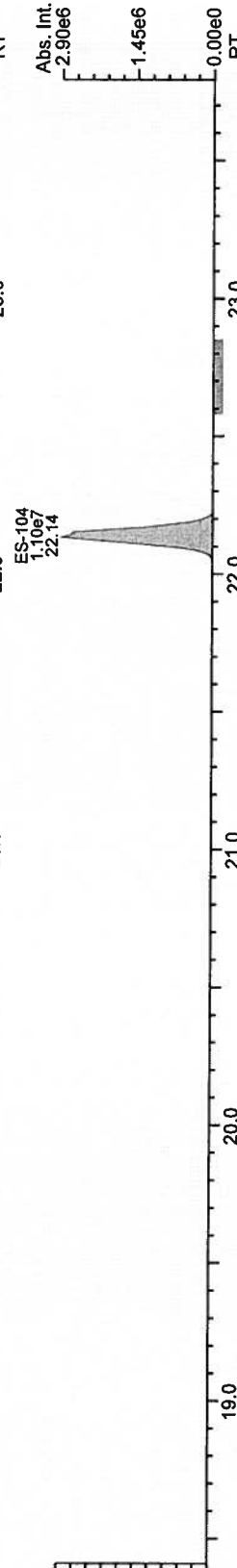
Rel. Int.  
100%  
PeCB-3  
18.41-23.79  
325.8804 Fn3  
Flags: PB  
4σ 1.12e3



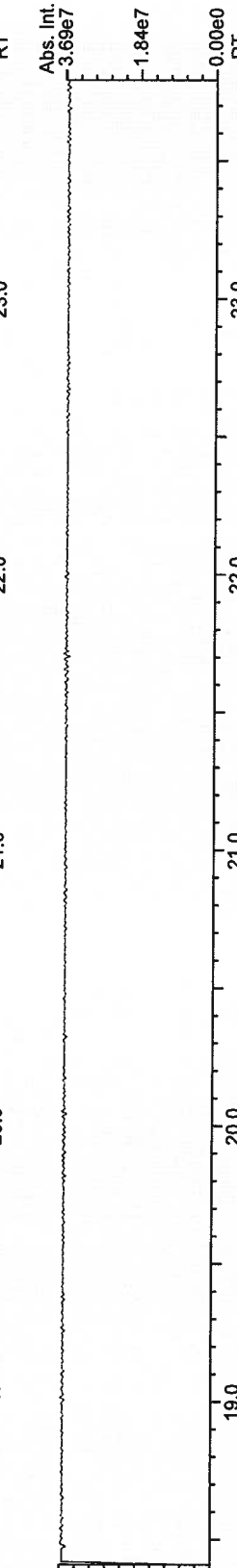
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100%  
PeCB Std.  
18.41-23.79  
337.9207 Fn3  
Flags: PB  
4σ 2.25e3

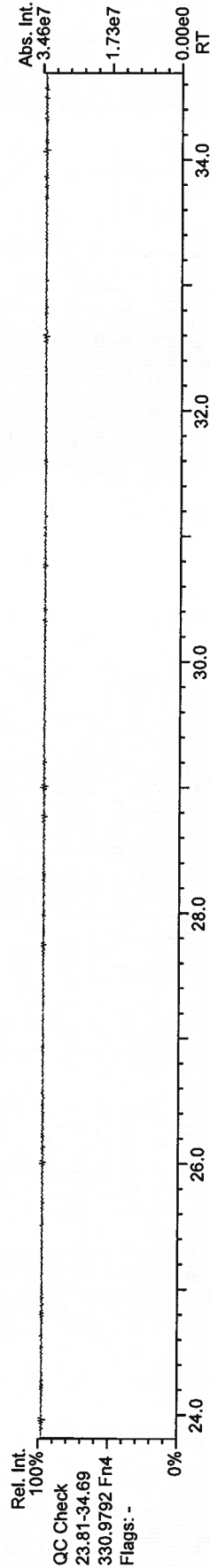
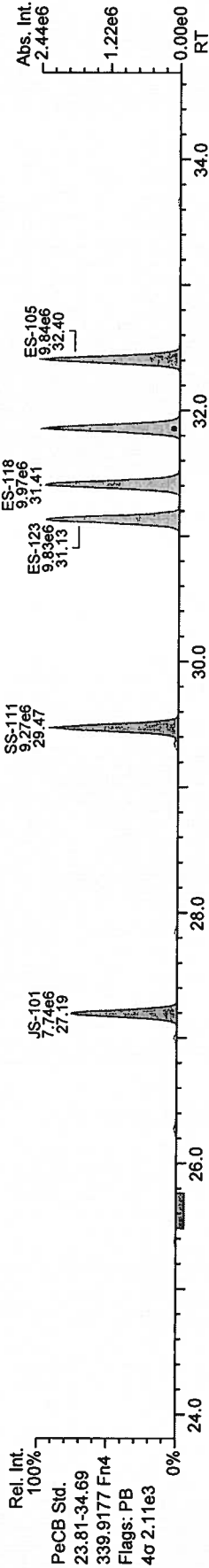
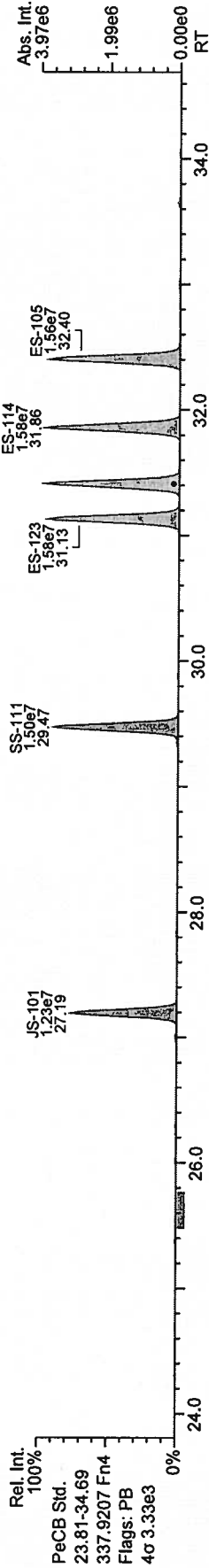
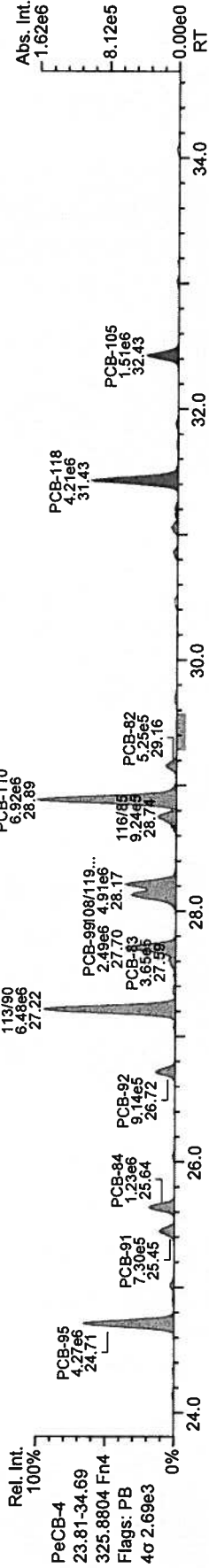
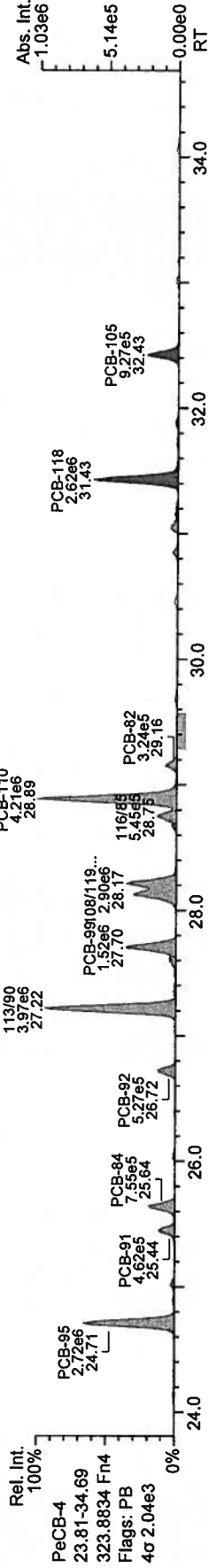


Rel. Int.  
100%  
PeCB Std.  
18.41-23.79  
339.9177 Fn3  
Flags: PB  
4σ 2.21e3



Rel. Int.  
100%  
QC Check  
18.41-23.79  
292.9824 Fn3  
Flags: -

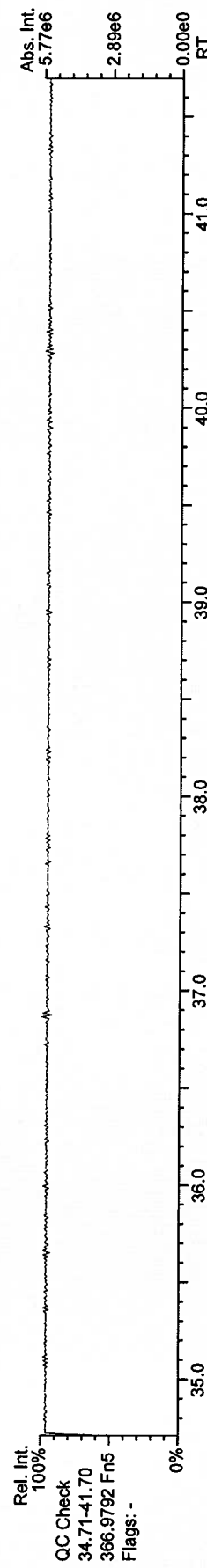
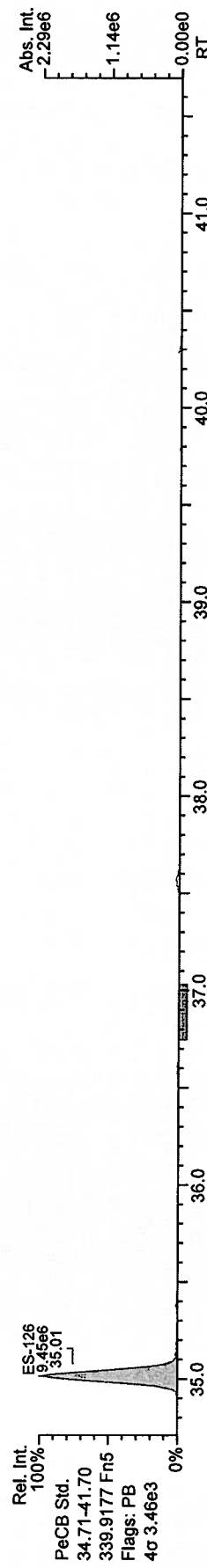
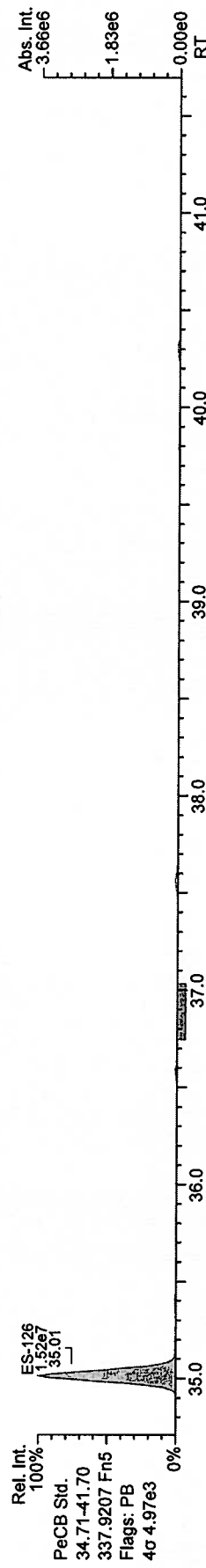
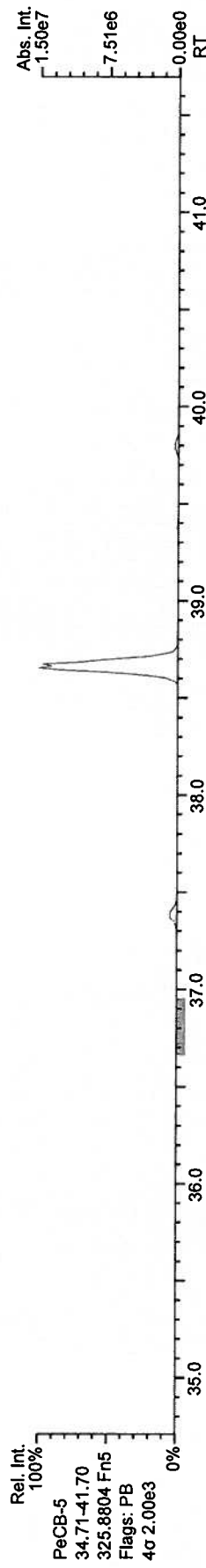
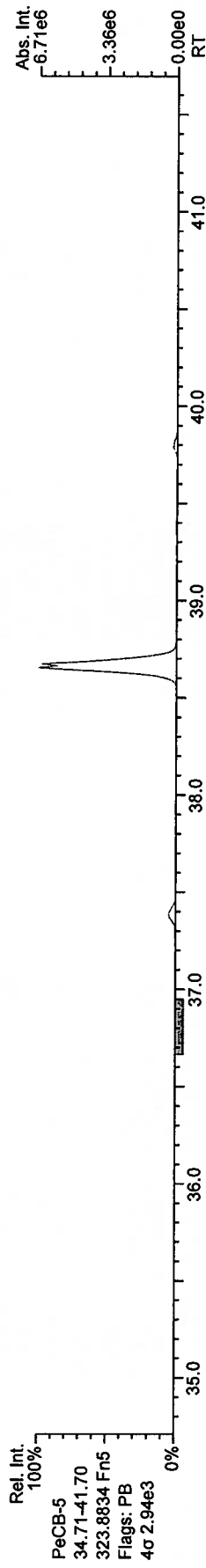




AP Lab ID: P1977\_7528\_PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)



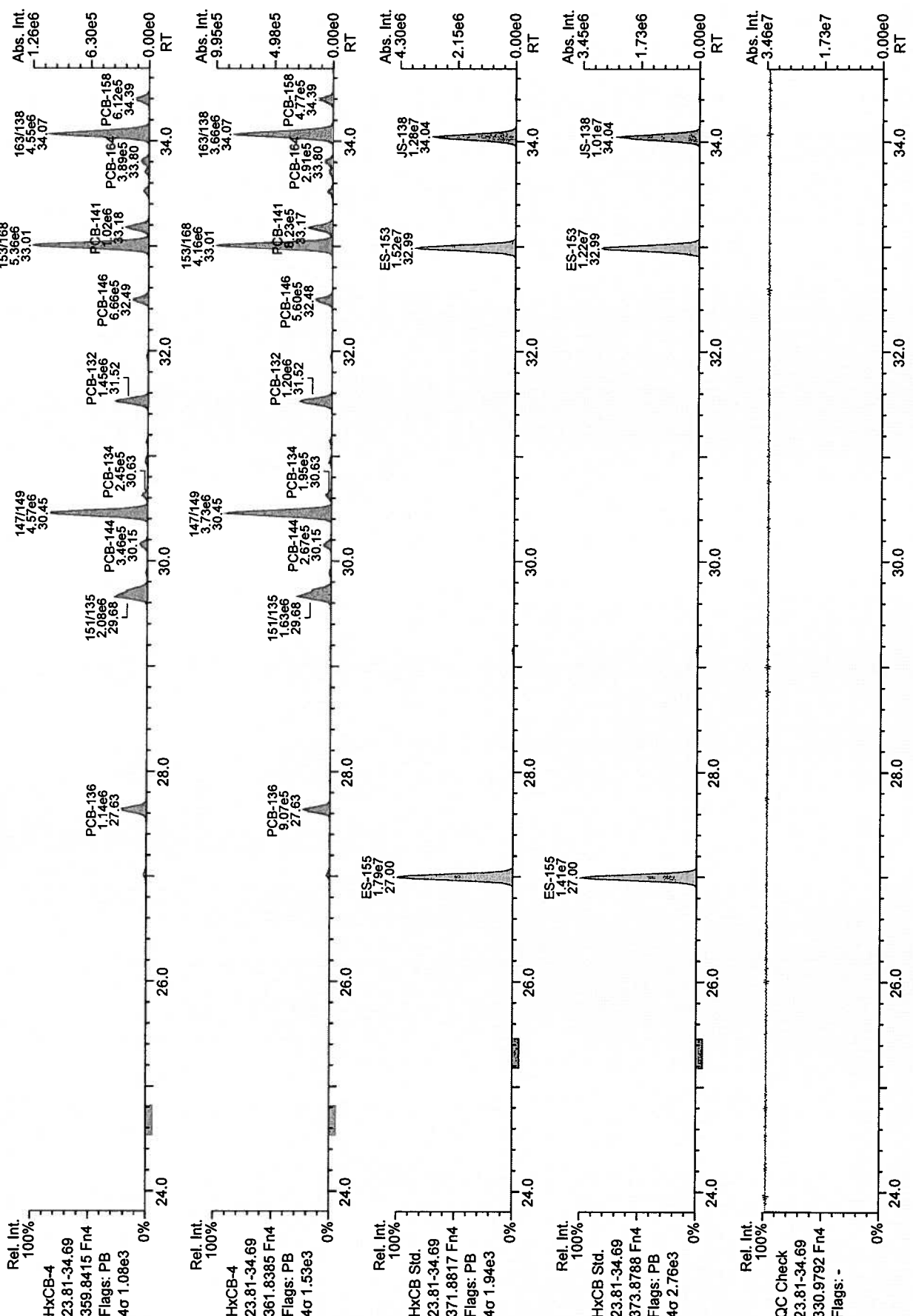
Results: P:\P1900\_P1999P1977P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_002.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CWCW7-045 cc: 6632, 7176 scc: 488-646

Revised: 09-Feb-2010 16:09:48 (CW) Printed: 10-Feb-2010 12:16:12 Page 12 of 22  
Peak annotation: Areas, Centroids

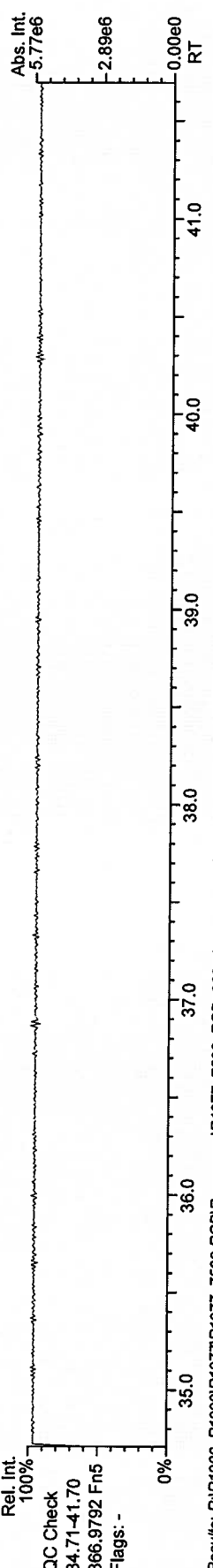
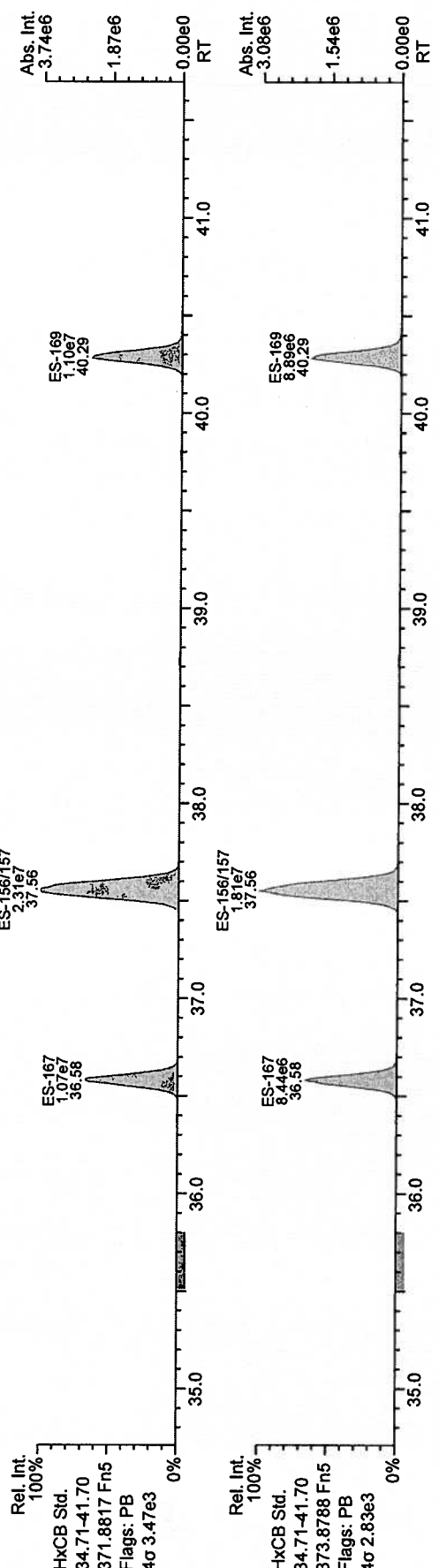
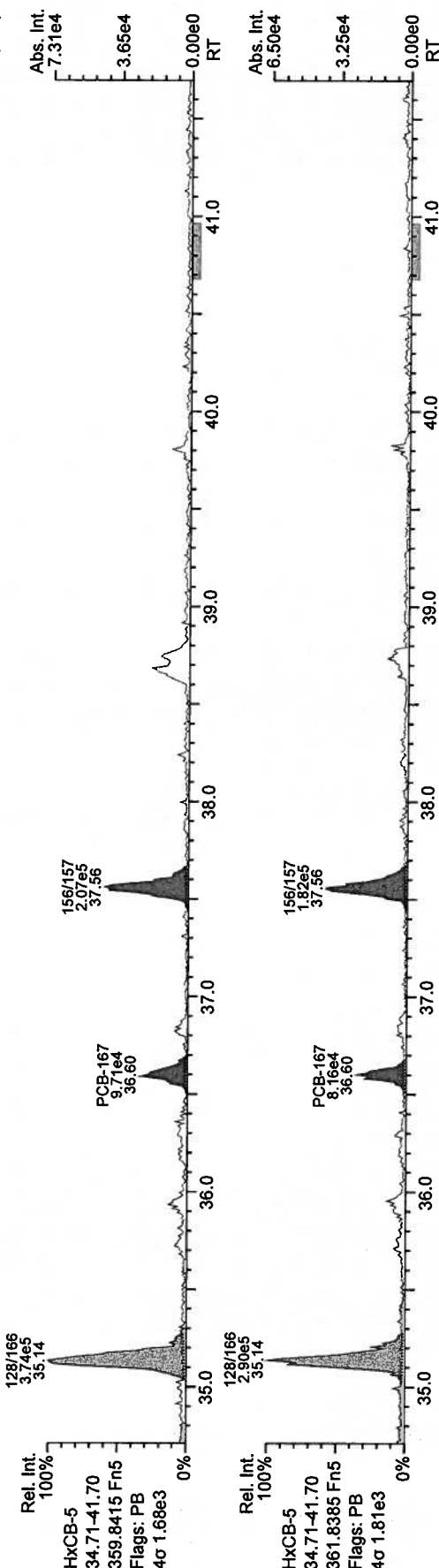
AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)





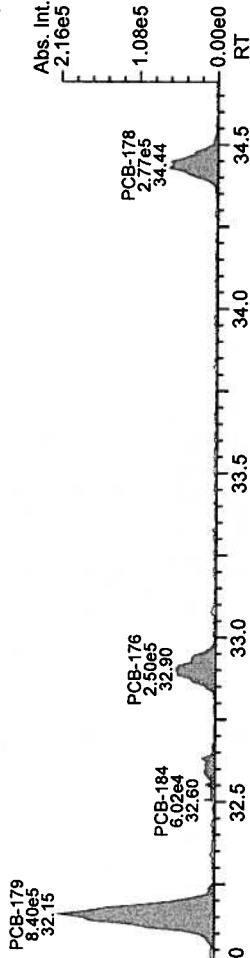


AP Lab ID: P1977\_7528 PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)

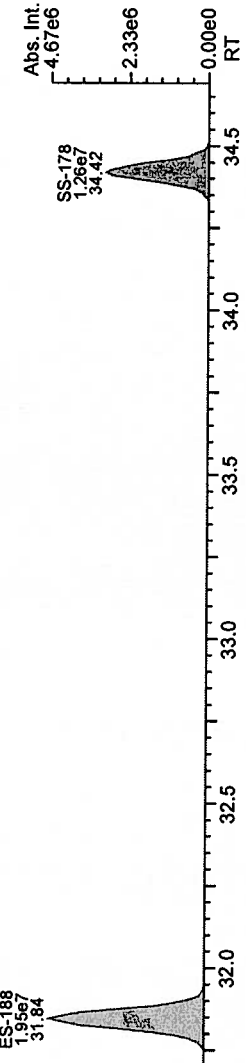
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0%  
HpCB-4  
30.00-34.69  
393.8025 Fn4  
Flags: PB  
4σ 1.54e3



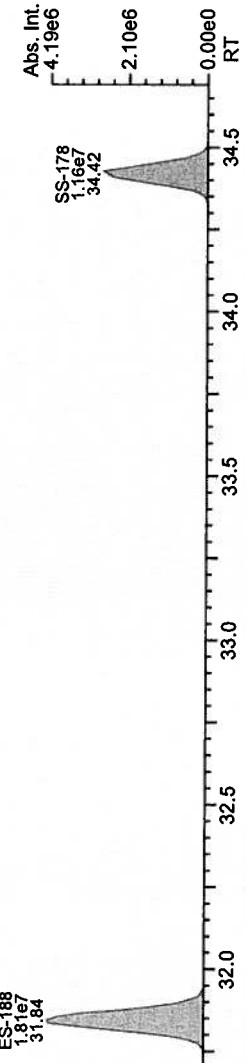
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0%  
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Flags: PB  
4σ 1.35e3



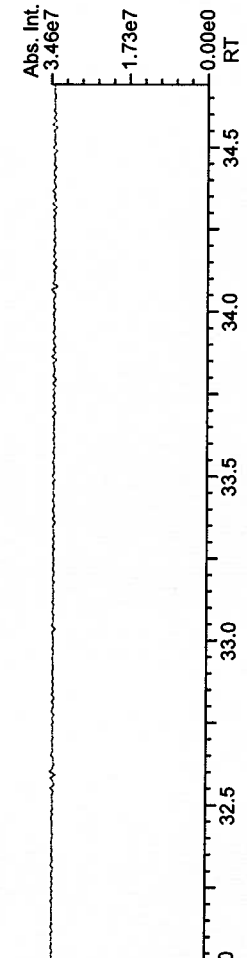
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405.8428 Fn4  
Flags: PB  
4σ 2.32e3

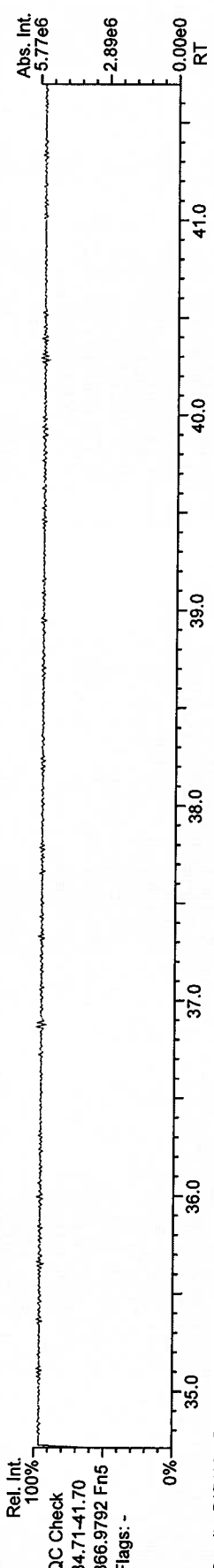
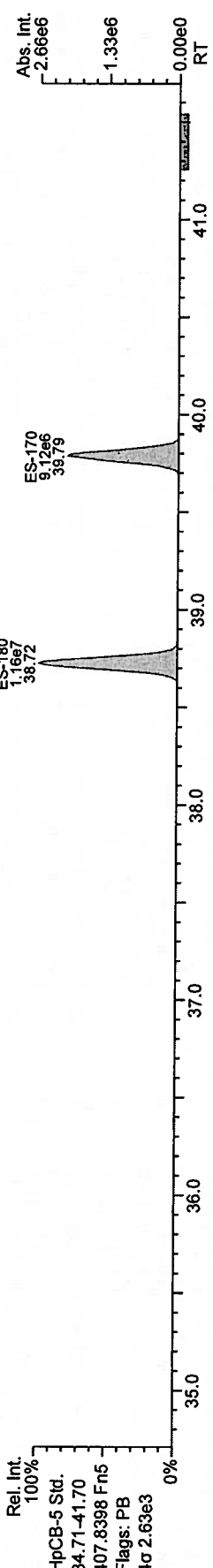
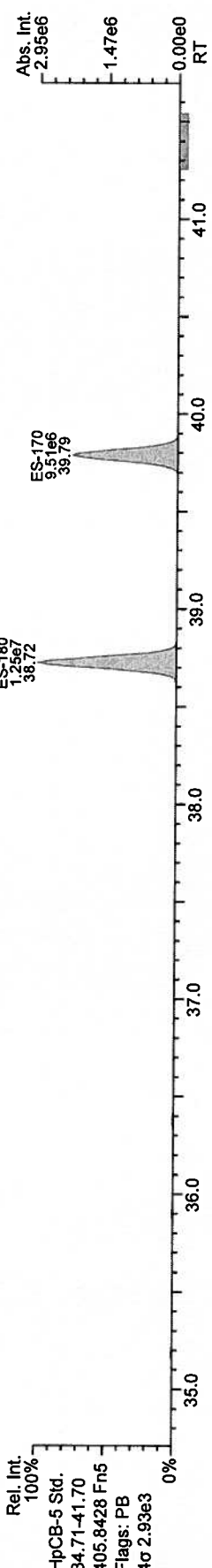
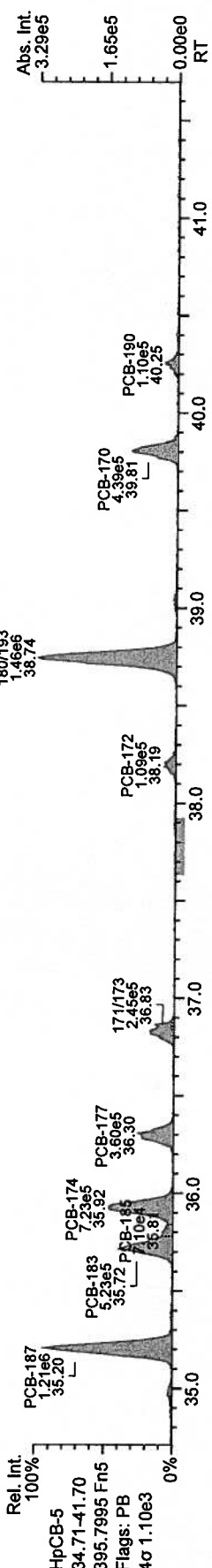
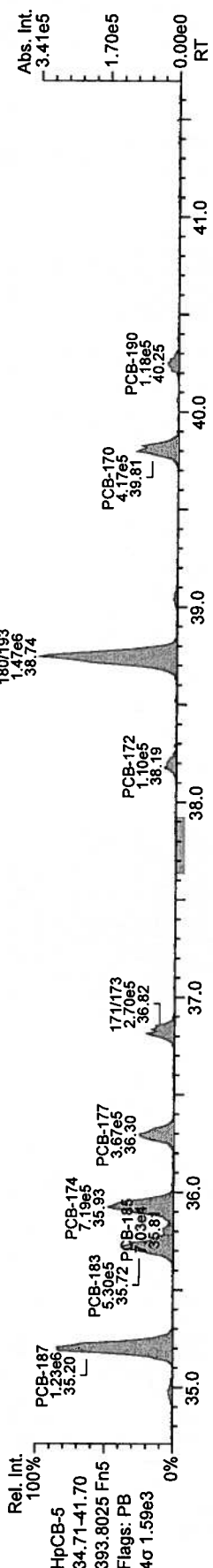


Rel. Int.  
100%  
0%  
HpCB Std.  
30.00-34.69  
407.8398 Fn4  
Flags: PB  
4σ 2.06e3



Rel. Int.  
100%  
0%  
QC Check  
30.00-34.69  
330.9792 Fn4  
Flags: -

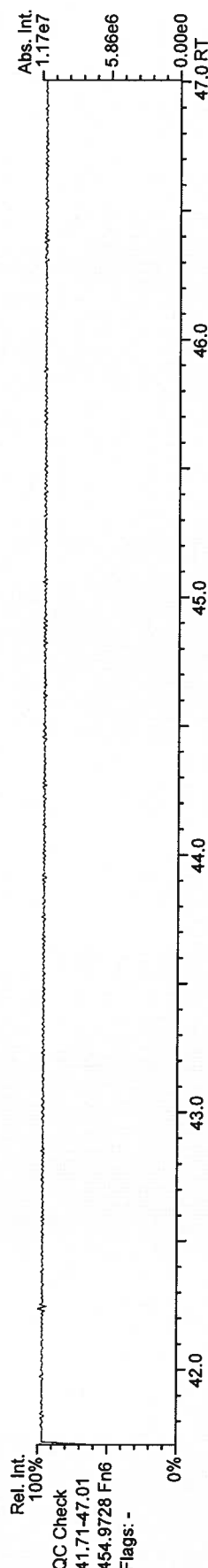
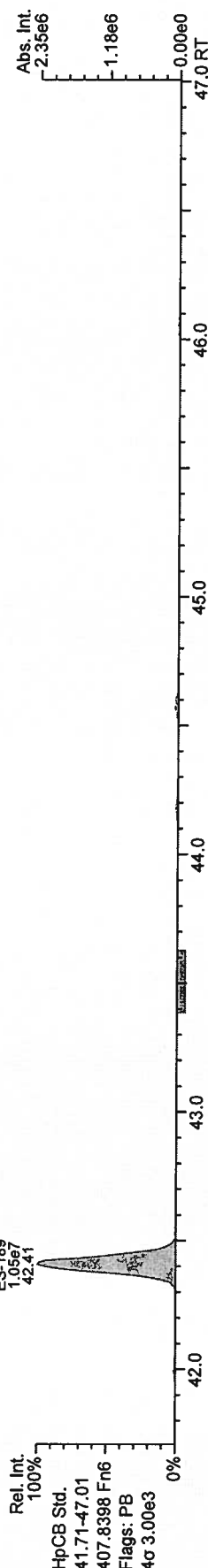
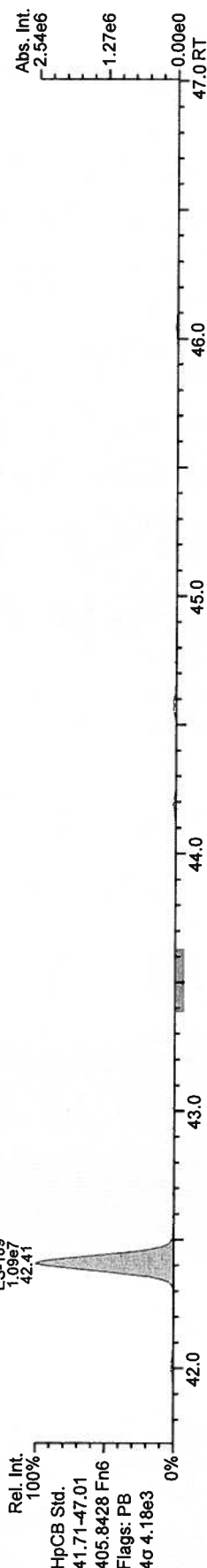
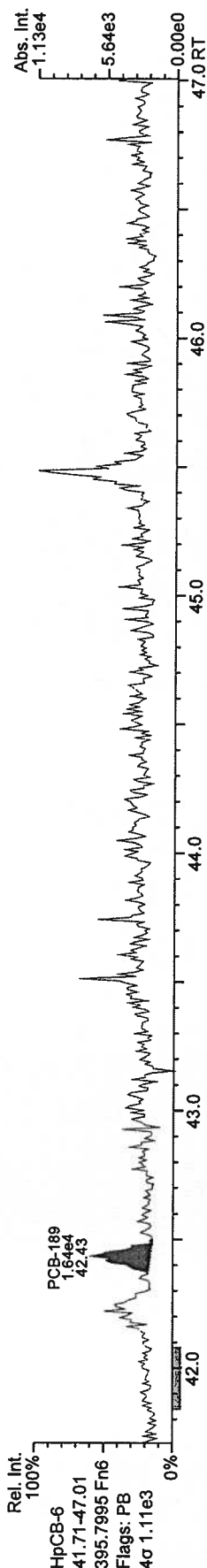
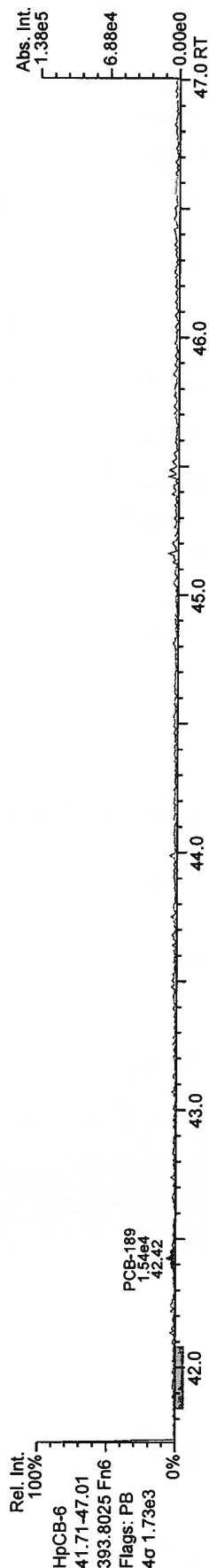


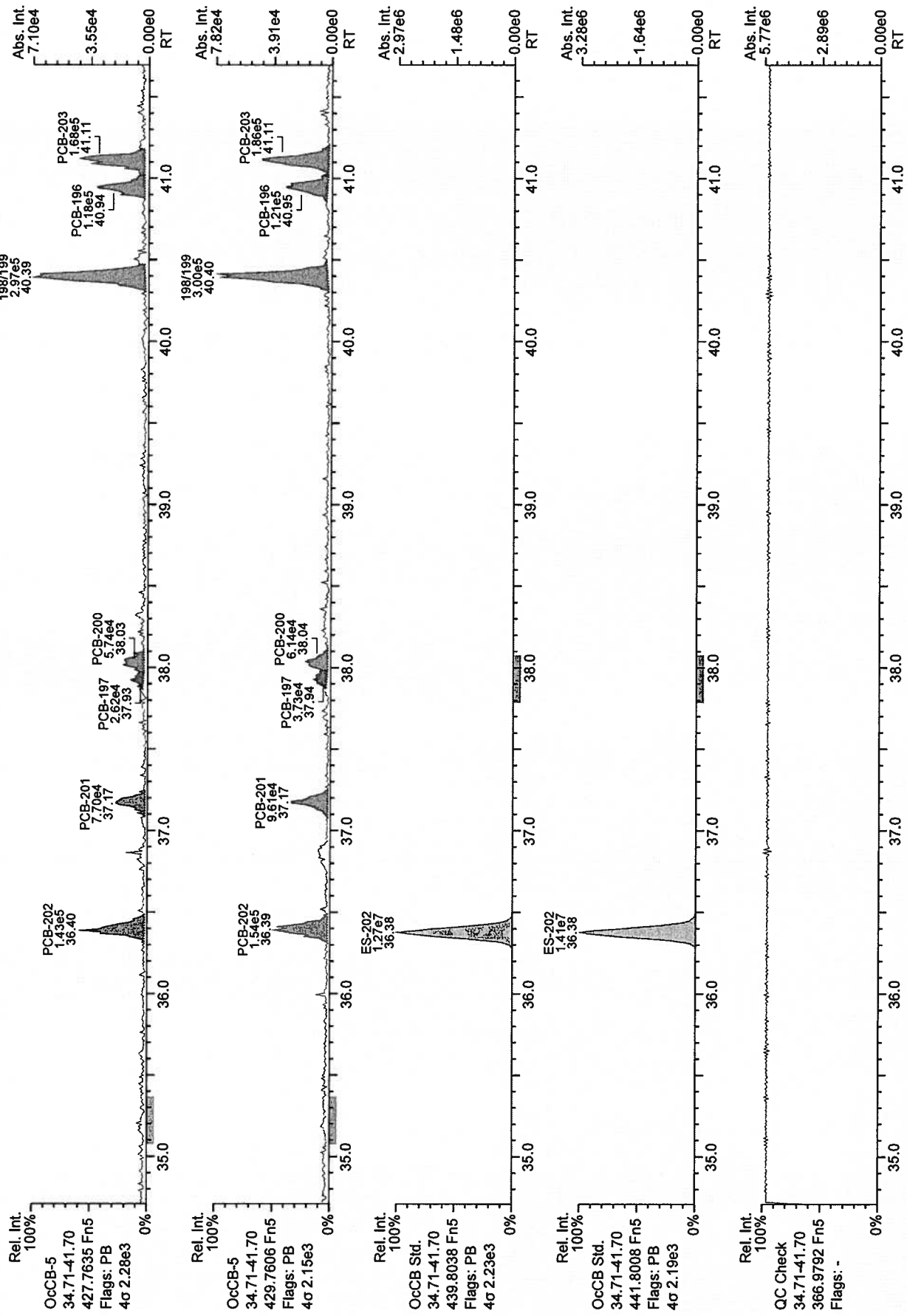


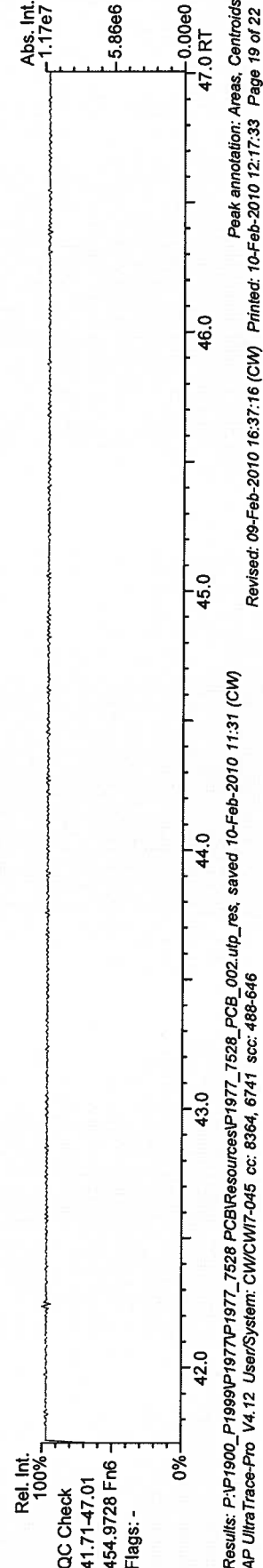
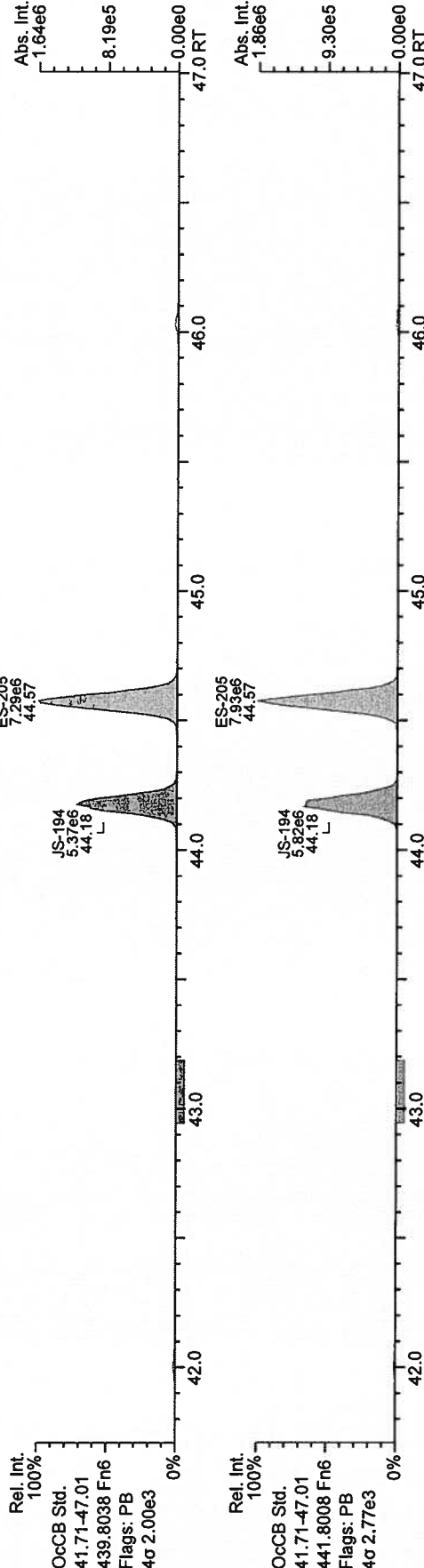
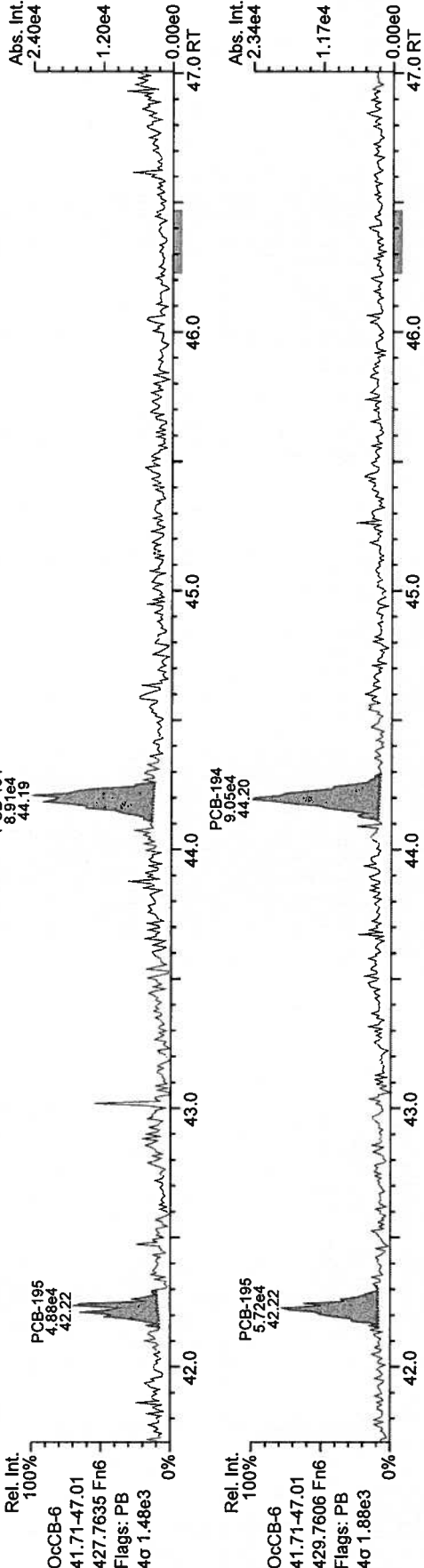
AP Lab ID: P1977\_7528\_PCB\_002  
Instr: AutoSpec-Ultima MM4

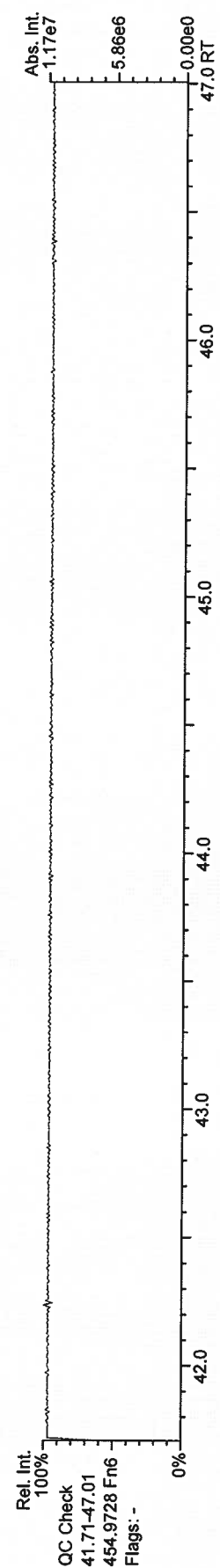
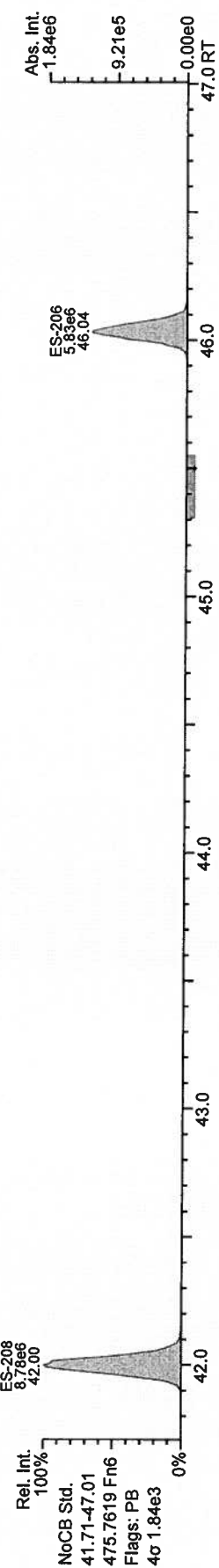
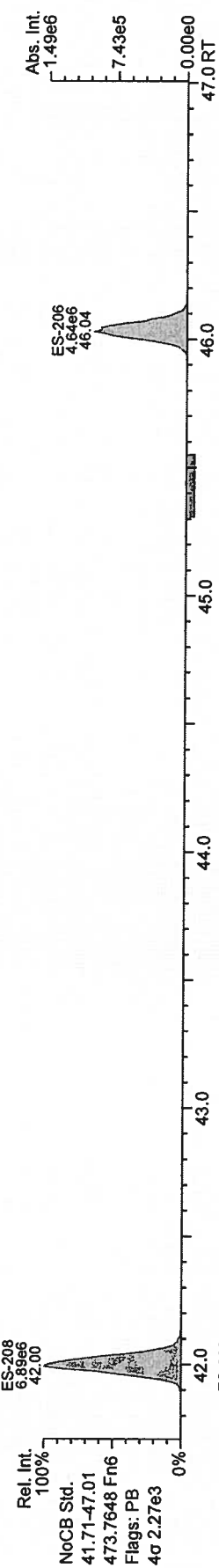
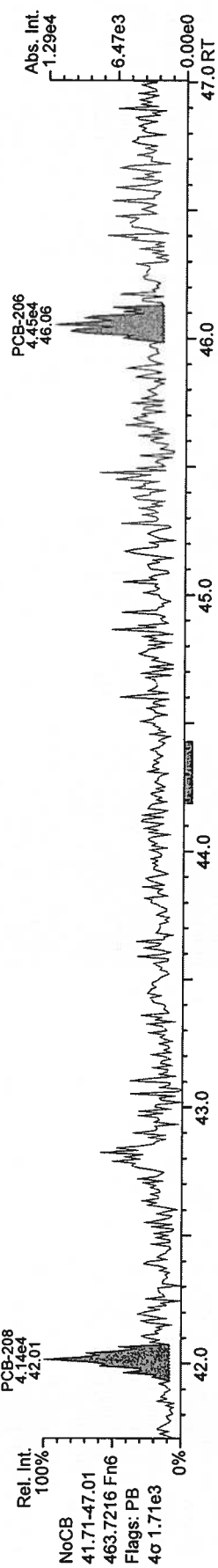
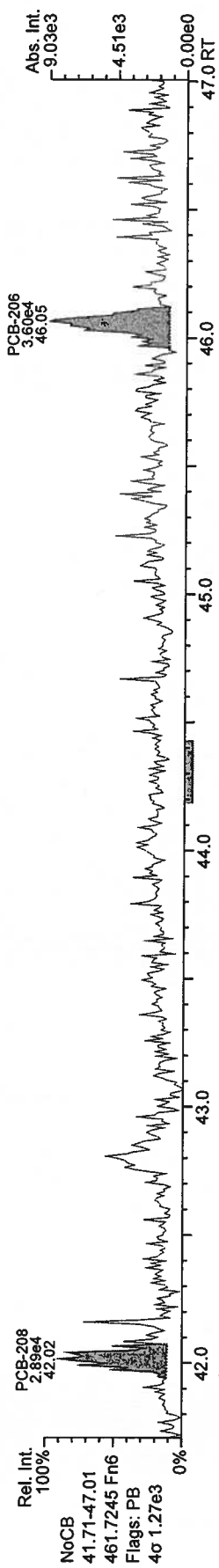
Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 32

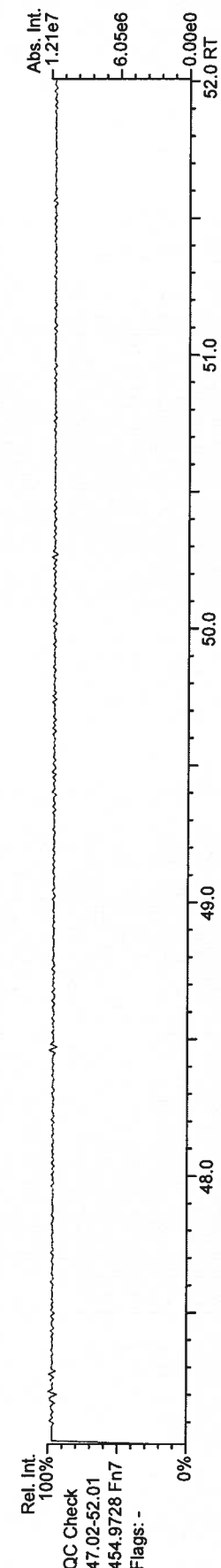
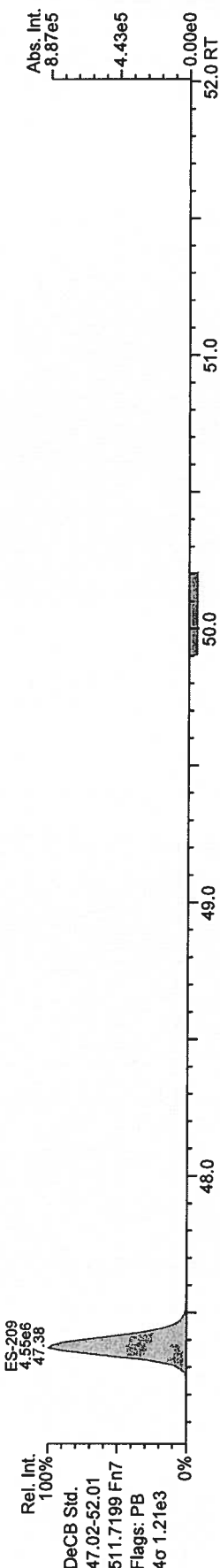
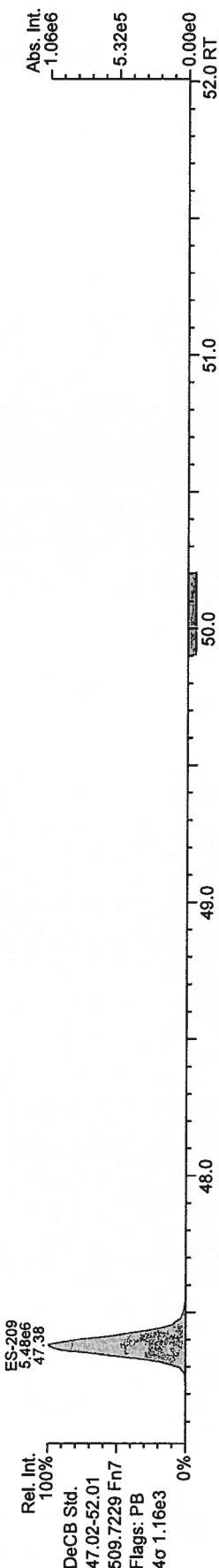
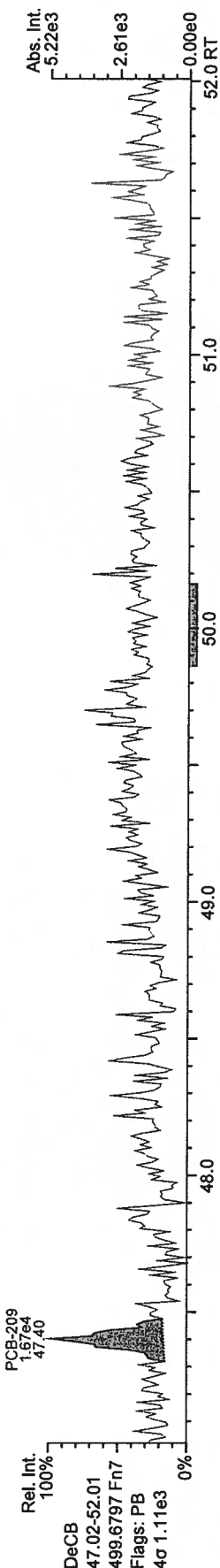
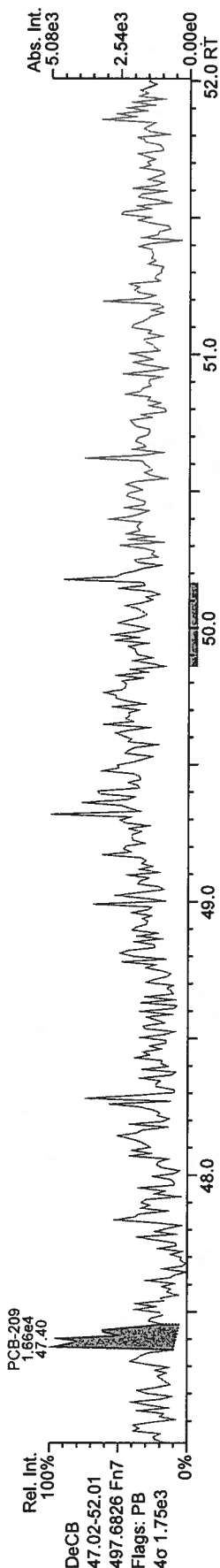
Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)









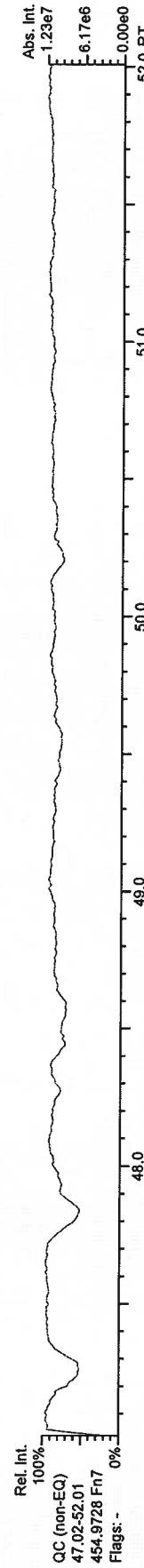
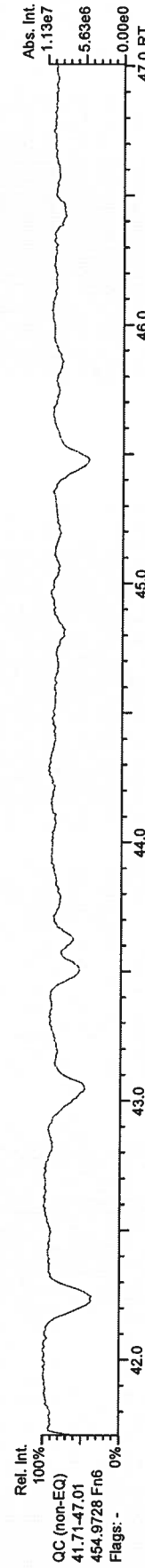
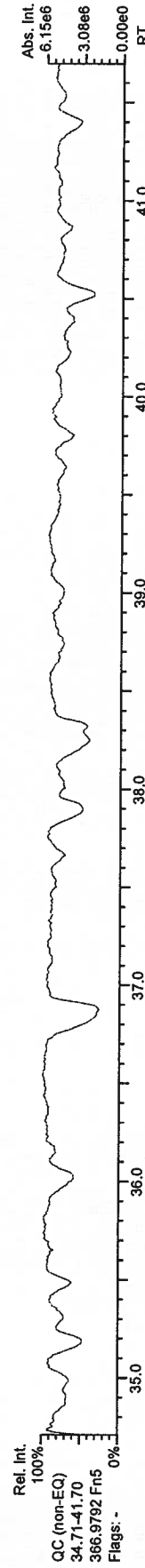
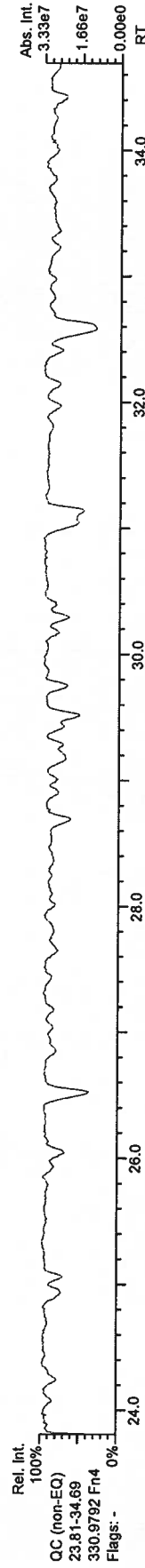
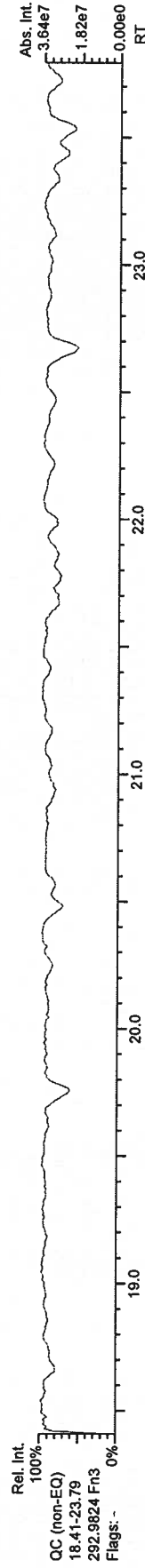
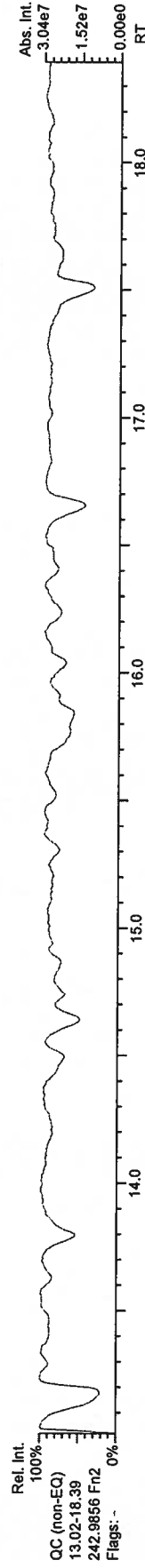
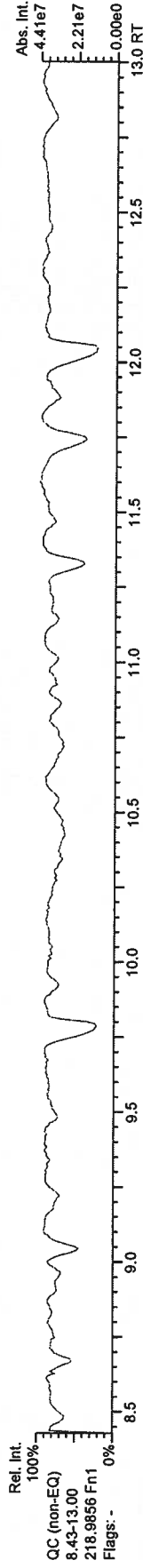




AP Lab ID: P1977\_7528\_PCB\_002  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-1  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 32

Acq: 05-Feb-2010 02:33:29  
User: CW Datafile: 100204S14 (EQ)



Results: P:\P1900\_P1999\P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_002.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 scc: 488-646

Revised: 09-Feb-2010 16:09:48 (CW) Printed: 10-Feb-2010 12:18:07 Page 22 of 22

P1977_7528_PCB_003											
Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	DL
PCB-77 33'44'-TeCB	29.58		1.0006	1.0005	-0.2	1.38E+06	0.82	1.04	165	4.03E+03	6.07
PCB-81 344'5-TeCB	NotFnd		1.0008	-		0.00E+00		1.05	ND	4.03E+03	5.76
PCB-105 233'44'-PeCB	32.55		1.0007	1.0007	0	1.66E+06	0.57	0.94	265	3.17E+03	5.83
PCB-114 2344'5-PeCB	NotFnd		1.0007	-		0.00E+00		0.93	ND	3.17E+03	5.23
PCB-118 23'44'5-PeCB	31.56		1.0007	1.0007	0	4.91E+06	0.61	0.95	719	3.17E+03	5.25
PCB-123 2'344'5-PeCB	NotFnd		1.0006	-		0.00E+00		0.98	ND	3.17E+03	5.78
PCB-126 33'44'5-PeCB	NotFnd		1.0005	-		0.00E+00		0.95	ND	4.34E+03	7.34
PCB-156/157 233'44'5/233'44'5'	37.69	C	1.0005	1.0000	-1.1	3.31E+05	1.11	0.93	57.9	2.55E+03	6.9
PCB-167 23'44'55'-HxCB	36.73		1.0006	1.0005	-0.2	1.46E+05	1.39	0.96	26.2	2.55E+03	5.31
PCB-169 33'44'55'-HxCB	NotFnd		1.0005	-		0.00E+00		0.89	ND	2.55E+03	6.37
PCB-189 233'44'55'-HpCB	NotFnd		1.0004	-		0.00E+00		0.87	ND	3.41E+03	5.96
PCB-209 DeCB	NotFnd		1.0004	-		0.00E+00		1.05	ND	2.54E+03	9.91
Recv.											
ES PCB-1	9.59		0.7029	0.7020	-0.5	2.29E+07	3.03	0.97	80.7 %	25%	150%
ES PCB-3	11.63		0.8512	0.8515	+0.2	2.45E+07	3.11	0.99	84.7 %	25%	150%
ES PCB-4	11.85		0.8680	0.8680	0	2.25E+07	1.55	0.74	104 %	25%	150%
ES PCB-15	17.17		1.2558	1.2571	+1.3	3.06E+07	1.57	1.07	98 %	25%	150%
ES PCB-19	14.68		1.0748	1.0748	0	1.90E+07	1.02	0.60	108 %	25%	150%
ES PCB-37	23.29		1.0877	1.0883	+0.8	2.40E+07	1.06	1.68	84.6 %	25%	150%
ES PCB-54	17.42		0.8143	0.8140	-0.3	2.60E+07	0.78	1.55	99.4 %	25%	150%
ES PCB-77	29.56		1.3802	1.3813	+2.0	3.22E+07	0.80	1.36	140 %	25%	150%
ES PCB-81	29.08		1.3579	1.3588	+1.6	3.20E+07	0.80	1.36	139 %	25%	150%
ES PCB-104	22.22		0.8145	0.8136	-1.2	2.21E+07	1.57	1.53	60.3 %	25%	150%
ES PCB-105	32.53		1.1915	1.1912	-0.6	2.67E+07	1.62	1.28	87 %	25%	150%
ES PCB-114	31.98		1.1714	1.1712	-0.4	2.85E+07	1.58	1.35	88.1 %	25%	150%
ES PCB-118	31.53		1.1548	1.1547	-0.2	2.89E+07	1.62	1.35	89 %	25%	150%
ES PCB-123	31.25		1.1446	1.1445	-0.2	2.65E+07	1.59	1.23	89.5 %	25%	150%
ES PCB-126	35.15		1.2874	1.2871	-0.6	2.94E+07	1.59	1.46	83.8 %	25%	150%
ES PCB-153	33.11		0.9690	0.9693	+0.6	2.97E+07	1.24	1.18	97.2 %	25%	150%
ES PCB-155	27.10		0.7934	0.7933	-0.2	3.54E+07	1.27	1.45	94.5 %	25%	150%
ES PCB-156/157	37.69		1.1032	1.1031	-0.2	4.91E+07	1.20	1.13	84.3 %	25%	150%
ES PCB-167	36.71		1.0745	1.0745	0	2.32E+07	1.28	1.11	81 %	25%	150%
ES PCB-169	40.42		1.1834	1.1832	-0.5	2.15E+07	1.27	1.09	76.3 %	25%	150%
ES PCB-170	39.91		0.9007	0.9012	+1.2	2.03E+07	1.10	1.30	109 %	25%	150%
ES PCB-180	38.85		0.8766	0.8772	+1.4	2.82E+07	1.05	1.72	114 %	25%	150%
ES PCB-188	31.96		0.7211	0.7217	+1.2	4.29E+07	1.12	1.56	106 %	25%	150%
ES PCB-189	42.53		0.9600	0.9603	+0.8	2.84E+07	1.01	2.04	97.4 %	25%	150%
ES PCB-202	36.50		0.8237	0.8240	+0.7	3.59E+07	0.90	1.26	111 %	25%	150%
ES PCB-205	44.68		1.0090	1.0089	-0.3	1.89E+07	0.91	1.41	93.6 %	25%	150%
ES PCB-206	46.14		1.0422	1.0417	-1.4	1.27E+07	0.80	0.93	95.3 %	25%	150%
ES PCB-208	42.11		0.9510	0.9509	-0.3	2.18E+07	0.77	1.32	115 %	25%	150%
ES PCB-209	47.47		1.0729	1.0719	-2.8	1.29E+07	1.17	1.01	89.1 %	25%	150%

## P1977\_7528\_PCB\_003

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	Checkcode:	$\tau\beta$ DL
SS PCB-28	19.81		0.9258	0.9258	0	2.44E+07	1.07	1.04	98.2 %	30%		135%
SS PCB-111	29.59		1.0837	1.0837	0	2.59E+07	1.52	1.01	96.3 %	30%		135%
SS PCB-178	34.54		1.0113	1.0111	-0.4	2.59E+07	1.03	0.63	96.6 %	30%		135%
CS PCB-28	19.81		0.9258	0.9258	0	2.44E+07	1.07	1.74	83.1 %	30%		135%
CS PCB-111	29.59		1.0837	1.0837	0	2.59E+07	1.52	1.25	86.3 %	30%		135%
CS PCB-178	34.54		1.0113	1.0111	-0.4	2.59E+07	1.03	0.98	103 %	30%		135%

JS PCB-9  
JS PCB-52  
JS PCB-101  
JS PCB-138  
JS PCB-194

2.93E+07 1.58  
1.69E+07 0.78  
2.40E+07 1.57  
2.59E+07 1.23  
1.43E+07 0.93

Checkcode:

 $\tau\beta$ 

Totals	NON-EMPC	EMPC	DL
Mono-CBs	3,040	3,040	8.18
Di-CBs	25,200	25,200	14.9
Tri-CBs	18,900	18,900	11.2
Tetra-CB.	18,300	18,300	5.61
Penta-CB.	6,360	6,370	5.85
Hexa-CBs	3,930	4,010	5.52
Hepta-CB.	1,480	1,480	5.37
Octa-CBs	160	211	6.83
Nona-CBs	0	0	8.4

PCB-1 2-MoCB	9.60		1.0012	1.0011	-0.1	7.50E+06	3.10	1.18	1,110	6.07E+03		7
PCB-2 3-MoCB	11.48		0.9869	0.9869	0	4.94E+06	3.17	1.37	591	6.07E+03		8
PCB-3 4-MoCB	11.64		1.0010	1.0009	-0.1	9.58E+06	3.09	1.17	1,340	6.07E+03		9.35
PCB-4 22'-DiCB	11.87	SI	1.0012	1.0012	0	6.13E+06	SI*	0.87	1,250	5.50E+03		11.7
PCB-10 26-DiCB	12.02	SI	1.0146	1.0144	-0.1	5.71E+05	SI*	1.27	80	5.50E+03		8.04
PCB-9 25-DiCB	13.67	SI	1.0011	1.0008	-0.2	1.32E+06	SI*	1.22	141	1.12E+04		14.5
PCB-7 24-DiCB	13.82	SI	1.0120	1.0122	+0.2	5.61E+07	SI*	0.96	7,620	1.12E+04		18.4
PCB-6 23'-DiCB	14.04	SI	1.0278	1.0283	+0.4	3.25E+06	SI*	1.22	350	1.12E+04		14.6
PCB-5 23-DiCB	14.30	SI	1.0479	1.0474	-0.4	5.94E+05	SI*	0.92	84.6	1.12E+04		19.3
PCB-8 24'-DiCB	14.43	SI	1.0562	1.0563	+0.1	1.53E+07	SI*	1.22	1,640	1.12E+04		14.6
PCB-14 35-DiCB	NotEnd		0.9257	-		0.00E+00		1.00	ND	1.12E+04		17.8
PCB-11 33'-DiCB	16.63	SI	0.9689	0.9689	0	8.91E+07	SI*	0.95	12,300	1.12E+04		18.7
PCB-13/12 34'-/34-DiCB	16.90	C SI	0.9851	0.9842	-0.9	3.12E+06	SI*	1.02	398	1.12E+04		17.3
PCB-15 44'-DiCB	17.18	SI	1.0008	1.0008	0	9.78E+06	SI*	0.98	1,300	1.12E+04		18
PCB-19 22'6-TrCB	14.71		1.0011	1.0018	+0.6	1.85E+06	0.89	0.95	409	3.96E+03		9.53
PCB-30/18 246-/22'5-TrCB	16.37	C	1.1132	1.1149	+1.7	1.62E+07	1.05	1.39	2,460	3.96E+03		6.53
PCB-17 22'4-TrCB	16.73		1.1393	1.1398	+0.5	7.50E+06	1.06	1.03	1,530	3.96E+03		8.79
PCB-27 23'6-TrCB	16.92		1.1522	1.1528	+0.6	1.40E+06	1.01	1.40	210	3.96E+03		6.45
PCB-24 236-TrCB	17.04		1.1602	1.1606	+0.4	2.72E+05	1.12	1.33	43	3.96E+03		6.8
PCB-16 22'3-TrCB	17.14		1.1668	1.1673	+0.5	5.85E+06	1.02	1.09	1,130	3.96E+03		8.28

## P1977\_7528\_PCB\_003

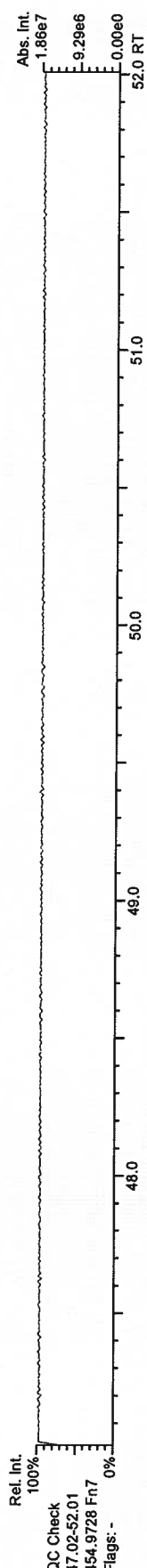
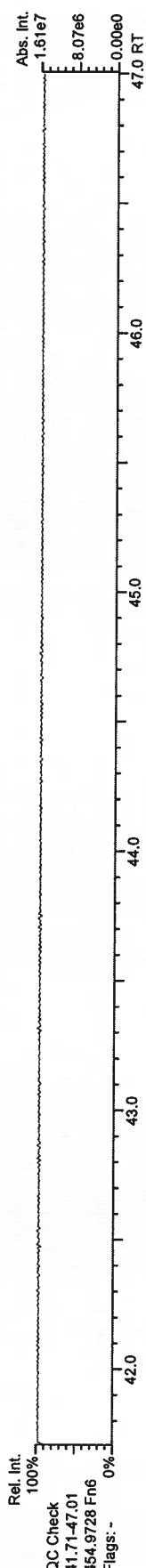
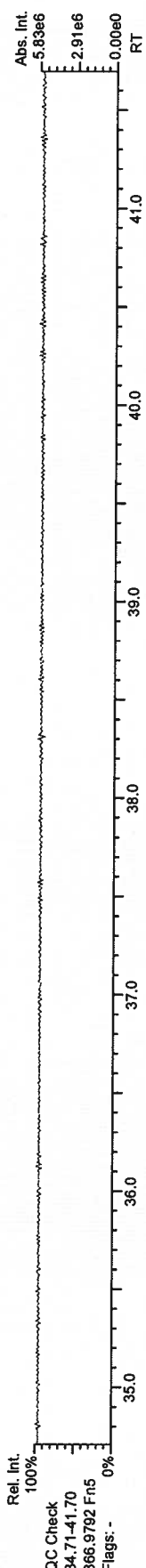
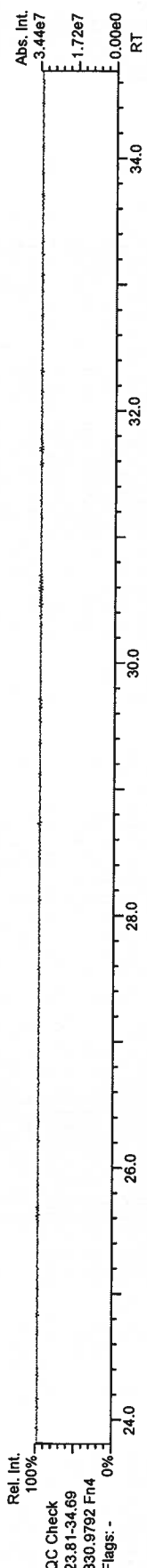
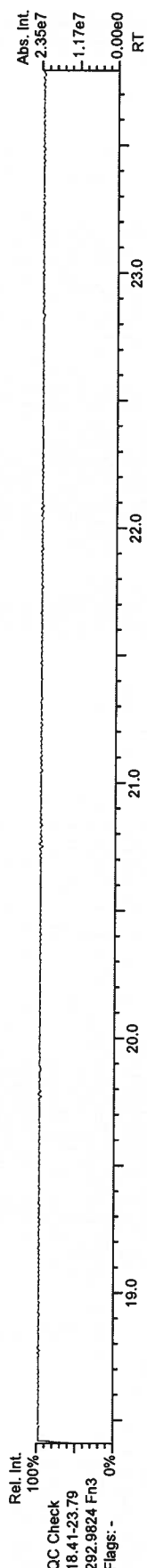
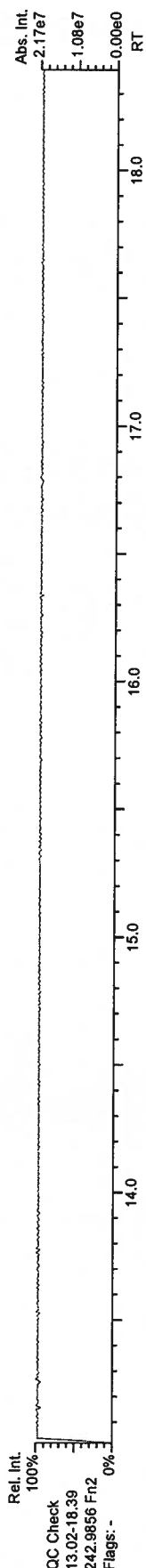
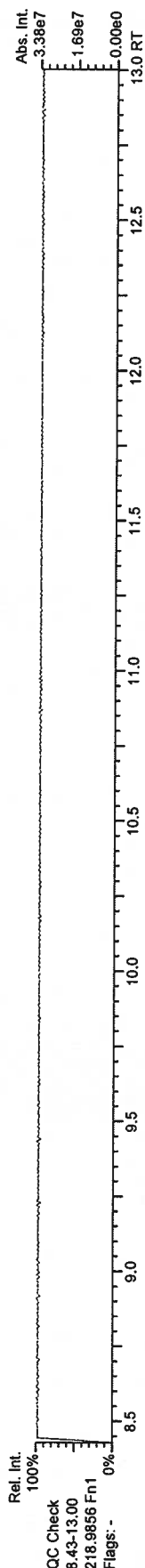
Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	τβ DL
PCB-32 24'6"-TrCB	17.59		1.1978	1.1982	+0.4	6.30E+06	1.05	1.48	899	3.96E+03	6.14
PCB-34 2'35"-TrCB	18.69		0.8033	0.8026	-0.8	1.35E+05	0.91	1.04	21.8	5.41E+03	10.6
PCB-23 235"-TrCB	NotFnd		0.8090	-		0.00E+00		1.47	ND	5.41E+03	7.53
PCB-26/29 23'5"-/245"-TrCB	19.10	C	0.8210	0.8199	-1.3	4.31E+06	1.02	1.09	663	5.41E+03	10.2
PCB-25 23'4"-TrCB	19.30		0.8292	0.8286	-0.7	2.09E+06	1.08	1.40	250	5.41E+03	7.89
PCB-31 24'5"-TrCB	19.57		0.8409	0.8403	-0.7	2.25E+07	1.03	1.13	3,340	5.41E+03	9.81
PCB-28/20 244'"/233' "-TrCB	19.83	C	0.8524	0.8515	-1.1	2.58E+07	1.03	1.21	3,560	5.41E+03	9.11
PCB-21/33 234'"/2'34"-TrCB	20.04	C	0.8598	0.8605	+0.8	1.38E+07	1.02	1.19	1,950	5.41E+03	9.32
PCB-22 234' "-TrCB	20.38		0.8755	0.8752	-0.4	8.20E+06	1.06	1.28	1,070	5.41E+03	8.61
PCB-36 33'5"-TrCB	21.74		0.9336	0.9333	-0.4	2.49E+05	1.03	1.27	32.7	5.41E+03	8.68
PCB-39 34'5"-TrCB	22.06		0.9469	0.9474	+0.7	2.66E+05	1.02	1.60	27.8	5.41E+03	6.91
PCB-38 345"-TrCB	22.55		0.9688	0.9682	-0.8	1.26E+05	1.07	1.02	20.7	5.41E+03	10.9
PCB-35 33'4"-TrCB	22.96		0.9856	0.9856	0	1.16E+06	1.07	0.89	217	5.41E+03	12.4
PCB-37 344' "-TrCB	23.31		1.0008	1.0008	0	5.50E+06	1.02	0.85	1,070	5.41E+03	12.9
PCB-54 22'66' "-TeCB	17.43	J	1.0010	1.0005	-0.5	3.41E+04	0.72	0.95	5.5	2.91E+03	5.24
PCB-50/53 22'46'"/22'56"-TeCB	19.33	C	0.9043	0.9031	-1.4	1.26E+06	0.79	0.69	229	2.91E+03	6.33
PCB-45 22'36"-TeCB	NotFnd		0.9305	-		0.00E+00		0.65	ND	2.91E+03	6.74
PCB-51 22'46' "-TeCB	19.98		0.9338	0.9335	-0.4	1.50E+07	0.76	0.69	2,720	2.91E+03	6.32
PCB-46 22'36' "-TeCB	20.19		0.9435	0.9433	-0.2	4.93E+05	0.78	0.62	99	2.91E+03	7
PCB-52 22'55' "-TeCB	21.42		1.0010	1.0010	0	9.60E+06	0.77	0.94	1,280	2.91E+03	4.66
PCB-73 23'5'6TeCB	NotFnd		1.0067	-		0.00E+00		0.83	ND	2.91E+03	5.27
PCB-43 22'35"-TeCB	21.62		1.0106	1.0103	-0.4	3.40E+05	0.82	0.70	60.7	2.91E+03	6.22
PCB-69/49 23'46'"/22'45"-TeCB	21.84	C	1.0198	1.0206	+1.0	6.03E+06	0.78	0.97	782	2.91E+03	4.52
PCB-48 22'45"-TeCB	22.09		1.0323	1.0321	-0.3	2.18E+06	0.77	0.75	363	2.91E+03	5.81
PCB-44/47/65 22'35'"/22'44' "-	22.32	C	1.0420	1.0428	+1.1	4.00E+07	0.78	0.83	6,040	2.91E+03	5.26
PCB-59/62/75 233'6'"/2346'"/24	22.57	C	1.0544	1.0544	0	1.06E+06	0.77	1.14	116	2.91E+03	3.81
PCB-42 22'34' "-TeCB	22.74		1.0624	1.0624	0	2.07E+06	0.77	0.70	372	2.91E+03	6.27
PCB-41 22'34"-TeCB	23.06		1.0773	1.0775	+0.3	9.78E+05	0.74	0.60	203	2.91E+03	7.25
PCB-71/40 23'4'6"/22'33' "-TeCB	23.16	C	1.0822	1.0823	+0.1	3.50E+06	0.77	0.90	487	2.91E+03	4.85
PCB-64 234'6"-TeCB	23.36		1.0912	1.0914	+0.3	4.02E+06	0.77	1.25	402	2.91E+03	3.49
PCB-72 23'55' "-TeCB	24.08	J	0.8282	0.8282	0	1.27E+05	0.75	1.36	11.7	4.03E+03	4.45
PCB-68 23'45' "-TeCB	24.34		0.8368	0.8369	+0.1	4.96E+06	0.77	1.73	359	4.03E+03	3.5
PCB-57 233'5"-TeCB	24.69	J	0.8491	0.8490	-0.1	1.24E+05	0.86	1.12	13.9	4.03E+03	5.42
PCB-58 233'5' "-TeCB	NotFnd		0.8562	-		0.00E+00		1.29	ND	4.03E+03	4.69
PCB-67 23'45"-TeCB	25.04		0.8612	0.8610	-0.3	7.99E+05	0.81	1.48	67.4	4.03E+03	4.07
PCB-63 234'5"-TeCB	25.27		0.8690	0.8689	-0.2	6.01E+05	0.74	1.53	49.3	4.03E+03	3.96
PCB-61/70/74/76 2345'"/23'4'5	25.57	C	0.8788	0.8793	+0.8	2.48E+07	0.76	1.28	2,420	4.03E+03	4.72
PCB-66 23'44' "-TeCB	25.84		0.8884	0.8884	0	1.21E+07	0.79	1.38	1,090	4.03E+03	4.37
PCB-55 233'4"-TeCB	25.98		0.8933	0.8932	-0.2	3.17E+05	0.87	1.20	33.2	4.03E+03	5.05
PCB-56 233'4' "-TeCB	26.41		0.9081	0.9080	-0.2	5.77E+06	0.78	1.36	531	4.03E+03	4.45
PCB-60 2344' "-TeCB	26.60		0.9145	0.9146	+0.2	3.73E+06	0.86	1.16	402	4.03E+03	5.21
PCB-80 33'55' "-TeCB	NotFnd		0.9263	-		0.00E+00		1.74	ND	4.03E+03	3.48
PCB-79 33'45' "-TeCB	28.24	J	0.9712	0.9710	-0.3	1.40E+05	0.71	1.49	11.7	4.03E+03	4.05
PCB-78 33'45"-TeCB	NotFnd		0.9876	-		0.00E+00		1.21	ND	4.03E+03	4.99
PCB-104 22'466' "-PeCB	NotFnd		1.0009	-		0.00E+00		0.99	ND	2.71E+03	5.66
PCB-96 22'366' "-PeCB	22.56	J	1.0152	1.0152	0	7.54E+04	0.57	1.11	12.3	2.71E+03	5.02
PCB-103 22'45'6"-PeCB	24.24	J EMPC	0.8879	0.8877	-0.3	5.24E+04	0.47	0.94	8.44	3.17E+03	6.07

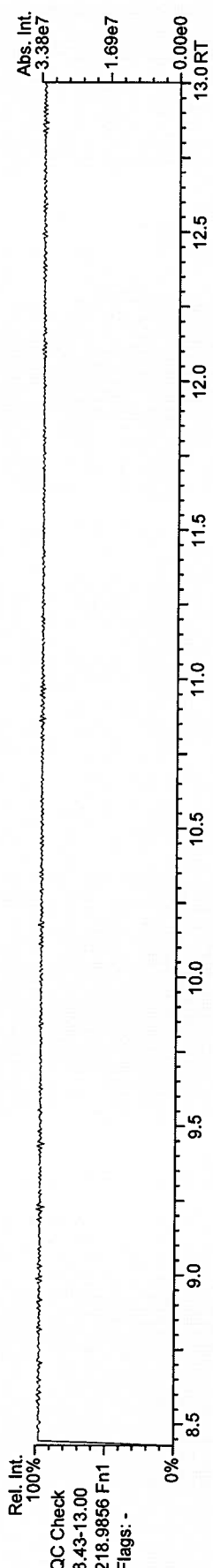
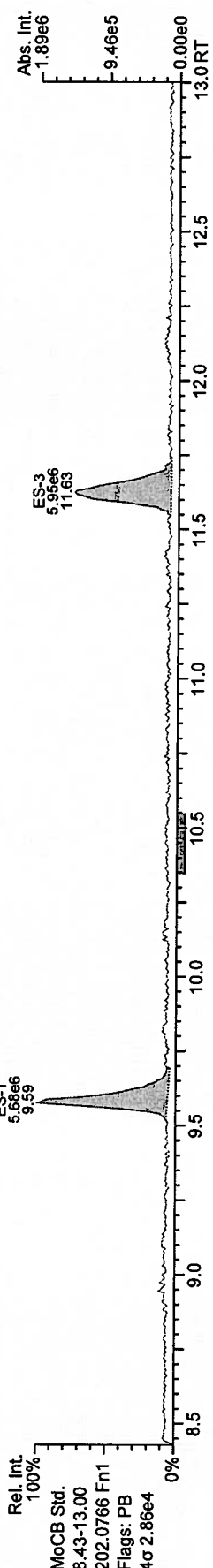
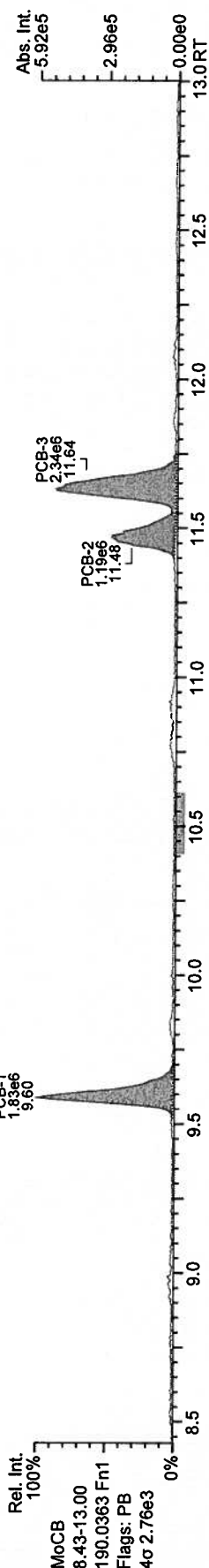
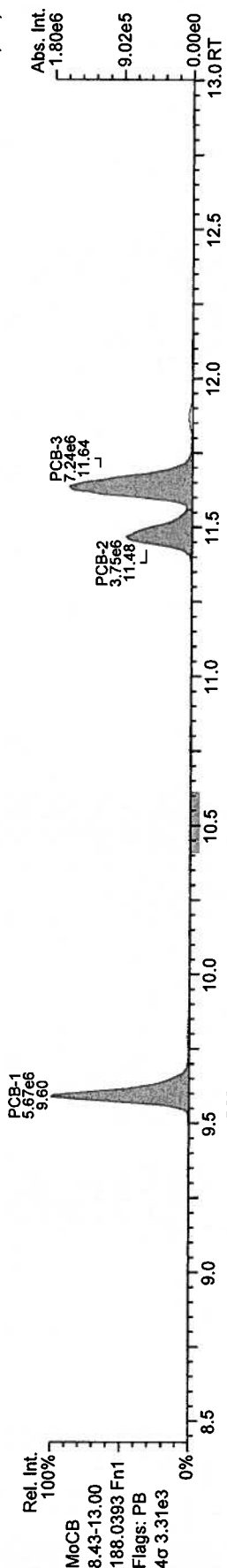
## P1977\_7528\_PCB\_003

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	τβ DL
PCB-94 22'356'-PeCB	NotFnd		0.8949	-		0.00E+00		1.11	ND	3.17E+03	5.14
PCB-95 22'35'6-PeCB	24.81		0.9088	0.9084	-0.6	5.61E+06	0.59	0.89	954	3.17E+03	6.41
PCB-100/93 22'44'6-/22'356-P	NotFnd	C	0.9159	-		0.00E+00		0.82	ND	3.17E+03	6.96
PCB-102 22'456'-PeCB	25.11		0.9200	0.9195	-0.8	2.64E+05	0.58	0.75	53.1	3.17E+03	7.6
PCB-98 22'3'46-PeCB	NotFnd		0.9224	-		0.00E+00		1.03	ND	3.17E+03	5.5
PCB-88 22'346-PeCB	NotFnd		0.9330	-		0.00E+00		1.05	ND	3.17E+03	5.42
PCB-91 22'34'6-PeCB	25.55		0.9359	0.9355	-0.6	9.00E+05	0.61	1.11	122	3.17E+03	5.11
PCB-84 22'33'6-PeCB	25.74		0.9429	0.9424	-0.8	1.52E+06	0.60	0.75	306	3.17E+03	7.6
PCB-89 22'346'-PeCB	NotFnd		0.9579	-		0.00E+00		0.87	ND	3.17E+03	6.52
PCB-121 23'45'6-PeCB	NotFnd		0.9708	-		0.00E+00		1.55	ND	3.17E+03	3.68
PCB-92 22'355'-PeCB	26.83		0.9825	0.9825	0	1.14E+06	0.64	0.81	213	3.17E+03	7.01
PCB-113/90/101 233'5'6-/22'3	27.33		0.9999	1.0007	+1.3	7.98E+06	0.63	0.90	1,340	3.17E+03	6.31
PCB-83 22'33'5-PeCB	27.70	C	1.0155	1.0144	-1.8	4.35E+05	0.53	0.72	91.6	3.17E+03	7.93
PCB-99 22'44'5-PeCB	27.81		1.0189	1.0184	-0.8	3.12E+06	0.60	1.16	406	3.17E+03	4.91
PCB-112 233'56-PeCB	NotFnd		1.0227	-		0.00E+00		1.18	ND	3.17E+03	4.79
PCB-108/119/86/97/125/87 233	28.28	C	1.0354	1.0355	+0.2	5.69E+06	0.57	1.11	775	3.17E+03	5.14
PCB-117 234'56-PeCB	NotFnd		1.0543	-		0.00E+00		0.85	ND	3.17E+03	6.68
PCB-116/85 23456-/22'344'-Pe	28.86	C	1.0573	1.0569	-0.7	9.37E+05	0.63	1.24	114	3.17E+03	4.6
PCB-110 233'4'6-PeCB	29.00		1.0625	1.0619	-1.0	7.94E+06	0.60	1.41	850	3.17E+03	4.04
PCB-115 2344'6-PeCB	NotFnd		1.0651	-		0.00E+00		1.08	ND	3.17E+03	5.24
PCB-82 22'33'4-PeCB	29.27		1.0724	1.0717	-1.2	5.87E+05	0.62	0.87	102	3.17E+03	6.53
PCB-111 233'55'-PeCB	NotFnd		1.0845	-		0.00E+00		1.58	ND	3.17E+03	3.6
PCB-120 23'455'-PeCB	NotFnd		1.0988	-		0.00E+00		1.22	ND	3.17E+03	4.64
PCB-107/124 233'4'5-/2'3455'	30.97	J C	0.9908	0.9910	+0.4	2.64E+05	0.61	1.06	37.5	3.17E+03	5.35
PCB-109 233'46-PeCB	NotFnd		0.9974	-		0.00E+00		1.19	ND	3.17E+03	4.78
PCB-106 233'45-PeCB	NotFnd		1.0039	-		0.00E+00		1.21	ND	3.17E+03	4.71
PCB-122 2'33'45-PeCB	NotFnd		1.0100	-		0.00E+00		0.80	ND	3.17E+03	6.1
PCB-127 33'455'-PeCB	NotFnd		1.0390	-		0.00E+00		1.00	ND	3.17E+03	5.45
PCB-155 22'44'66'-HxCB	27.11	J EMPC	1.0008	1.0003	-0.8	1.08E+05	1.04	0.99	12.4	2.62E+03	3.51
PCB-152 22'3566'-HxCB	NotFnd		1.0069	-		0.00E+00		1.18	ND	2.62E+03	2.95
PCB-150 22'34'66'-HxCB	NotFnd		1.0122	-		0.00E+00		1.43	ND	2.62E+03	2.43
PCB-136 22'33'66'-HxCB	27.74		1.0235	1.0235	0	1.42E+06	1.15	0.98	163	2.62E+03	3.53
PCB-145 22'3466'HxCB	NotFnd		1.0329	-		0.00E+00		0.96	ND	2.62E+03	3.61
PCB-148 22'34'56'-HxCB	NotFnd		1.0803	-		0.00E+00		1.25	ND	2.62E+03	3.34
PCB-151/135 22'355'6-/22'33'	29.80	C	1.0995	1.0993	-0.4	2.73E+06	1.32	0.88	418	2.62E+03	4.75
PCB-154 22'44'5'6-HxCB	NotFnd		1.1069	-		0.00E+00		0.88	ND	2.62E+03	4.74
PCB-144 22'345'6-HxCB	30.27		1.1166	1.1167	+0.2	4.69E+05	1.12	0.91	69.2	2.62E+03	4.57
PCB-147/149 22'34'56-/22'34'	30.57	C	1.1278	1.1280	+0.4	6.15E+06	1.23	1.04	799	2.62E+03	4.03
PCB-134 22'33'56-HxCB	30.75		1.1339	1.1345	+1.1	3.05E+05	1.35	0.68	60.7	2.62E+03	6.16
PCB-143 22'3456'-HxCB	NotFnd		1.1369	-		0.00E+00		1.25	ND	2.62E+03	3.35
PCB-139/140 22'344'6-/22'344'	NotFnd	C	1.1466	-		0.00E+00		1.06	ND	2.62E+03	3.93
PCB-131 22'33'46-HxCB	NotFnd		1.1529	-		0.00E+00		0.83	ND	2.62E+03	5.05
PCB-142 22'3456-HxCB	NotFnd		1.1578	-		0.00E+00		1.09	ND	2.62E+03	3.83
PCB-132 22'33'46'-HxCB	31.64		1.1672	1.1673	+0.2	1.92E+06	1.25	0.88	292	2.62E+03	4.72
PCB-133 22'33'55'-HxCB	NotFnd		1.1827	-		0.00E+00		0.84	ND	2.62E+03	4.97
PCB-165 233'55'6-HxCB	NotFnd		0.9483	-		0.00E+00		0.91	ND	2.62E+03	4.59
PCB-146 22'34'55'-HxCB	32.61		0.9545	0.9545	0	7.93E+05	1.43	1.13	94.9	2.62E+03	3.7

P1977\_7528\_PCB\_003

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	τβ DL
PCB-161 233'45'6"-HxCB	NotFnd		0.9578	-		0.00E+00		1.09	ND	2.62E+03	3.82
PCB-153/168 22'44'55'"/23'44'	33.13	C	0.9703	0.9698	-1.0	6.56E+06	1.29	1.15	771	2.62E+03	3.64
PCB-141 22'3455'-HxCB	33.30		0.9746	0.9747	+0.2	1.30E+06	1.24	0.85	206	2.62E+03	4.89
PCB-130 22'33'45'-HxCB	33.65		0.9847	0.9849	+0.4	2.69E+05	1.20	0.66	54.7	2.62E+03	6.29
PCB-137 22'344'5"-HxCB	33.83		0.9902	0.9903	+0.2	2.31E+05	1.18	1.13	27.5	2.62E+03	3.69
PCB-164 233'4'5'6"-HxCB	33.93		0.9930	0.9932	+0.4	4.58E+05	1.08	1.15	53.6	2.62E+03	3.63
PCB-163/138/129 233'4'56"/22'	34.19	C	1.0012	1.0007	-1.0	5.54E+06	1.28	0.99	759	2.62E+03	4.24
PCB-160 233'456"-HxCB	NotFnd		1.0048	-		0.00E+00		1.58	ND	2.62E+03	2.65
PCB-158 233'44'6"-HxCB	34.51	EMPC	1.0104	1.0102	-0.4	6.43E+05	1.02	1.22	70.8	2.62E+03	3.41
PCB-128/166 22'33'44'"/2344'5	35.26	C	0.9601	0.9604	+0.6	4.55E+05	1.34	1.00	78.4	2.55E+03	5.08
PCB-159 233'455'-HxCB	NotFnd		0.9829	-		0.00E+00		1.16	ND	2.55E+03	4.38
PCB-162 233'4'55'-HxCB	NotFnd		0.9895	-		0.00E+00		1.49	ND	2.55E+03	3.4
PCB-188 22'34'566'-HpCB	NotFnd		1.0007	-		0.00E+00		0.97	ND	2.29E+03	2.72
PCB-179 22'33'566'-HpCB	32.27		1.0096	1.0097	+0.2	1.26E+06	1.02	1.13	103	2.29E+03	2.32
PCB-184 22'344'66'-HpCB	NotFnd		1.0236	-		0.00E+00		1.01	ND	2.29E+03	2.6
PCB-176 22'33'466'-HpCB	33.02		1.0330	1.0329	-0.2	3.88E+05	1.03	1.17	30.9	2.29E+03	2.25
PCB-186 22'34566'-HpCB	NotFnd		1.0452	-		0.00E+00		0.98	ND	2.29E+03	2.68
PCB-178 22'33'55'6"-HpCB	34.56		1.0814	1.0813	-0.2	3.67E+05	1.11	0.73	46.7	2.29E+03	3.6
PCB-175 22'33'45'6"-HpCB	NotFnd		1.0983	-		0.00E+00		0.72	ND	2.78E+03	6.55
PCB-187 22'34'55'6"-HpCB	35.33		1.1055	1.1054	-0.2	1.73E+06	1.11	1.01	243	2.78E+03	4.65
PCB-182 22'344'56'-HpCB	NotFnd		1.1109	-		0.00E+00		0.97	ND	2.78E+03	4.85
PCB-184 22'344'5'6"-HpCB	35.85		1.1215	1.1215	0	8.70E+05	0.96	0.89	138	2.78E+03	5.26
PCB-185 22'3455'6"-HpCB	35.95		1.1242	1.1246	+0.9	1.35E+05	1.12	0.95	20.1	2.78E+03	4.94
PCB-174 22'33'456'-HpCB	36.05		1.1280	1.1278	-0.4	1.14E+06	1.02	0.95	171	2.78E+03	4.97
PCB-177 22'33'4'56"-HpCB	36.42		1.1396	1.1394	-0.4	5.65E+05	0.91	0.90	88.8	2.78E+03	5.21
PCB-181 22'344'56"-HpCB	NotFnd		1.1501	-		0.00E+00		0.77	ND	2.78E+03	6.07
PCB-171/173 22'33'44'6"/22'3	36.95	C	1.1559	1.1561	+0.4	3.97E+05	1.06	0.82	69.1	2.78E+03	5.77
PCB-172 22'33'455'-HpCB	38.31		0.9006	0.9006	0	1.38E+05	1.17	0.75	26	2.78E+03	6.24
PCB-192 233'455'6"-HpCB	NotFnd		0.9062	-		0.00E+00		1.00	ND	2.78E+03	4.7
PCB-180/193 22'344'55'"/233'	38.87	C	0.9130	0.9139	+2.1	2.19E+06	0.98	0.73	425	2.78E+03	6.41
PCB-191 233'44'5'6"-HpCB	NotFnd		0.9206	-		0.00E+00		0.96	ND	2.78E+03	4.92
PCB-170 22'33'44'5"-HpCB	39.93		0.9387	0.9389	+0.5	6.48E+05	0.99	1.36	93.8	2.78E+03	4.68
PCB-190 233'44'56"-HpCB	40.37		0.9492	0.9492	0	1.64E+05	1.14	1.31	24.8	2.78E+03	4.88
PCB-202 22'33'55'66'-OcCB	36.53		1.0006	1.0008	+0.4	2.96E+05	0.98	0.87	37.8	2.91E+03	4.25
PCB-201 22'33'45'66'-OcCB	37.31	EMPC	1.0220	1.0222	+0.4	1.55E+05	1.10	0.81	21.4	2.91E+03	4.57
PCB-204 22'344'566'-OcCB	NotFnd		1.0376	-		0.00E+00		1.00	ND	2.91E+03	3.7
PCB-197 22'33'44'66'-OcCB	NotFnd		1.0429	-		0.00E+00		0.96	ND	2.91E+03	3.84
PCB-200 22'33'4566'-OcCB	NotFnd		1.0455	-		0.00E+00		0.75	ND	2.91E+03	4.91
PCB-198/199 22'33'455'6"/22'	40.52	C	1.1098	1.1103	+1.2	4.17E+05	0.95	0.75	61.5	2.91E+03	4.89
PCB-196 22'33'44'56'-OcCB	41.06	EMPC	1.1255	1.1250	-1.2	1.81E+05	1.12	0.69	29.3	2.91E+03	5.37
PCB-203 22'344'55'6"-OcCB	41.23		1.1300	1.1297	-0.7	2.41E+05	0.99	0.88	30.4	2.91E+03	4.19
PCB-195 22'33'44'56"-OcCB	NotFnd		0.9475	-		0.00E+00		0.97	ND	3.83E+03	9.43
PCB-194 22'33'44'55'-OcCB	44.31		0.9915	0.9917	+0.5	1.46E+05	0.87	1.01	30.7	3.83E+03	9
PCB-205 233'44'55'6"-OcCB	NotFnd		1.0004	-		0.00E+00		0.97	ND	3.83E+03	9.42
PCB-208 22'33'455'66'-NoCB	NotFnd		1.0005	-		0.00E+00		0.95	ND	3.00E+03	6.9
PCB-207 22'33'44'566'-NoCB	NotFnd		1.0191	-		0.00E+00		1.04	ND	3.00E+03	6.31
PCB-206 22'33'44'55'6"-NoCB	NotFnd		1.0004	-		0.00E+00		1.07	ND	3.00E+03	9.89



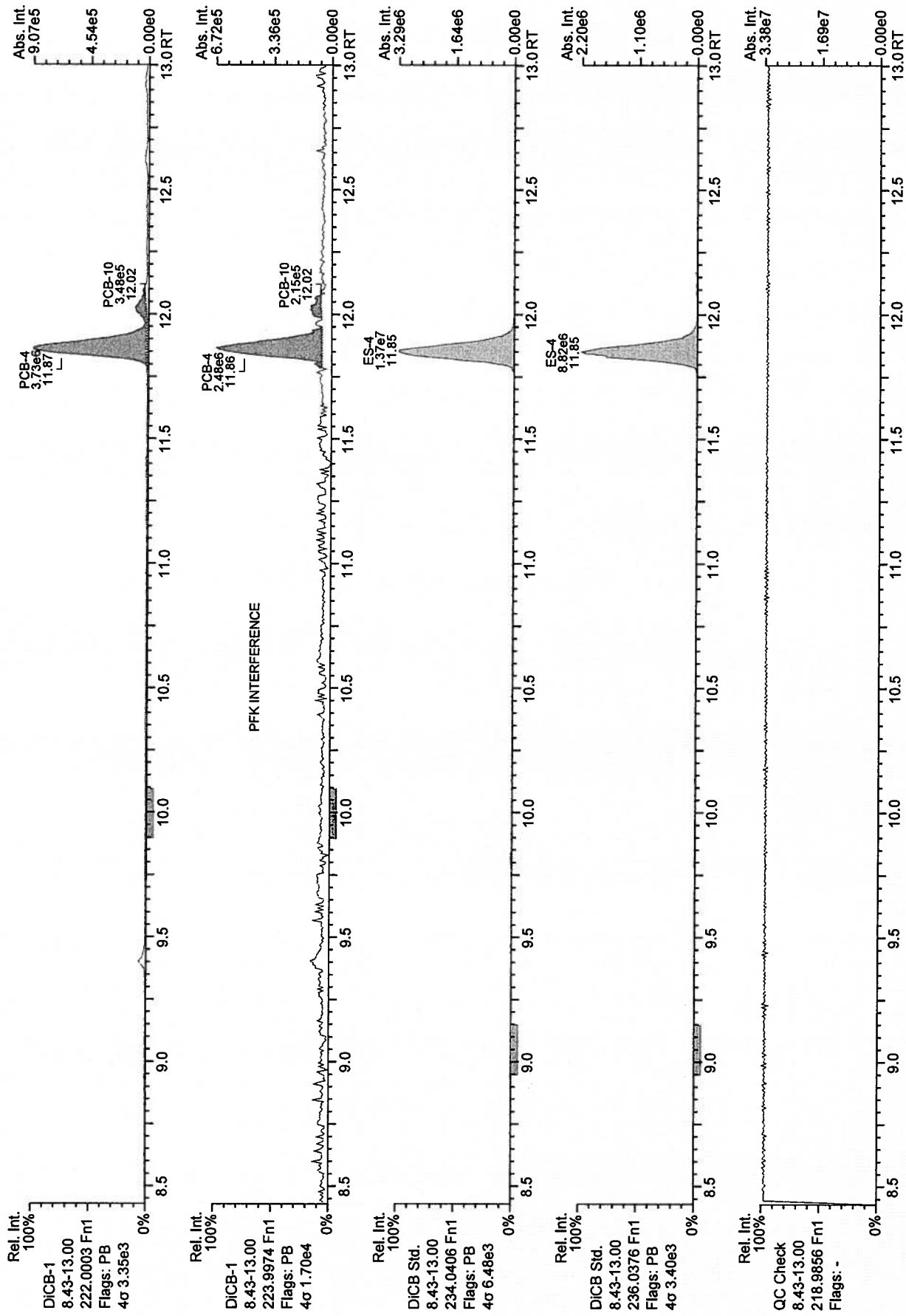




AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 33

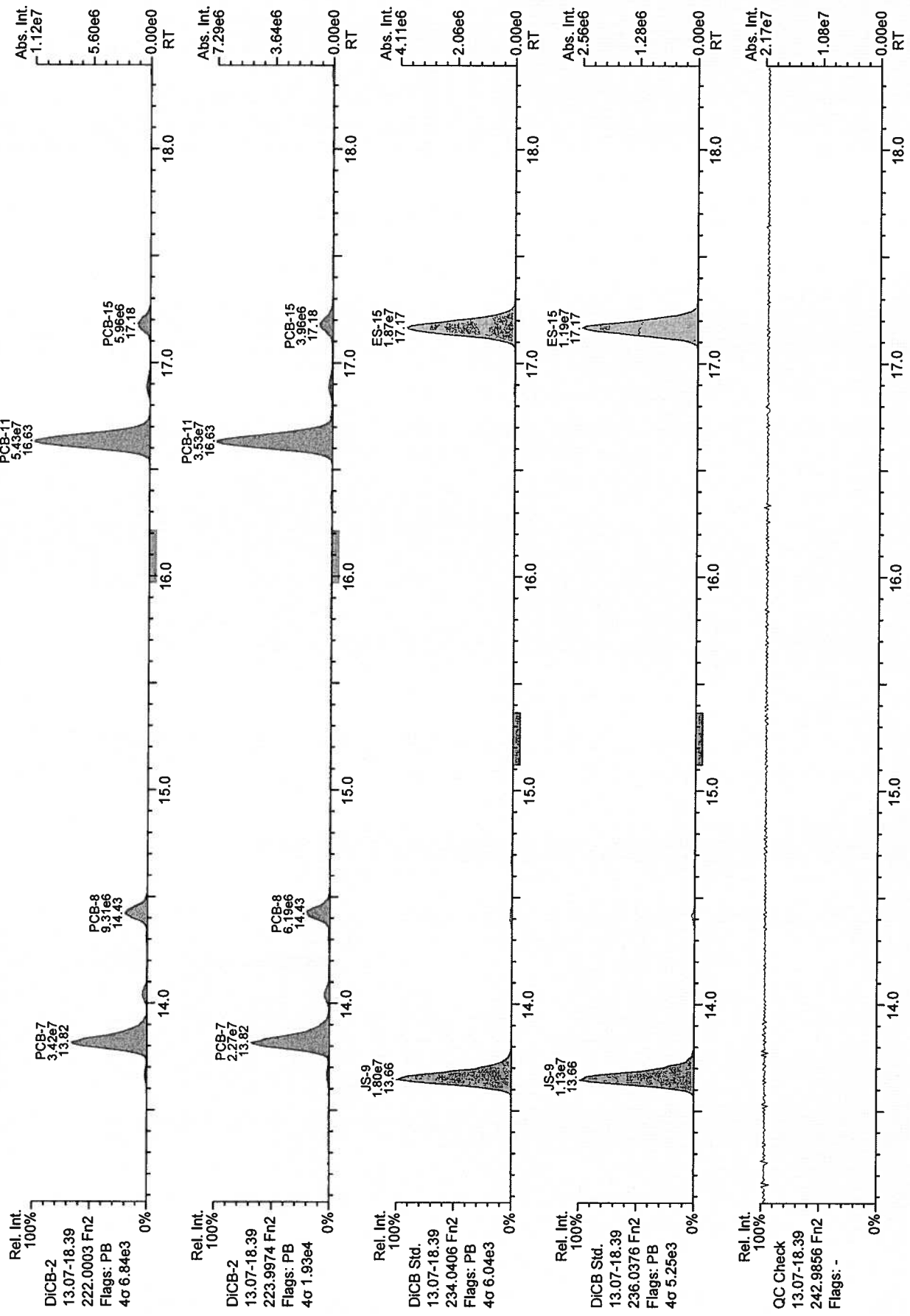
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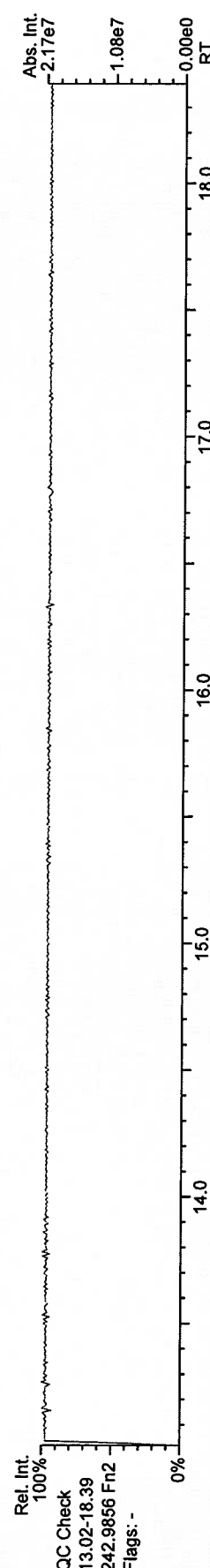
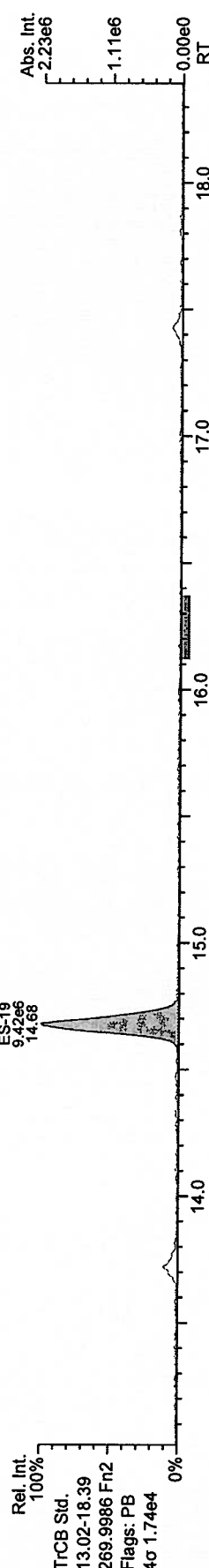
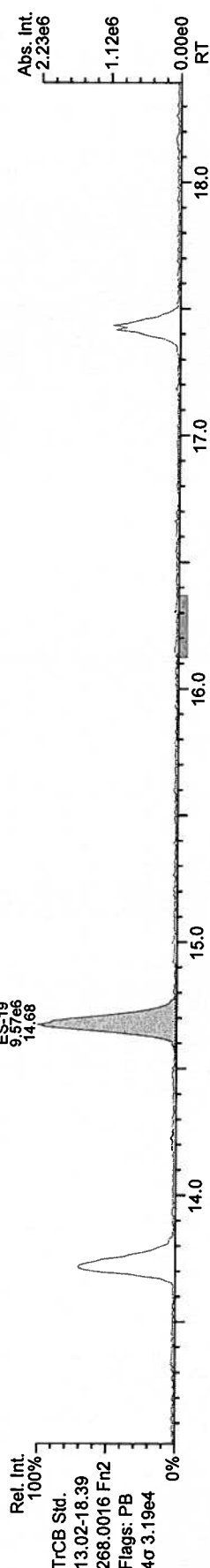
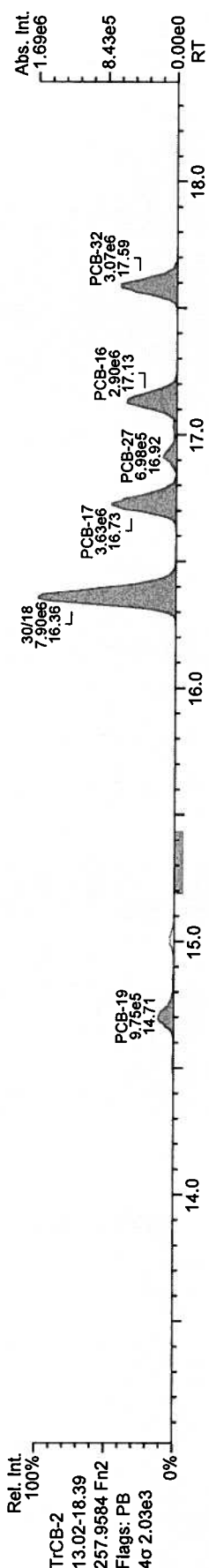
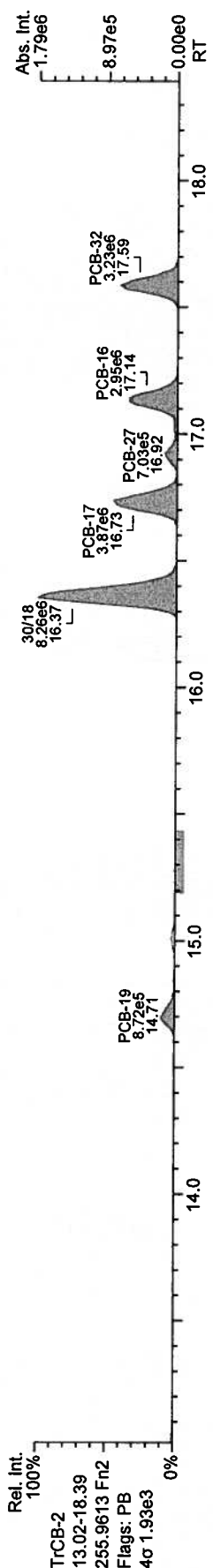


AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 33

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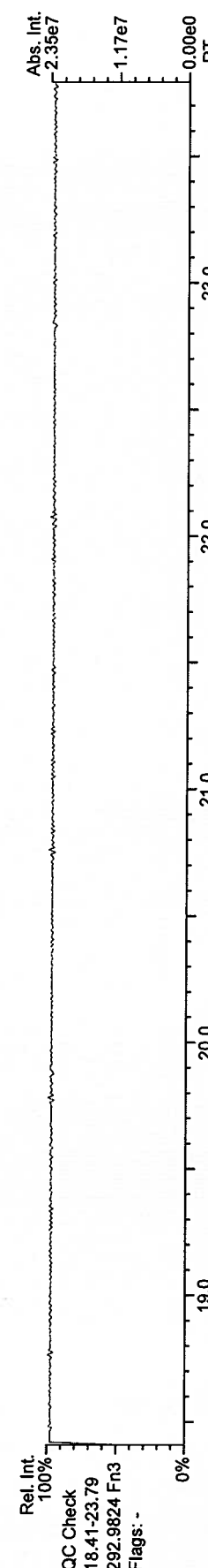
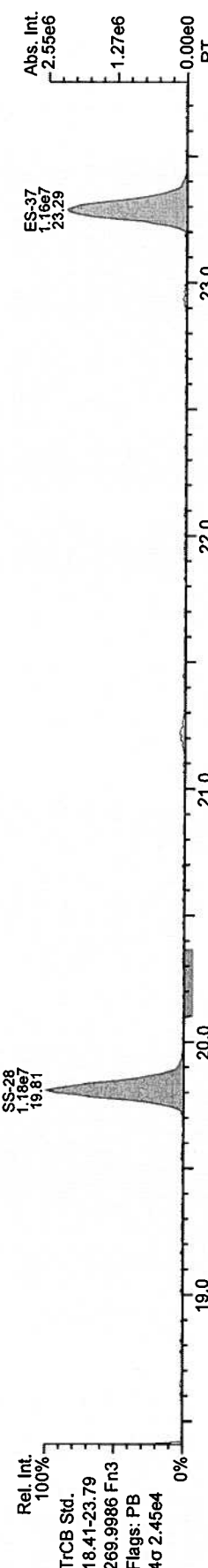
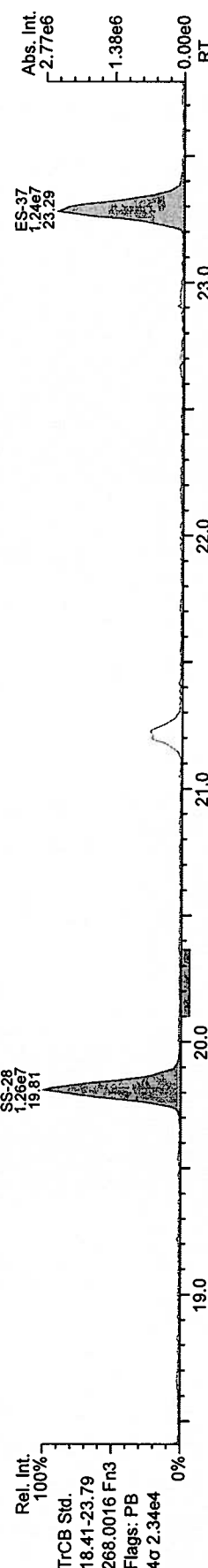
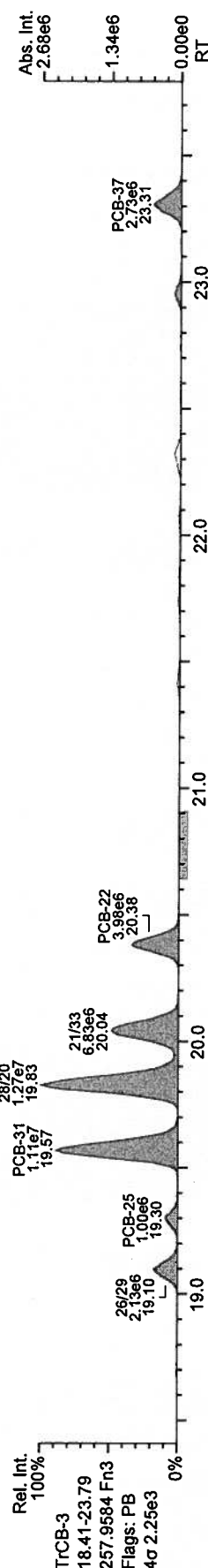
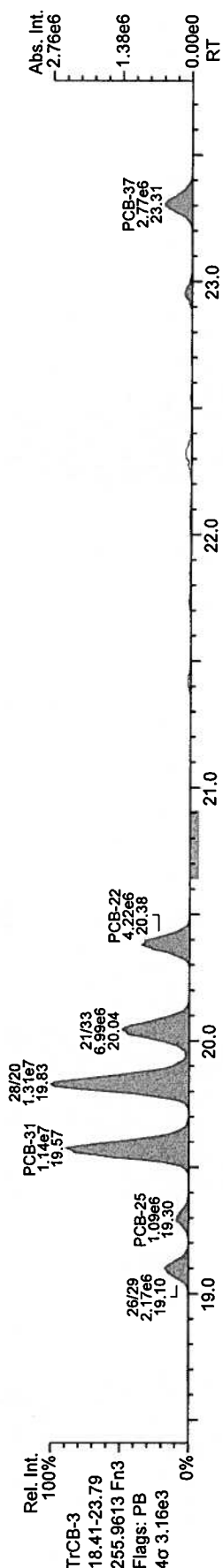




AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 33

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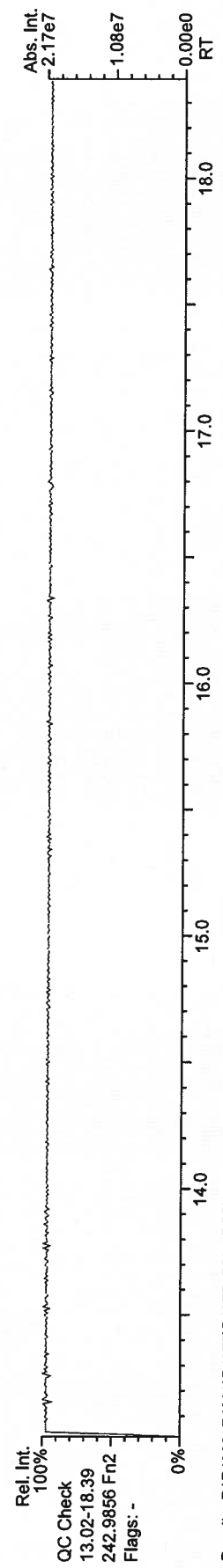
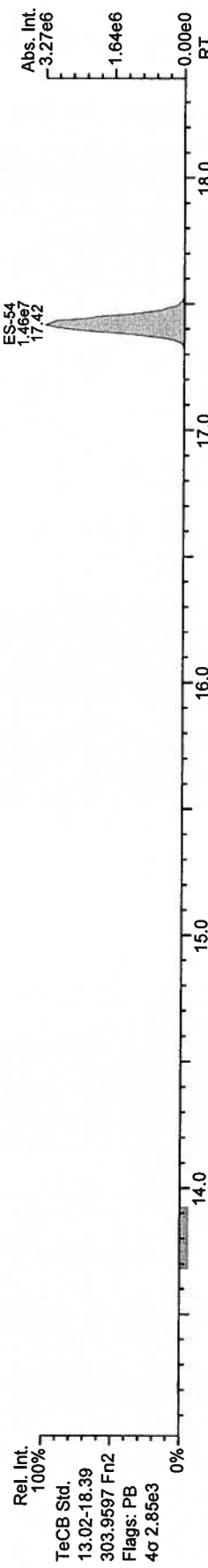
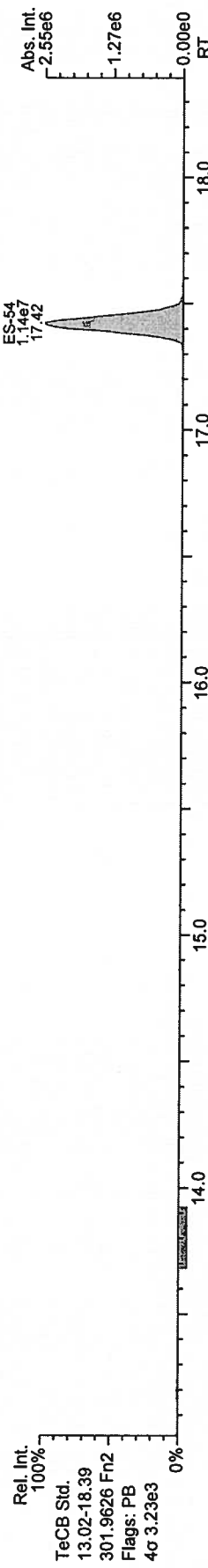
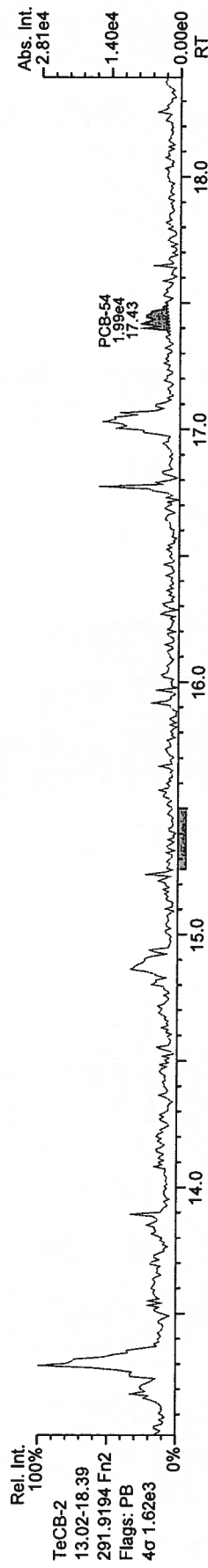
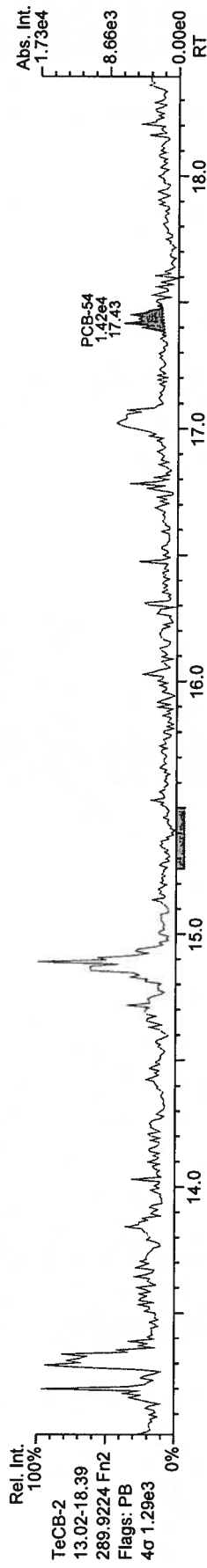
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Peak annotation: Areas, Centroids  
Revised: 09-Feb-2010 16:10:08 (CW) Printed: 10-Feb-2010 12:19:15 Page 6 of 22

AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 33

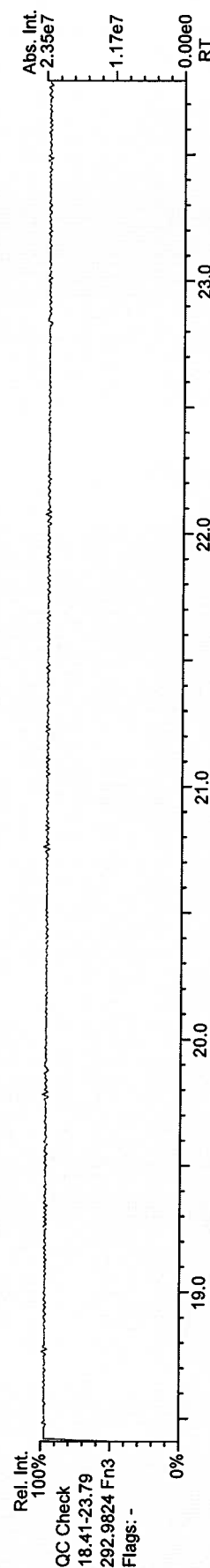
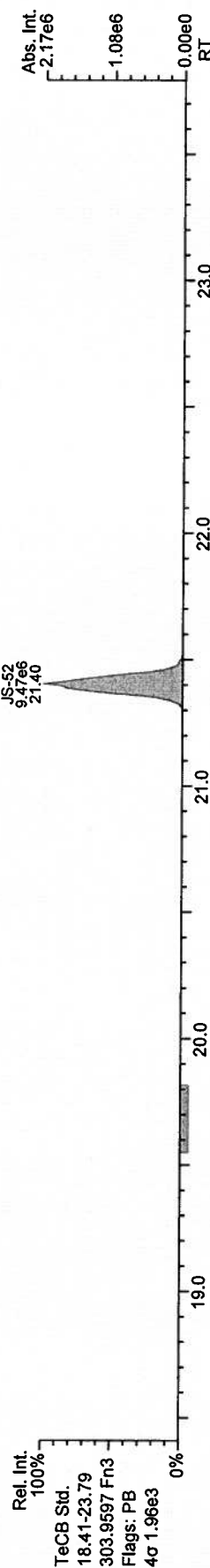
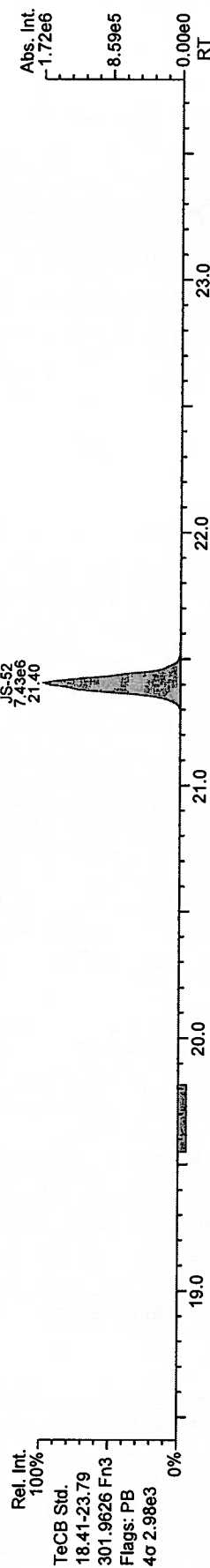
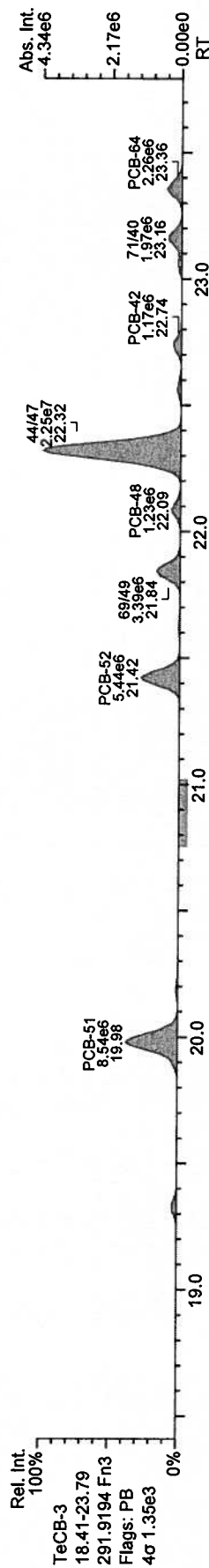
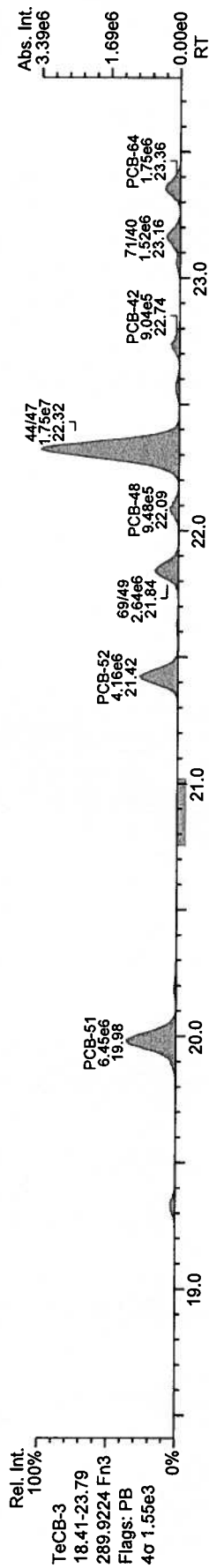
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AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 33

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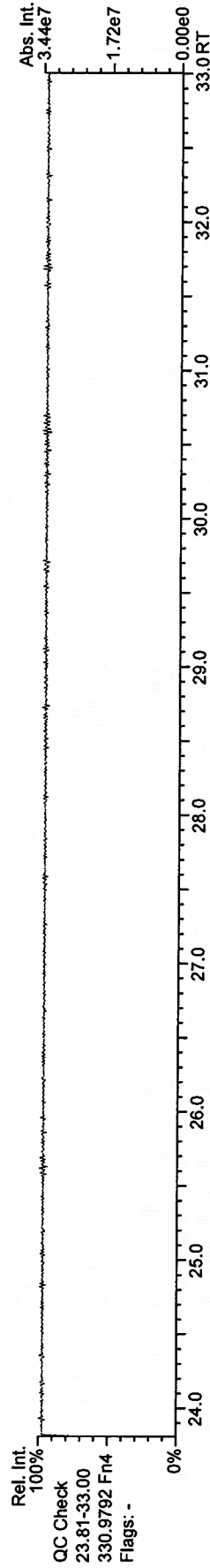
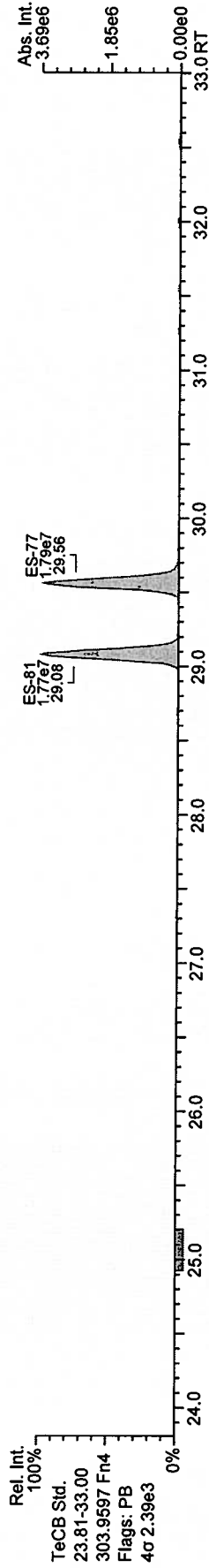
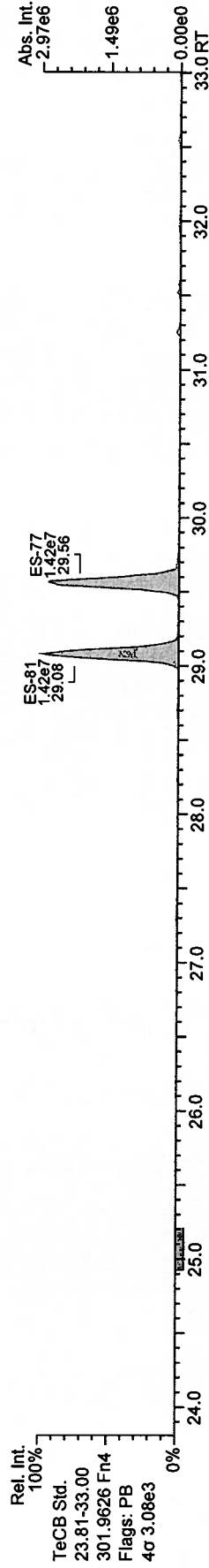
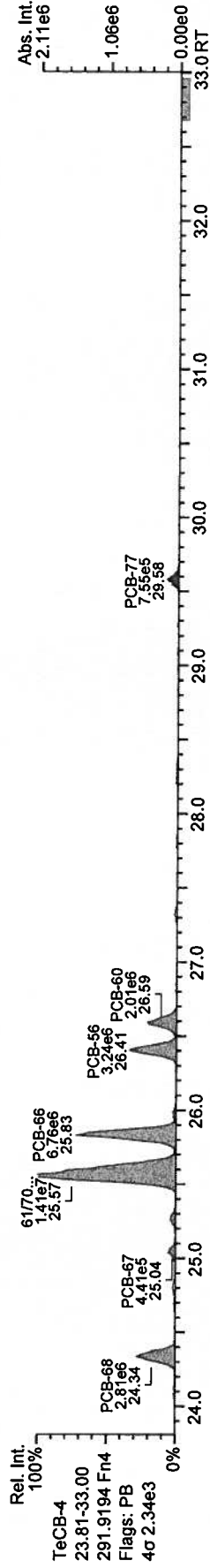
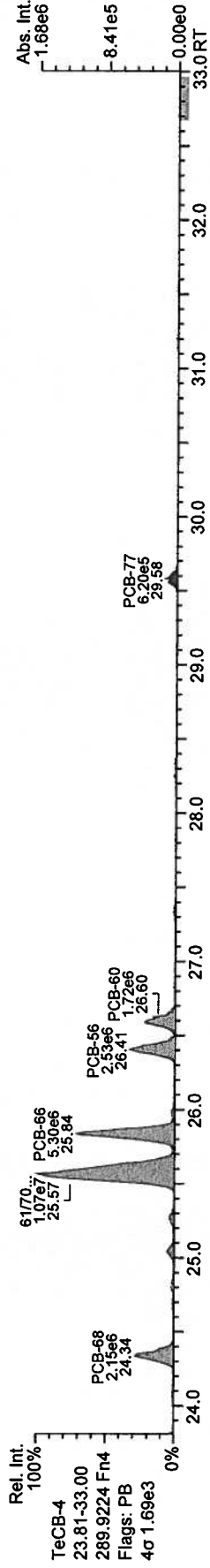
Revised: 09-Feb-2010 16:10:08 (CW) Printed: 10-Feb-2010 12:19:36 Page 8 of 22

Peak annotation: Areas, Centroids

AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

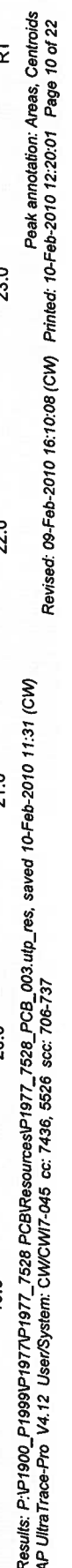
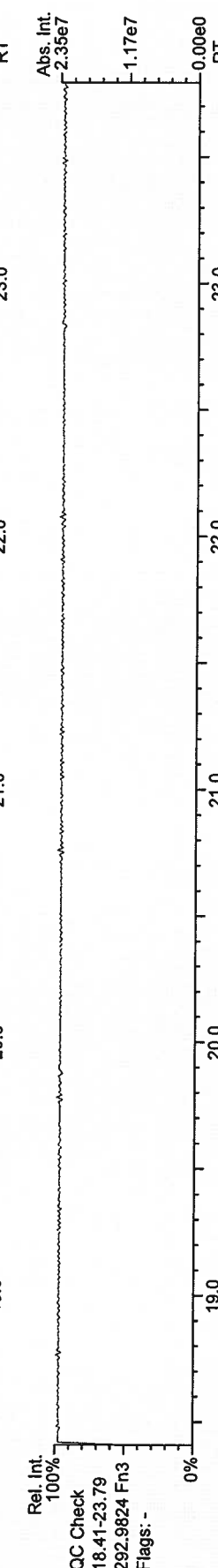
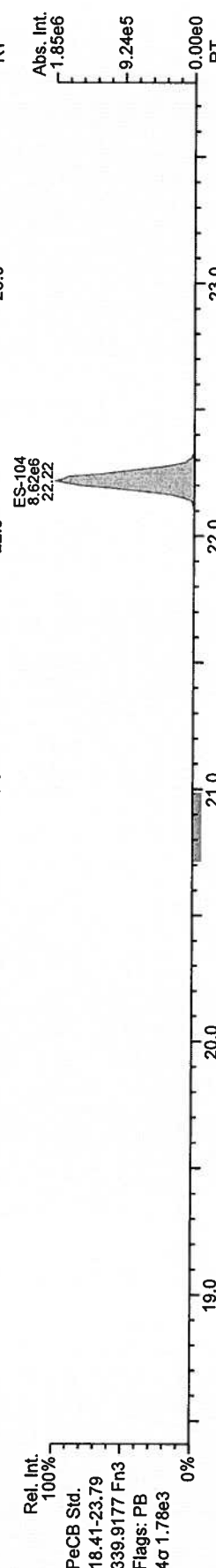
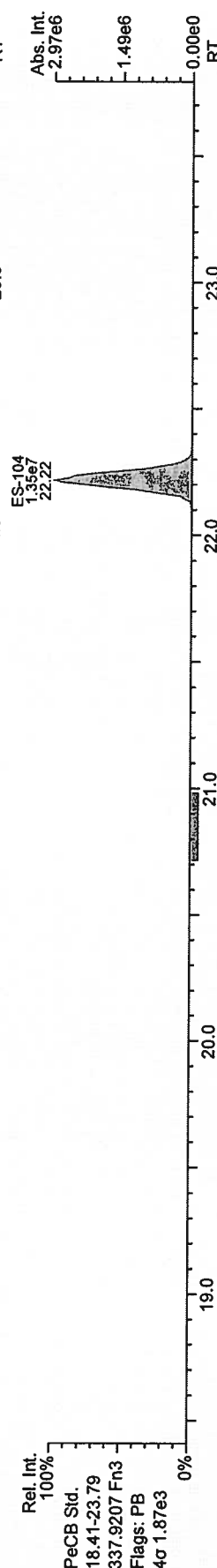
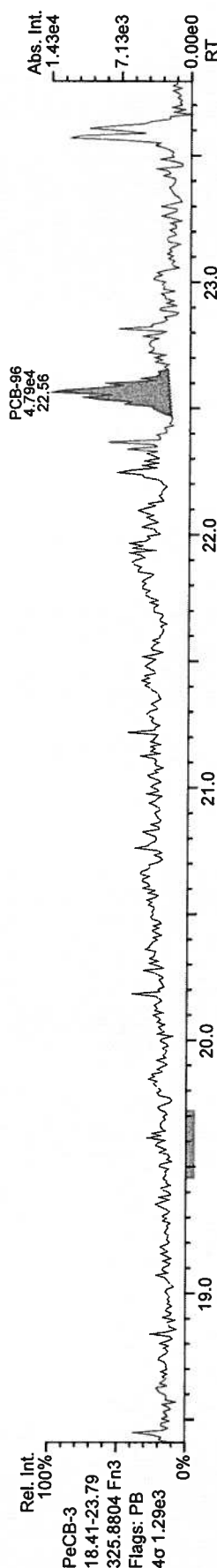
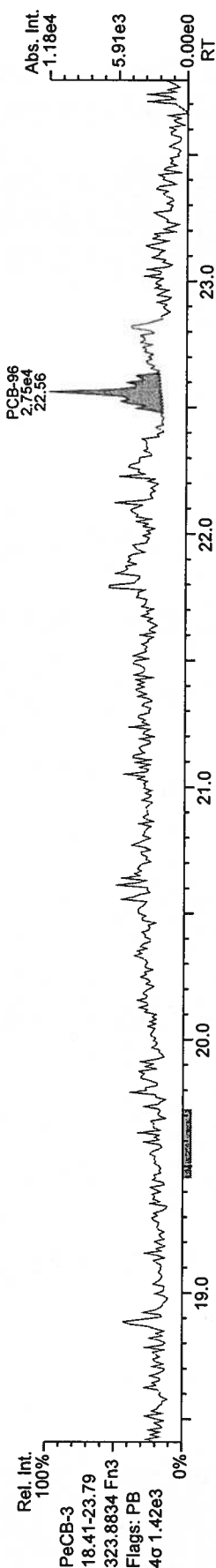


Results: P:\P1900\_P1999\P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_003.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 8958, 0502 scc: 706-737  
Revised: 09-Feb-2010 16:10:08 (CW) Printed: 10-Feb-2010 12:19:51 Page 9 of 22  
Peak annotation: Areas, Centroids

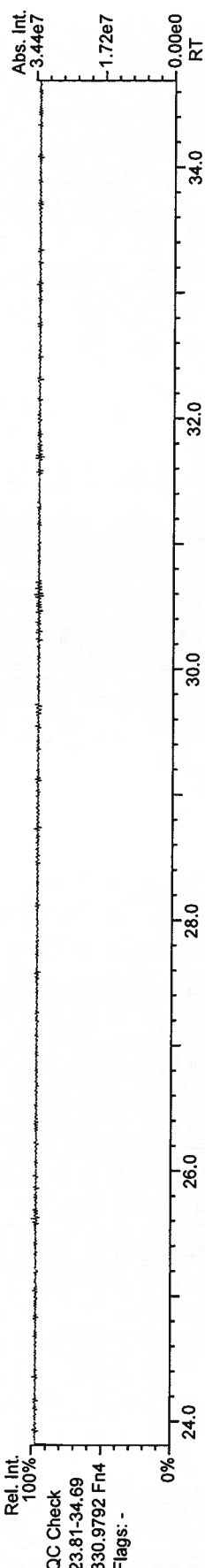
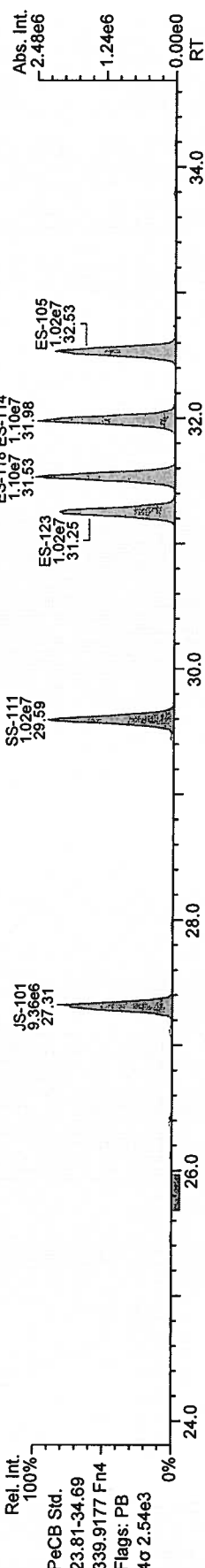
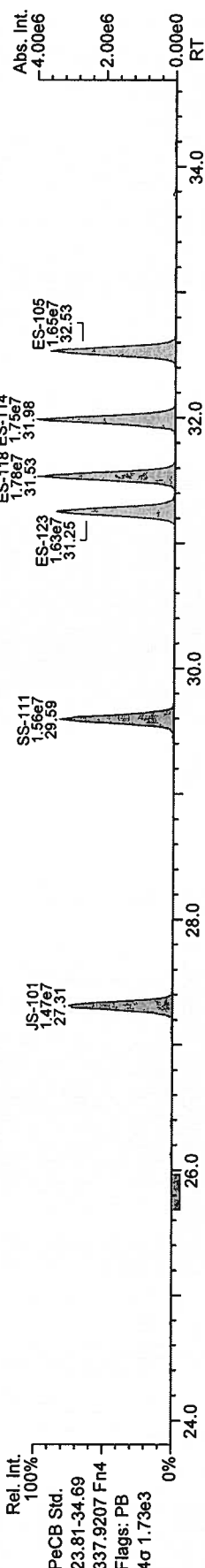
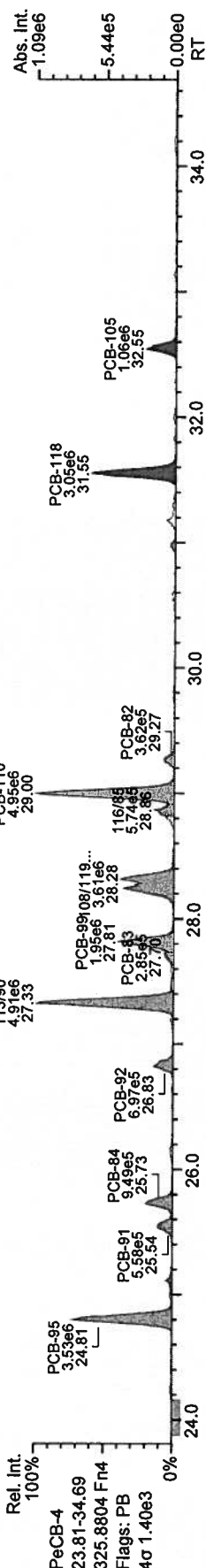
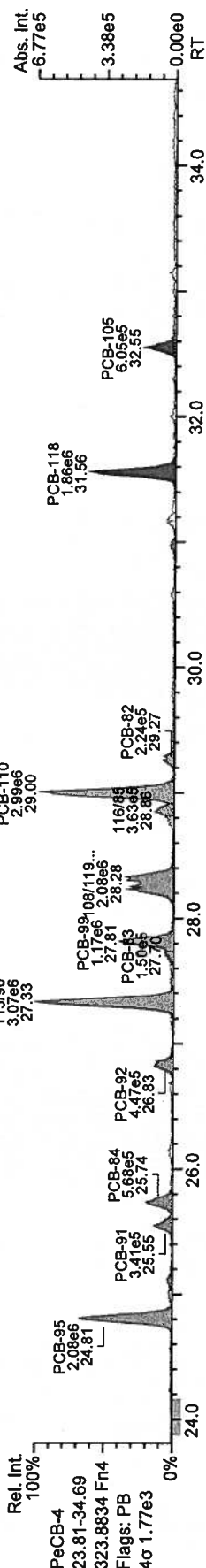
AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)



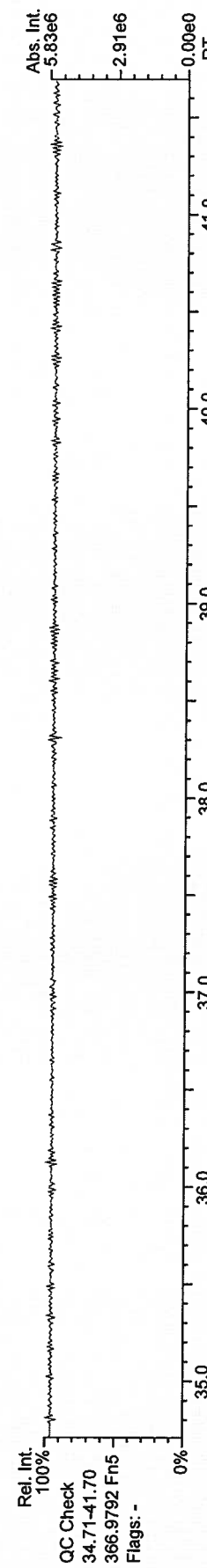
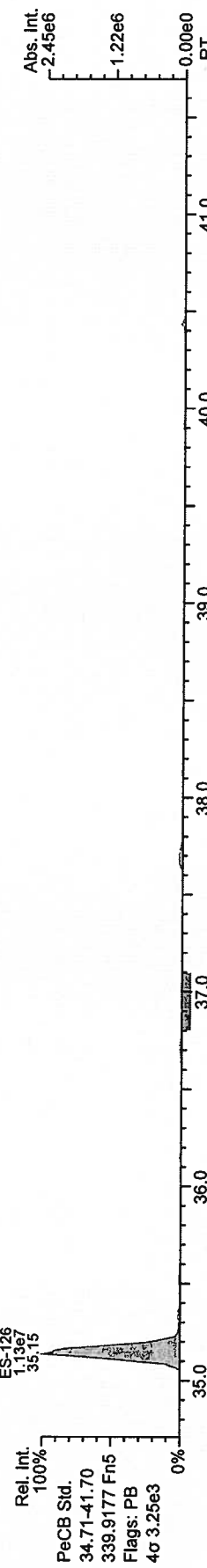
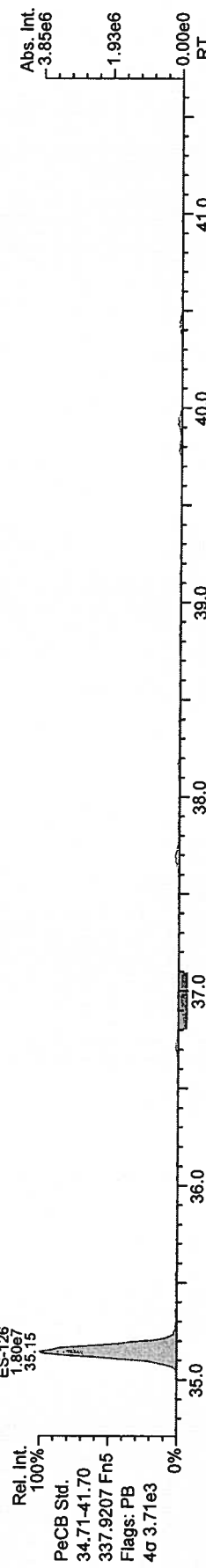
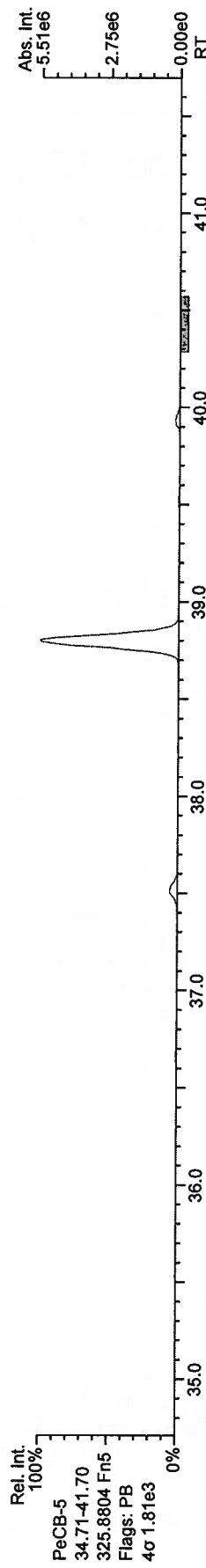
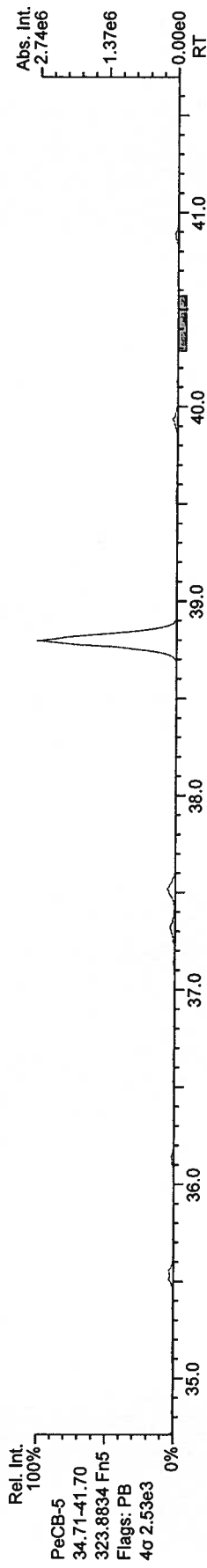




AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)



Results: P:\P1900\_P1999\P1977\_P1977\_7528\_PCBResources\P1977\_7528\_PCB\_003.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 3316, 5572 scc: 706-737

Revised: 09-Feb-2010 16:10:08 (CW) Printed: 10-Feb-2010 12:20:28 Page 12 of 22

AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

Rel. Int.

100%

0%

24.0

26.0

28.0

30.0

32.0

34.0

RT

Abs. Int.

8.14e5

4.07e5

0.00e0

153/168

3.70e6

33.13

163/138

3.12e6

34.19

PCB-164

2.38e5

33.93

PCB-141

7.21e5

33.30

PCB-146

4.67e5

32.61

PCB-132

1.06e6

31.64

PCB-134

1.75e5

30.75

PCB-144

2.47e5

30.27

PCB-136

7.56e5

27.74

151/135

1.55e6

29.80

147/149

3.39e6

30.57

Rel. Int.

100%

0%

24.0

26.0

28.0

30.0

32.0

34.0

RT

Abs. Int.

5.96e5

2.98e5

0.00e0

153/168

2.87e6

33.14

163/138

2.43e6

34.19

PCB-164

2.20e5

33.93

PCB-141

5.83e5

33.30

PCB-146

3.26e5

32.61

PCB-132

8.53e5

31.64

PCB-134

1.75e5

30.75

PCB-144

2.22e5

30.27

PCB-136

6.59e5

27.74

151/135

1.18e6

29.80

147/149

2.76e6

30.57

Rel. Int.

100%

0%

24.0

26.0

28.0

30.0

32.0

34.0

RT

Abs. Int.

4.24e6

2.12e6

0.00e0

ES-153

1.84e7

33.11

JS-138

1.43e7

34.16

Rel. Int.

100%

0%

24.0

26.0

28.0

30.0

32.0

34.0

RT

Abs. Int.

3.33e6

1.66e6

0.00e0

ES-153

1.33e7

33.11

JS-138

1.16e7

34.16

Rel. Int.

100%

0%

24.0

26.0

28.0

30.0

32.0

34.0

RT

Abs. Int.

3.44e7

1.72e7

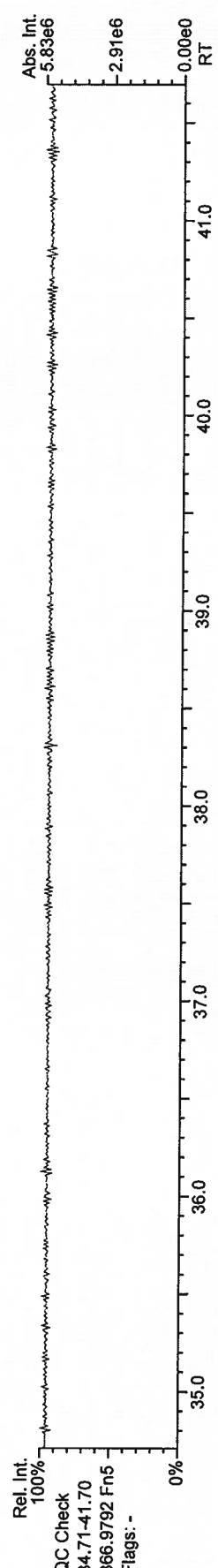
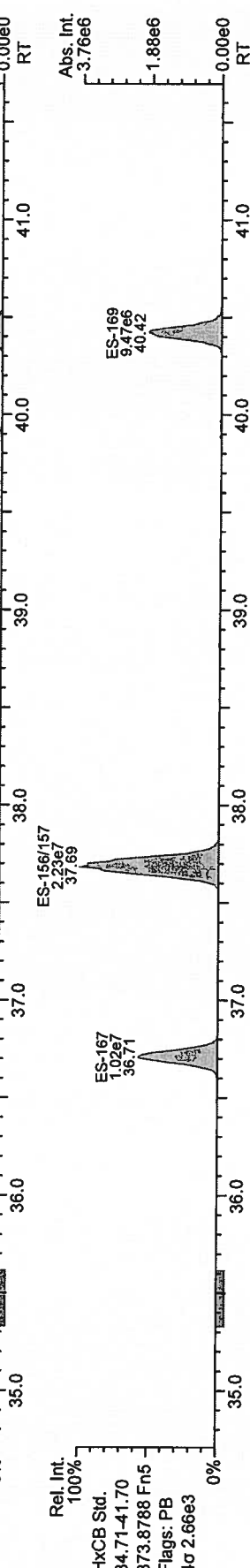
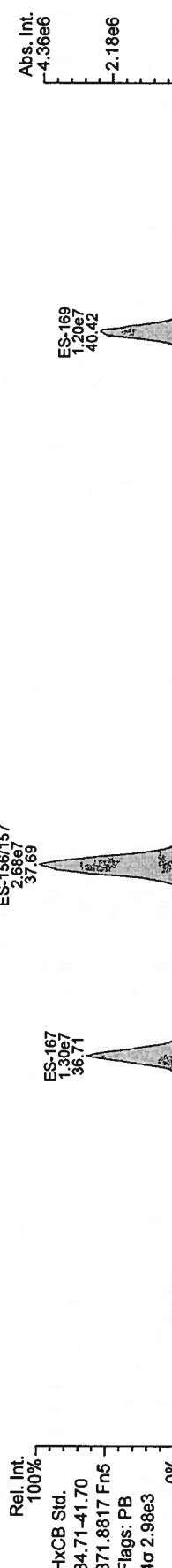
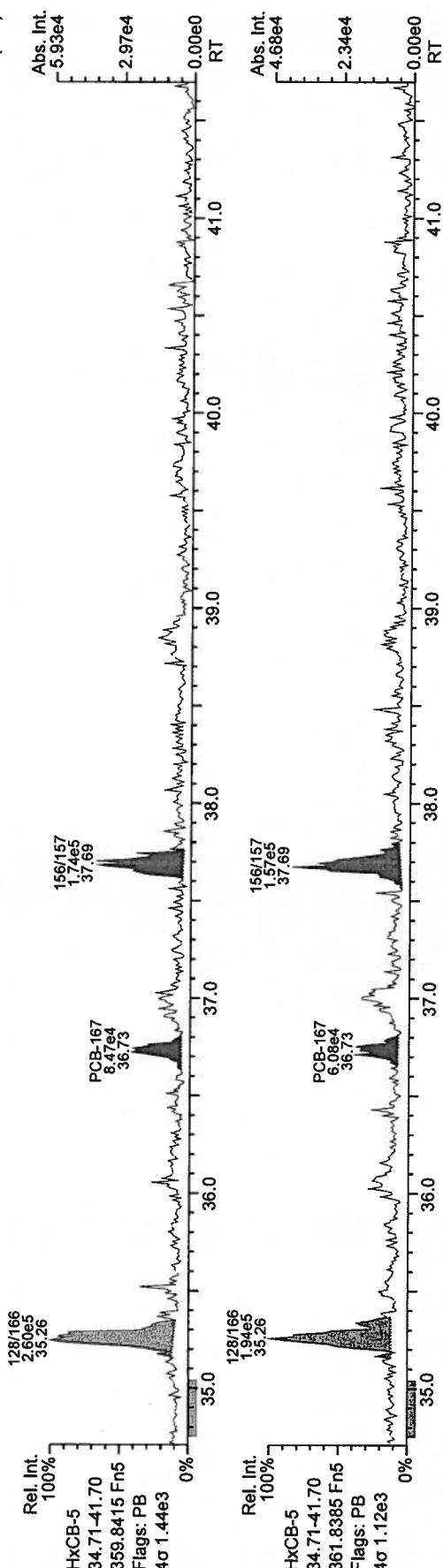
0.00e0

QC Check

23.81-34.69

330.9792 Fn4

Flags: -

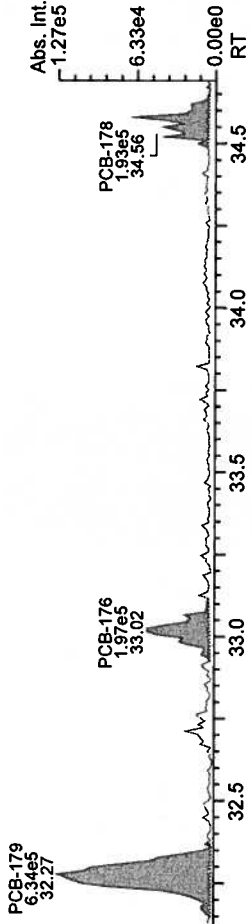


AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

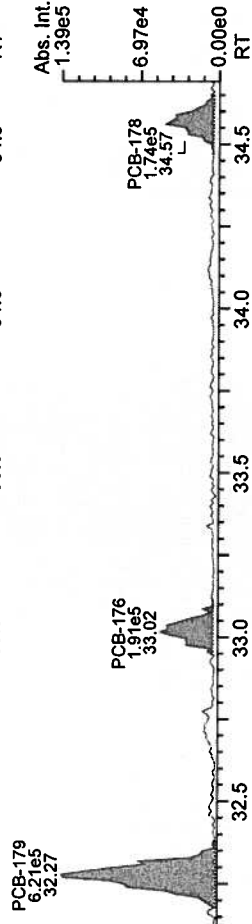
Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

Rel. Int.  
100%  
0%  
HpCB-4  
30.00-34.69  
393.8025 Fn4  
Flags: PB  
4σ 1.27e3



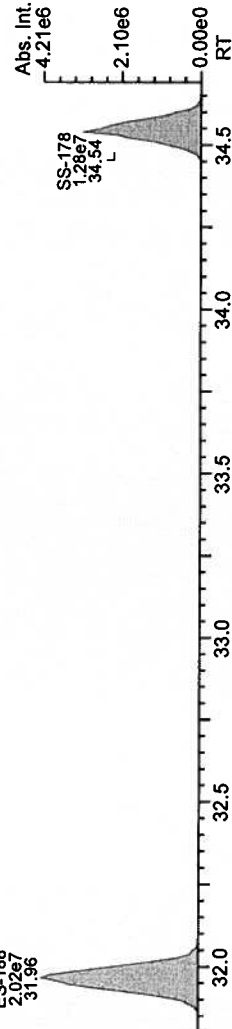
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100%  
0%  
HpCB-4  
30.00-34.69  
395.7995 Fn4  
Flags: PB  
4σ 1.02e3



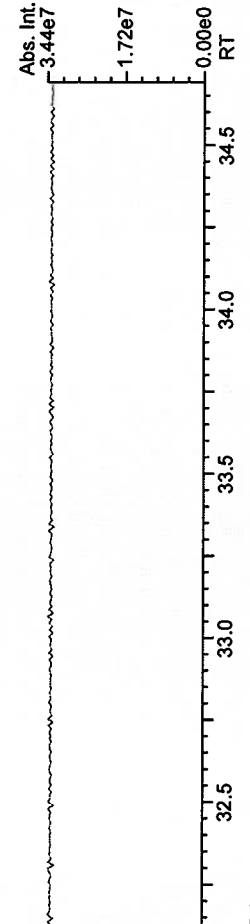
Rel. Int.  
100%  
0%  
HpCB Std.  
30.00-34.69  
405.8428 Fn4  
Flags: PB  
4σ 2.13e3



Rel. Int.  
100%  
0%  
HpCB Std.  
30.00-34.69  
407.8398 Fn4  
Flags: PB  
4σ 1.50e3

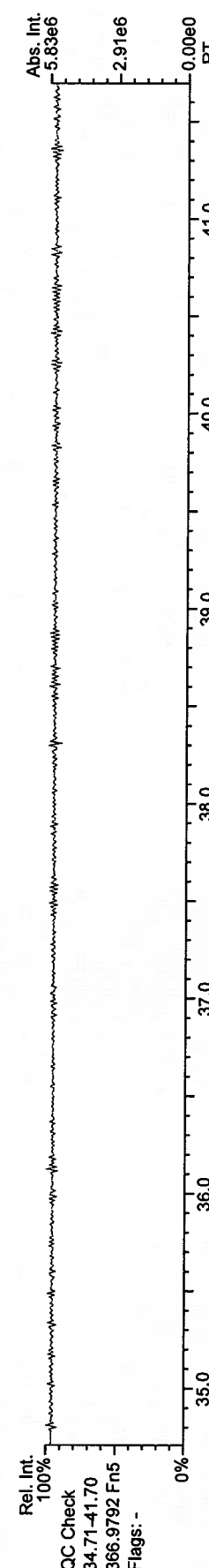
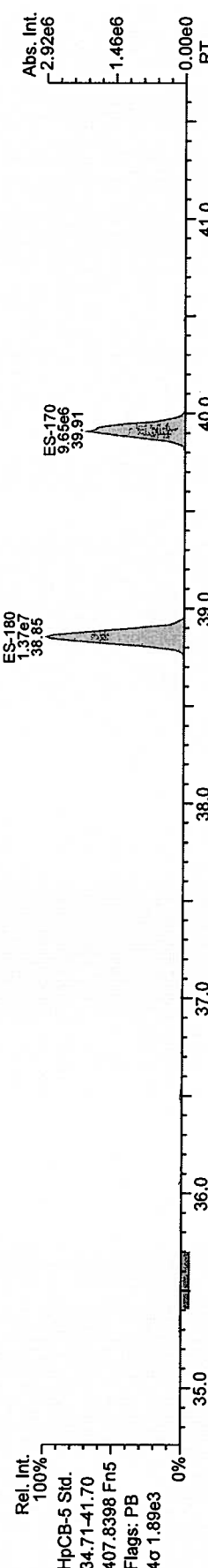
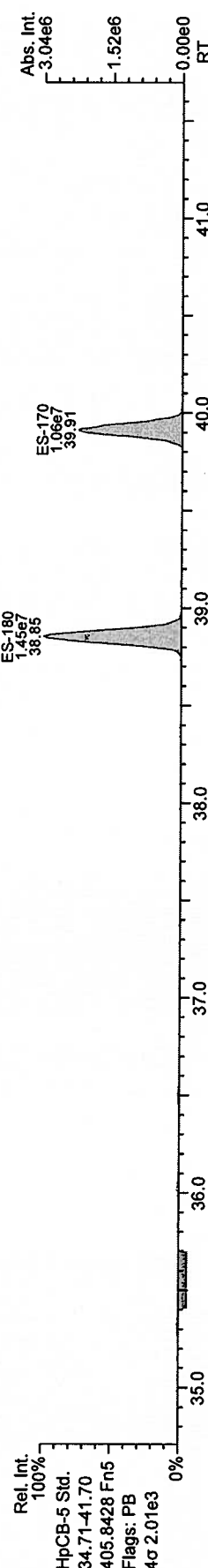
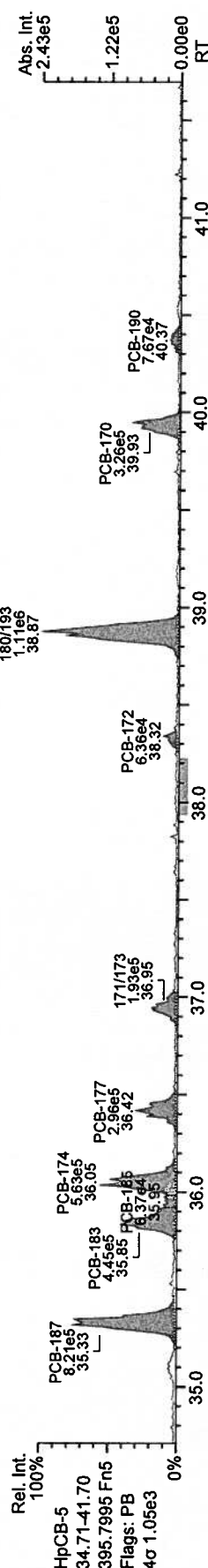
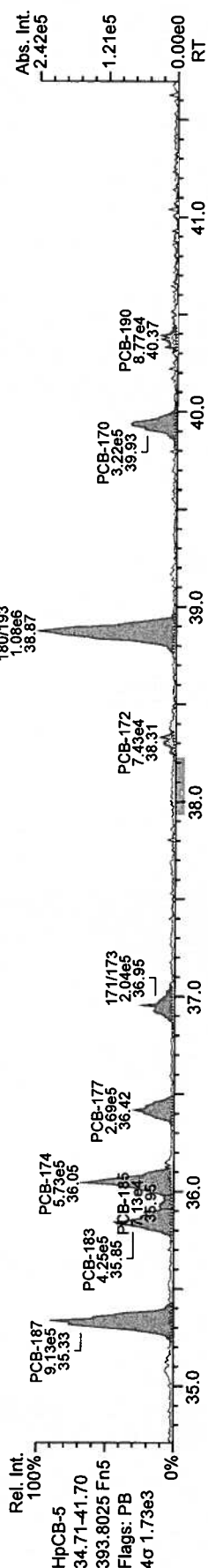


Rel. Int.  
100%  
0%  
QC Check  
30.00-34.69  
330.9792 Fn4  
Flags: -



Results: P:\P1900\_P1999\P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_003.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User\System: CWCW7-045 cc: 0770.9977 scc: 706-737

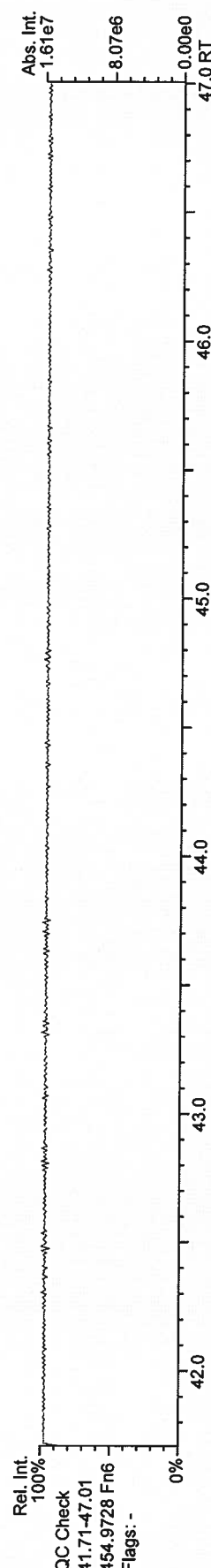
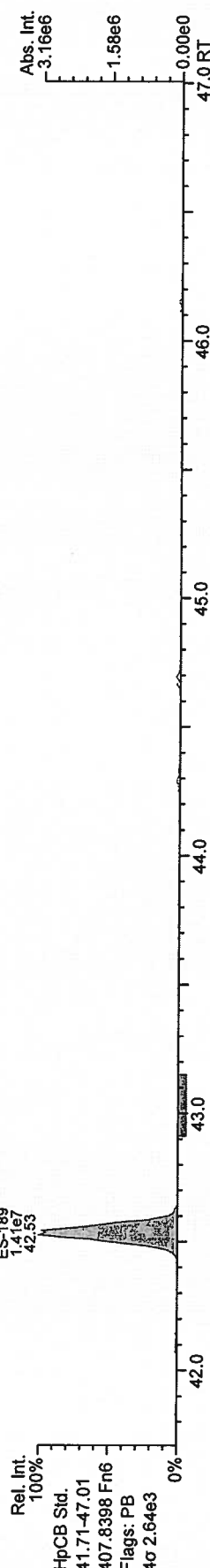
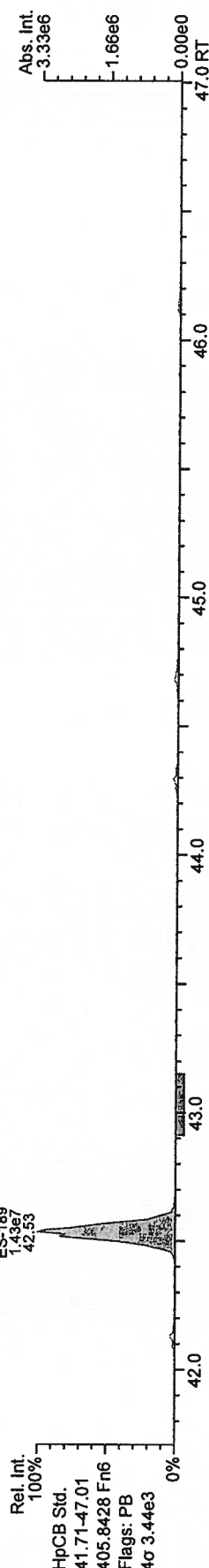
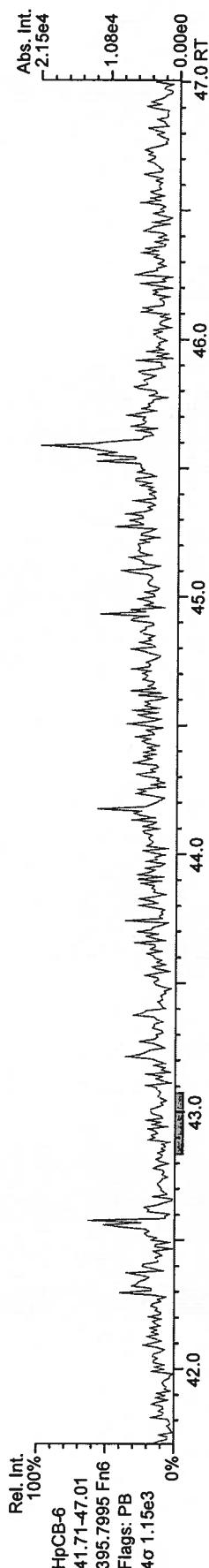
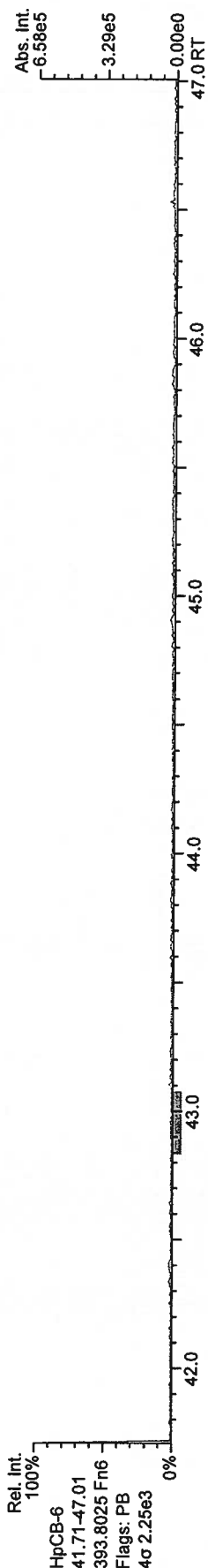
Revised: 09-Feb-2010 16:10:08 (CW) Printed: 10-Feb-2010 12:21:06 Page 15 of 22



AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

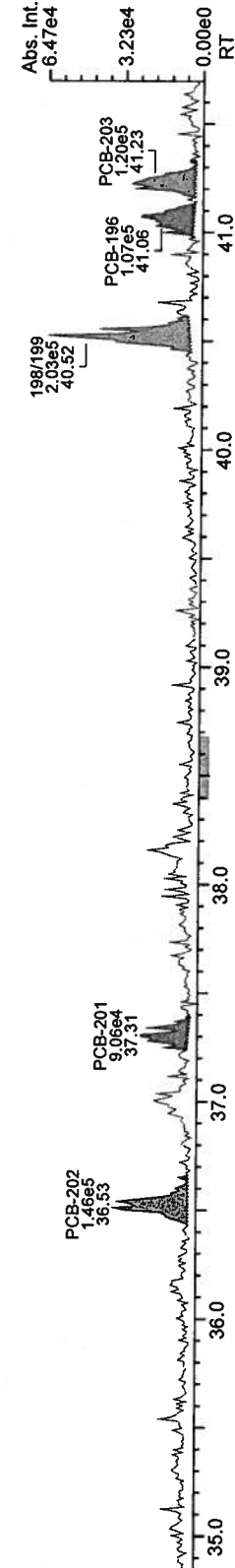


AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

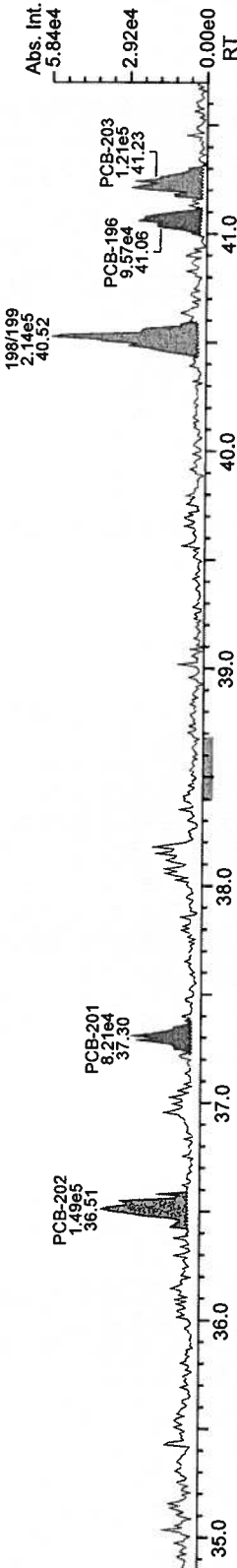
Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 33

Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

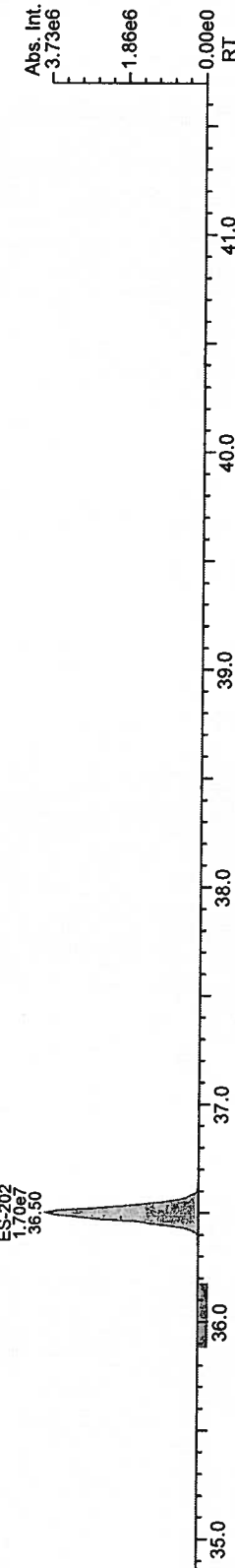
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100%  
0%  
OoCB-5  
34.71-41.70  
427.7635 Fn5  
Flags: PB  
4σ 1.69e3



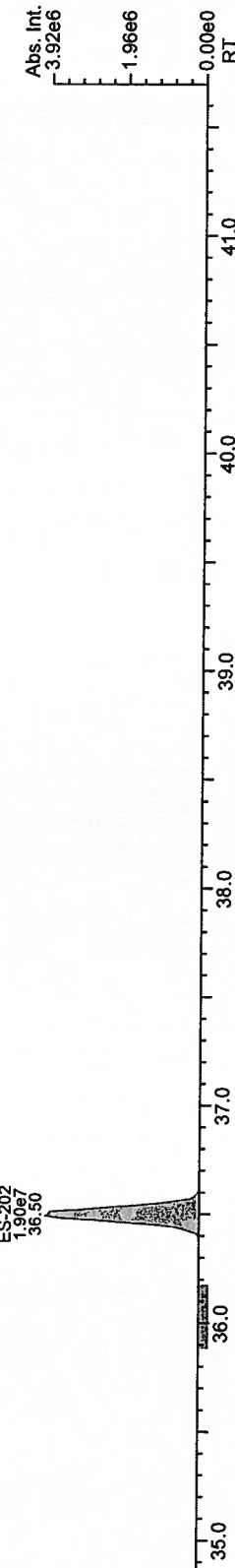
Rel. Int.  
100%  
0%  
OoCB-5  
34.71-41.70  
429.7606 Fn5  
Flags: PB  
4σ 1.22e3



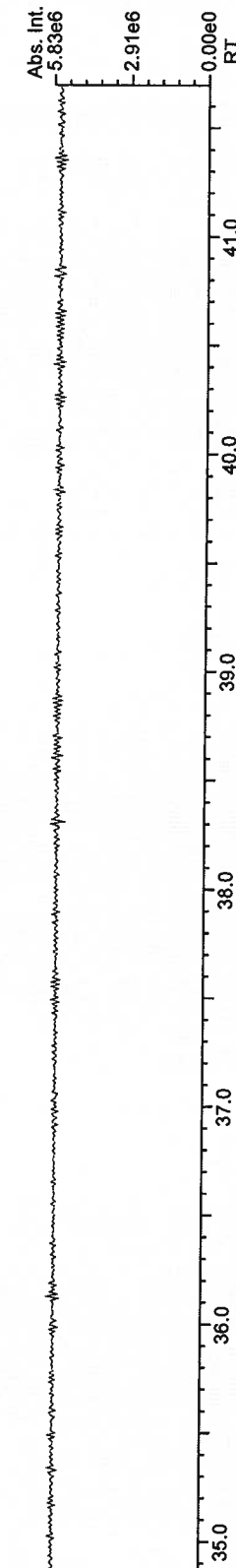
Rel. Int.  
100%  
0%  
OoCB Std.  
34.71-41.70  
439.8038 Fn5  
Flags: PB  
4σ 1.84e3



Rel. Int.  
100%  
0%  
OoCB Std.  
34.71-41.70  
441.8008 Fn5  
Flags: PB  
4σ 1.57e3



Rel. Int.  
100%  
0%  
QC Check  
34.71-41.70  
366.9792 Fn5  
Flags: -



Results: P:\P1900\_P1999\P1977\_7528\_PCB\Resources\P1977\_7528\_PCB\_003.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 7302, 7805 scc: 706-737

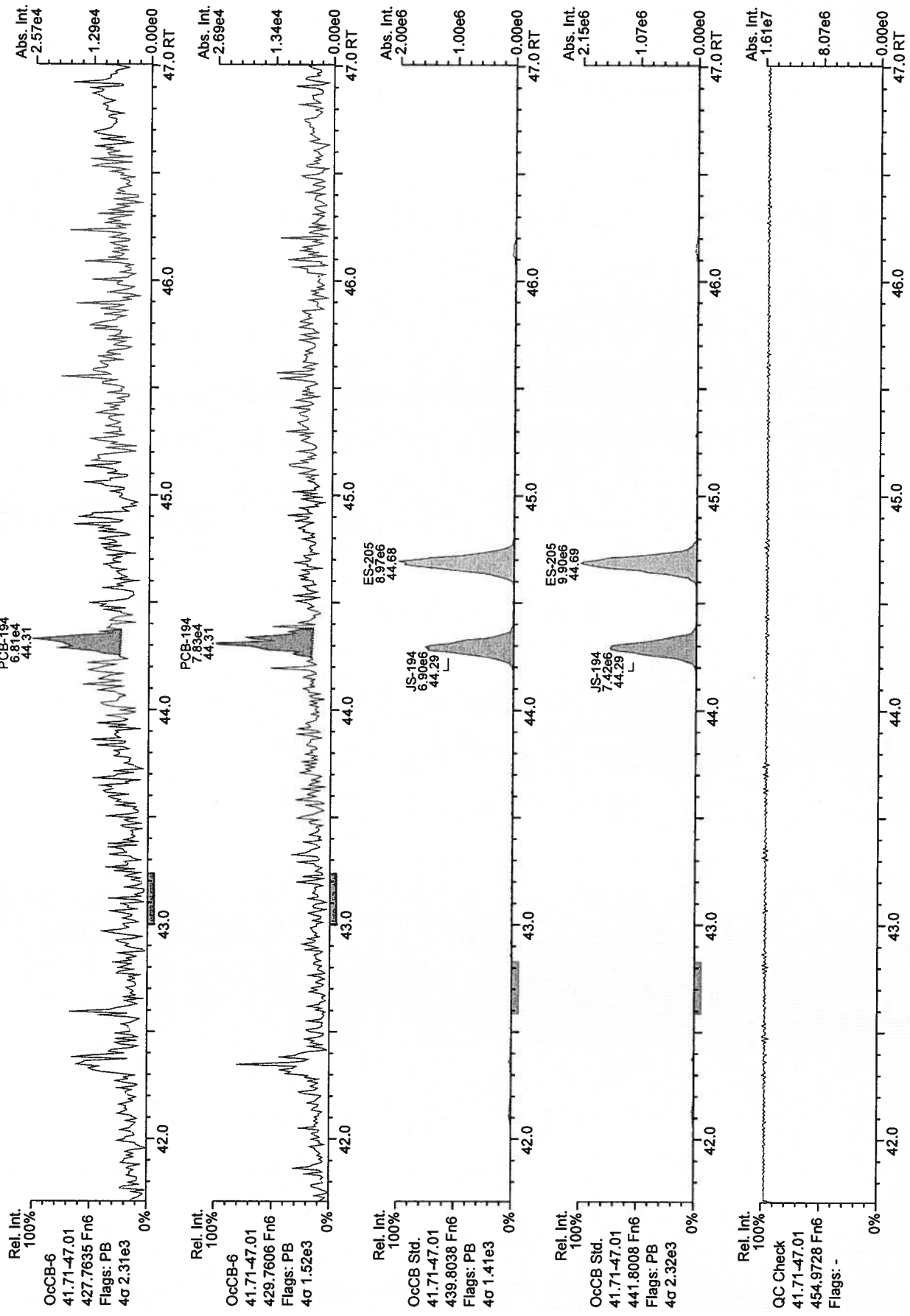
Revised: 09-Feb-2010 16:39:05 (CW) Printed: 10-Feb-2010 12:21:39 Page 18 of 22  
Peak annotation: Areas, Centroids



AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c/1-10 GC: pcbx100\_a\_BI Vial: 33

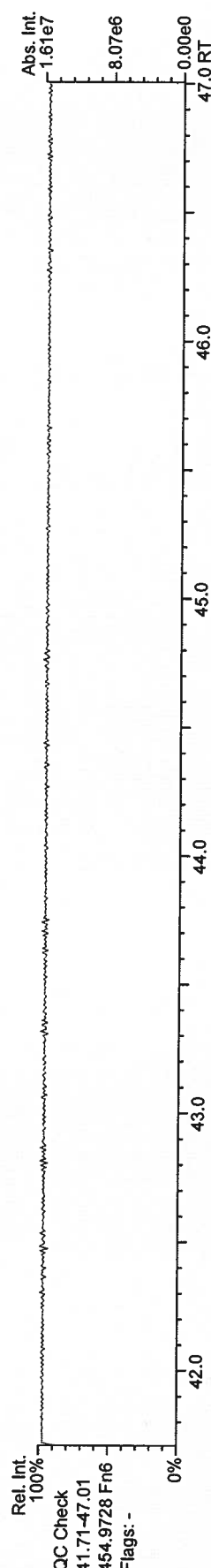
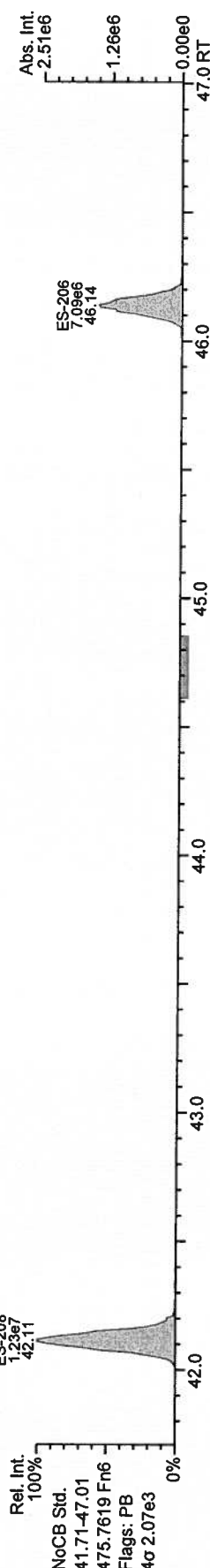
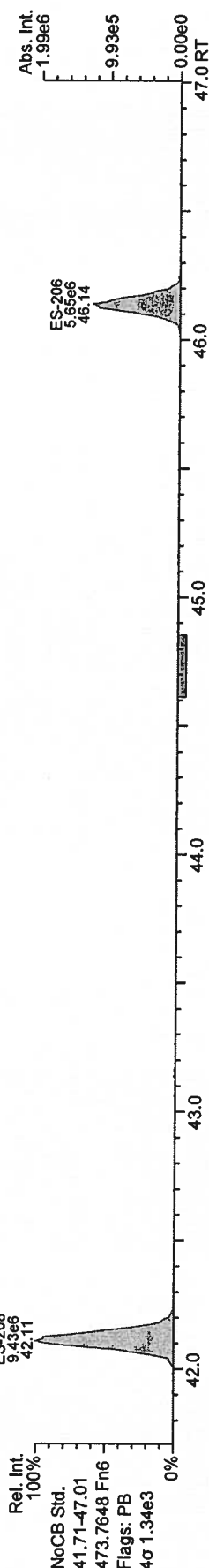
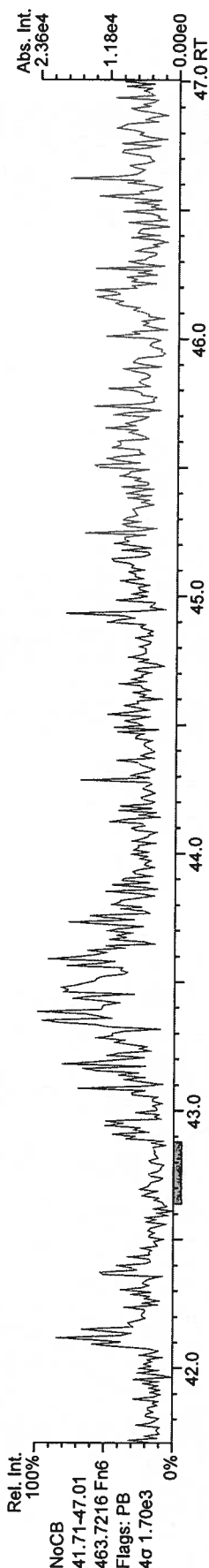
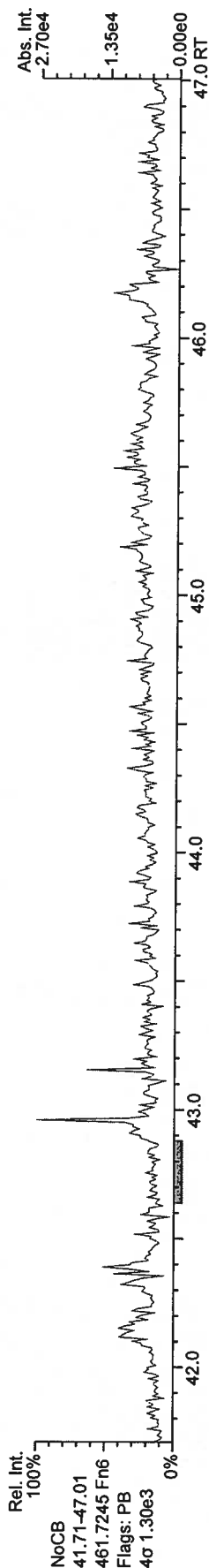
Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)



AP Lab ID: P1977\_7528\_PCB\_003  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 33

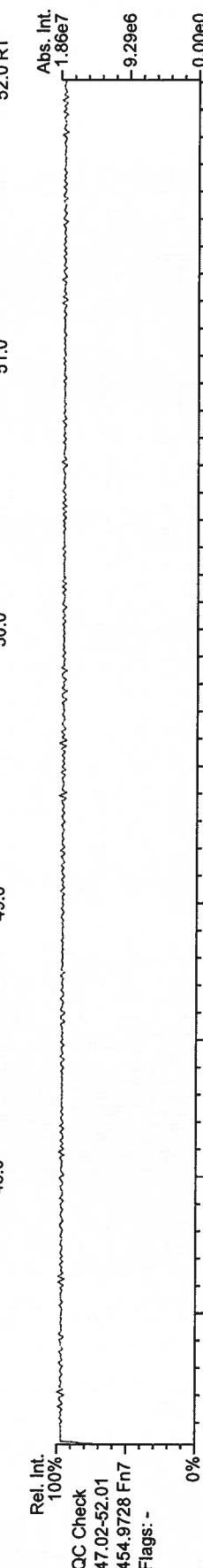
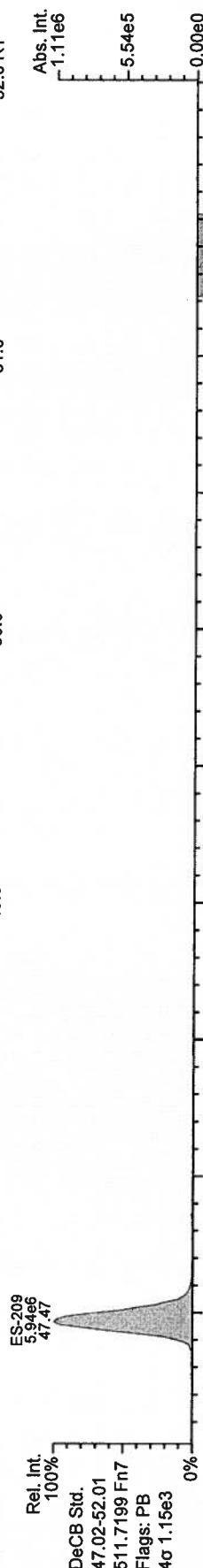
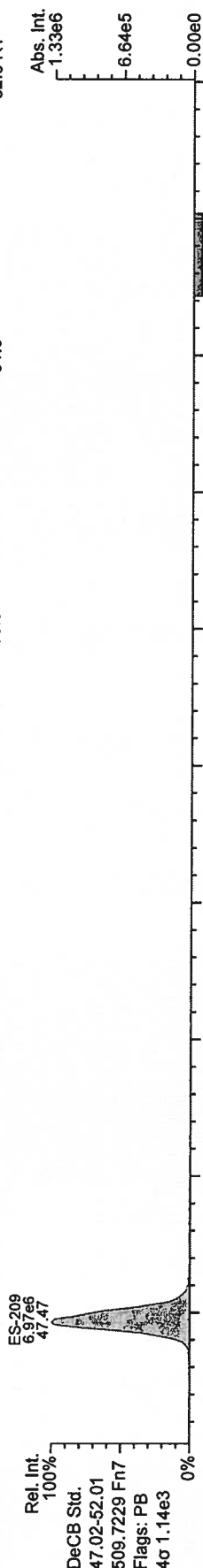
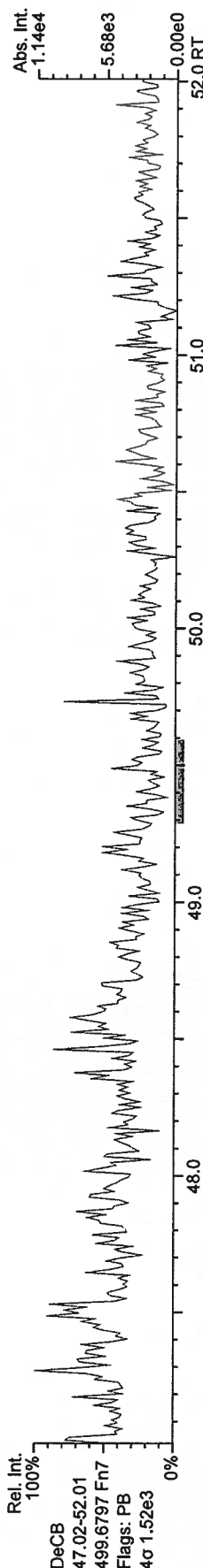
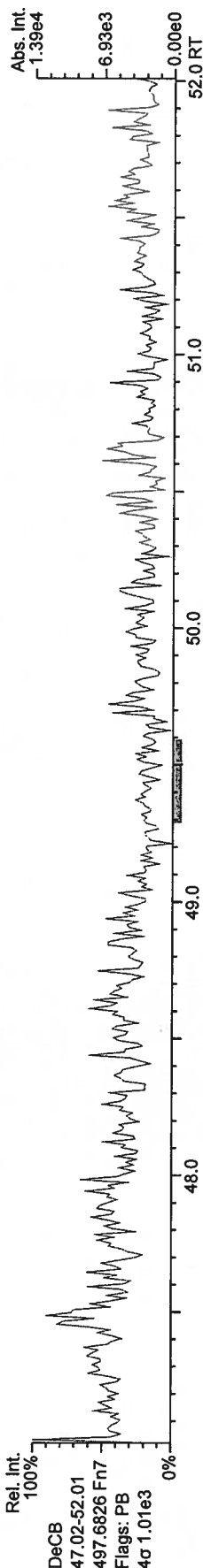
Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

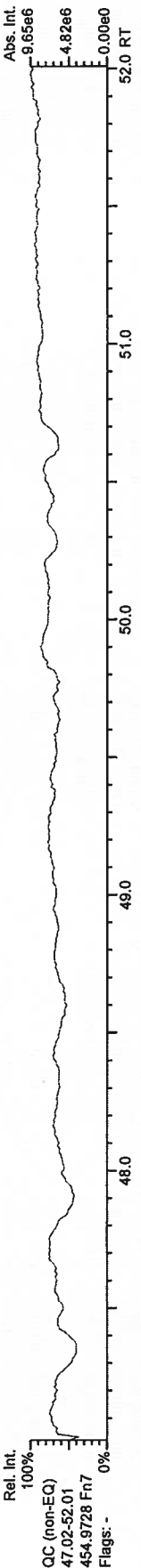
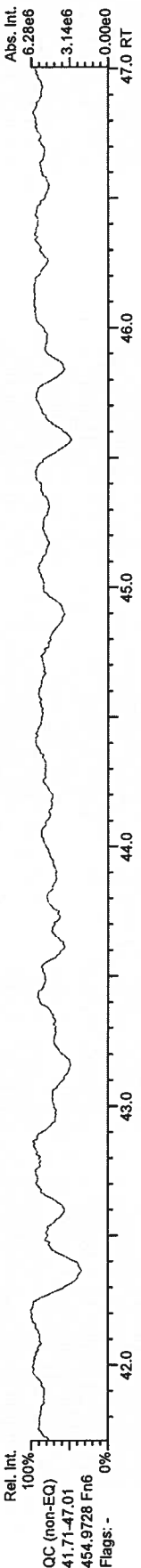
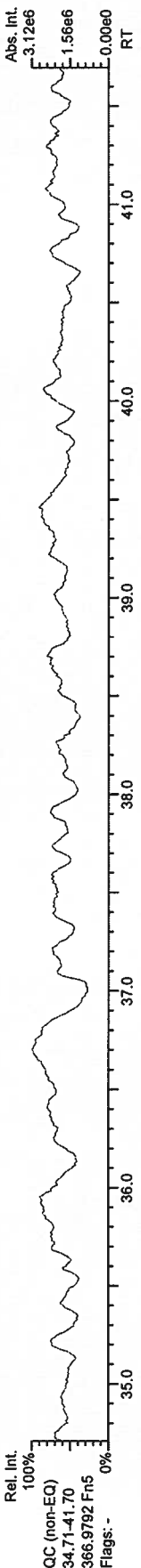
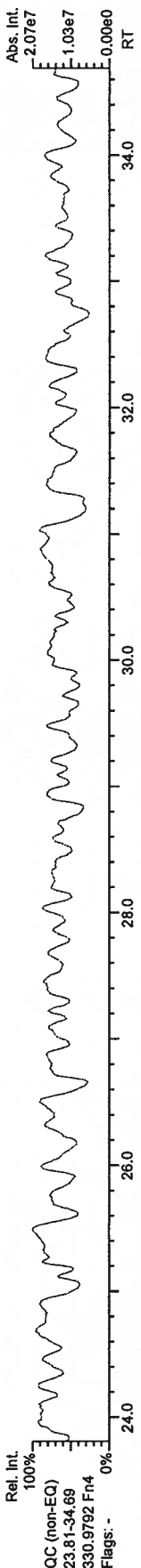
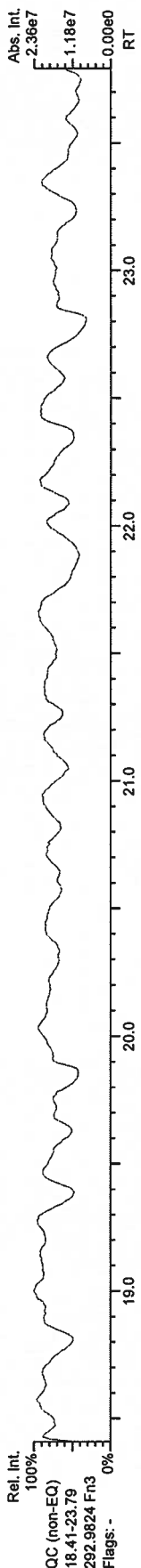
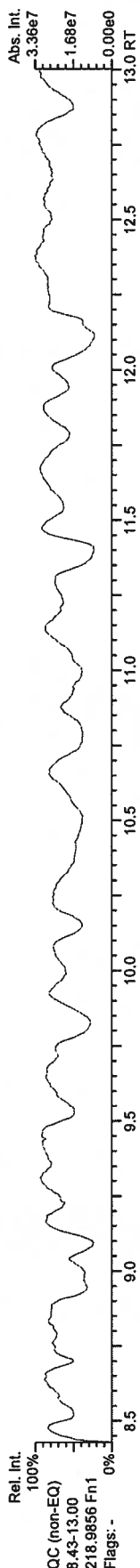


Acq: 05-Feb-2010 03:29:48  
User: CW Datafile: 100204S15 (EQ)

Sample ID: SSI #1-R-2  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 33

AP Lab ID: P1977\_7528 PCB\_003  
Instr: AutoSpec-Ultima MM4





P1977_7528_PCB_004 Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode:	
										Noise	DL
PCB-77 33'44'-TeCB	29.61		1.0006	1.0005	-0.2	2.38E+06	0.79	1.04	280	3.58E+03	5.36
PCB-81 344'5'-TeCB	29.14	J	1.0008	1.0007	-0.2	1.56E+05	0.71	1.05	17.8	3.58E+03	5.11
PCB-105 233'44'-PeCB	32.58		1.0007	1.0007	0	2.69E+06	0.65	0.94	424	3.12E+03	6.14
PCB-114 2344'5'-PeCB	32.04		1.0007	1.0009	+0.4	1.64E+05	0.55	0.93	25.3	3.12E+03	6.19
PCB-118 23'44'5'-PeCB	31.59		1.0007	1.0007	0	7.46E+06	0.64	0.95	1,100	3.12E+03	5.6
PCB-123 2'344'5'-PeCB	31.29		1.0006	1.0001	-0.9	0.00E+05	0.64	0.98	23.5	3.12E+03	6.13
PCB-126 33'44'5'-PeCB	NotFnd		1.0005	-		0.00E+00		0.95	ND	4.45E+03	7.68
PCB-156/157 233'44'5'/233'44'5'	37.72	C	1.0005	1.0001	-0.9	5.01E+05	1.26	0.93	83.2	2.64E+03	6.76
PCB-167 23'44'55'-HxCB	36.77		1.0006	1.0006	0	2.45E+05	1.16	0.96	42.4	2.64E+03	5.81
PCB-169 33'44'55'-HxCB	NotFnd		1.0005	-		0.00E+00		0.89	ND	2.64E+03	6.45
PCB-189 233'44'55'-HpCB	NotFnd		1.0004	-		0.00E+00		0.87	ND	3.84E+03	7.61
PCB-209 DeCB	NotFnd		1.0004	-		0.00E+00		1.05	ND	2.62E+03	12
Recv.											
ES PCB-1	9.60		0.7029	0.7025	-0.2	2.96E+07	3.25	0.97	87.8	25%	150%
ES PCB-3	11.64		0.8512	0.8517	+0.3	3.12E+07	3.17	0.99	91.1	25%	150%
ES PCB-4	11.97		0.8680	0.8682	+0.1	2.92E+07	1.56	0.74	114	25%	150%
ES PCB-15	17.19		1.2558	1.2575	+1.8	3.93E+07	1.63	1.07	106	25%	150%
ES PCB-19	14.69		1.0748	1.0748	0	2.36E+07	1.05	0.60	113	25%	150%
ES PCB-37	23.33		1.0877	1.0883	+0.8	2.79E+07	1.06	1.68	89.9	25%	150%
ES PCB-54	17.44		0.8143	0.8137	-0.6	3.31E+07	0.78	1.55	116	25%	150%
ES PCB-77	29.60		1.3802	1.3807	+0.9	3.28E+07	0.81	1.36	131	25%	150%
ES PCB-81	29.12		1.3579	1.3583	+0.7	3.34E+07	0.83	1.36	133	25%	150%
ES PCB-104	22.25		0.8145	0.8139	-0.8	2.56E+07	1.57	1.53	73.1	25%	150%
ES PCB-105	32.56		1.1915	1.1909	-1.2	2.70E+07	1.54	1.28	92.3	25%	150%
ES PCB-114	32.02		1.1714	1.1710	-0.8	2.79E+07	1.59	1.35	90.3	25%	150%
ES PCB-118	31.57		1.1548	1.1545	-0.6	2.87E+07	1.61	1.35	92.9	25%	150%
ES PCB-123	31.29		1.1446	1.1443	-0.6	2.69E+07	1.56	1.23	95.2	25%	150%
ES PCB-126	35.18		1.2874	1.2866	-1.7	3.06E+07	1.60	1.46	91.4	25%	150%
ES PCB-153	33.15		0.9690	0.9693	+0.6	2.82E+07	1.21	1.18	98.5	25%	150%
ES PCB-155	27.14		0.7934	0.7936	+0.3	3.68E+07	1.30	1.45	105	25%	150%
ES PCB-156/157	37.72		1.1032	1.1029	-0.7	5.18E+07	1.22	1.13	94.7	25%	150%
ES PCB-167	36.74		1.0745	1.0745	0	2.41E+07	1.33	1.11	89.7	25%	150%
ES PCB-169	40.45		1.1834	1.1828	-1.5	2.17E+07	1.29	1.09	82.2	25%	150%
ES PCB-170	39.94		0.9007	0.9012	+1.2	2.10E+07	1.04	1.30	128	25%	150%
ES PCB-180	38.88		0.8766	0.8774	+1.9	2.91E+07	1.07	1.72	134	25%	150%
ES PCB-188	31.99		0.7211	0.7219	+1.5	4.20E+07	1.09	1.56	111	25%	150%
ES PCB-189	42.56		0.9600	0.9603	+0.8	2.68E+07	1.05	2.04	104	25%	150%
ES PCB-202	36.53		0.8237	0.8243	+1.3	3.52E+07	0.94	1.26	116	25%	150%
ES PCB-205	44.71		1.0090	1.0089	-0.3	1.77E+07	0.95	1.41	99.5	25%	150%
ES PCB-206	46.16		1.0422	1.0416	-1.7	1.16E+07	0.77	0.93	98.1	25%	150%
ES PCB-208	42.14		0.9510	0.9509	-0.3	2.01E+07	0.80	1.32	121	25%	150%
ES PCB-209	47.49		1.0729	1.0717	-3.4	1.10E+07	1.19	1.01	86.2	25%	150%

P1977_7528_PCB_004	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	DL
SS PCB-28	19.84		0.9258	0.9257	-0.1	2.85E+07	1.06	1.04	98.4 %	30%	135%
SS PCB-111	29.63		1.0837	1.0836	-0.2	2.68E+07	1.48	1.01	98.5 %	30%	135%
SS PCB-178	34.58		1.0113	1.0111	-0.4	2.41E+07	1.05	0.63	91.8 %	30%	135%
CS PCB-28	19.84		0.9258	0.9257	-0.1	2.85E+07	1.06	1.74	88.5 %	30%	135%
CS PCB-111	29.63		1.0837	1.0836	-0.2	2.68E+07	1.48	1.25	93.8 %	30%	135%
CS PCB-178	34.58		1.0113	1.0111	-0.4	2.41E+07	1.05	0.98	102 %	30%	135%
JS PCB-9	13.67					3.48E+07	1.59				
JS PCB-52	21.44					1.85E+07	0.79				
JS PCB-101	27.34					2.29E+07	1.62				
JS PCB-138	34.20					2.43E+07	1.24				
JS PCB-194	44.32					1.27E+07	0.89				
Checkcode: ησ											
PCB-1 2-MoCB	9.61		1.0012	1.0011	-0.1	1.01E+07	3.08	1.18	1,160	5.67E+03	4.99
PCB-2 3-MoCB	11.49		0.9869	0.9870	+0.1	5.39E+06	3.01	1.37	505	5.67E+03	5.39
PCB-3 4-MoCB	11.66		1.0010	1.0010	0	1.22E+07	3.06	1.17	1,340	5.67E+03	6.31
PCB-4 22'-DiCB	11.88	SI	1.0012	1.0012	0	5.85E+06	SI*	0.87	921	5.23E+03	7.55
PCB-10 26-DiCB	12.04	SI	1.0146	1.0148	+0.1	6.43E+05	SI*	1.27	69.5	5.23E+03	5.18
PCB-9 25-DiCB	13.68	SI	1.0011	1.0008	-0.2	1.42E+06	SI*	1.22	118	1.06E+04	11.2
PCB-7 24-DiCB	13.83	SI	1.0120	1.0120	0	5.82E+06	SI*	0.96	615	1.06E+04	14.2
PCB-6 23'-DiCB	14.06	SI	1.0278	1.0282	+0.3	3.16E+06	SI*	1.22	264	1.06E+04	11.2
PCB-5 23-DiCB	14.33	SI	1.0479	1.0479	0	8.94E+05	SI*	0.92	99	1.06E+04	14.8
PCB-8 24'-DiCB	14.44	SI	1.0562	1.0564	+0.2	1.67E+07	SI*	1.22	1,400	1.06E+04	11.2
PCB-14 35-DiCB	NotFnd		0.9257	-		0.00E+00		1.00	ND	1.06E+04	13.7
PCB-11 33'-DiCB	16.65	SI	0.9689	0.9688	-0.1	1.39E+08	SI*	0.95	14,900	1.06E+04	14.4
PCB-13/12 34'-/34-DiCB	16.91	C SI	0.9851	0.9839	-1.2	3.07E+06	SI*	1.02	305	1.06E+04	13.3
PCB-15 44'-DiCB	17.20	SI	1.0008	1.0008	0	1.18E+07	SI*	0.98	1,220	1.06E+04	13.9
PCB-19 22'6-TrCB	14.73		1.0011	1.0022	+1.0	1.94E+06	0.93	0.95	347	3.48E+03	6.55
PCB-30/18 246-/22'5-TrCB	16.39	C	1.1132	1.1152	+2.0	1.44E+07	1.01	1.39	1,770	3.48E+03	4.49
PCB-17 22'4-TrCB	16.75		1.1393	1.1401	+0.8	5.99E+06	1.03	1.03	987	3.48E+03	6.04
PCB-27 23'6-TrCB	16.94		1.1522	1.1530	+0.8	1.19E+06	1.06	1.40	143	3.48E+03	4.44
PCB-24 236-TrCB	17.04		1.1602	1.1598	-0.4	2.52E+05	0.92	1.33	32.1	3.48E+03	4.68
PCB-16 22'3-TrCB	17.16		1.1668	1.1676	+0.8	5.24E+06	1.02	1.09	81	3.48E+03	5.69

## P1977\_7528\_PCB\_004

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Noise	Checkcode:	ησ DL
PCB-32 24'6"-TrCB	17.61		1.1978	1.1986	+0.8	5.31E+06	1.04	1.48	610	3.48E+03		4.22
PCB-34 2'35"-TrCB	18.71	J	0.8033	0.8023	-1.1	7.84E+04	0.91	1.04	10.8	5.15E+03		10.2
PCB-23 235"-TrCB	18.84	EMPC	0.8090	0.8078	-1.4	6.01E+04	0.83	1.47	5.87	5.15E+03		7.25
PCB-26/29 23'5"-/245"-TrCB	19.13	C	0.8210	0.8198	-1.4	3.97E+06	1.03	1.09	525	5.15E+03		9.8
PCB-25 23'4"-TrCB	19.33		0.8292	0.8285	-0.8	1.89E+06	1.10	1.40	193	5.15E+03		7.6
PCB-31 24'5"-TrCB	19.60		0.8409	0.8403	-0.7	2.10E+07	1.05	1.13	2,680	5.15E+03		9.45
PCB-28/20 244'-/233'-TrCB	19.86	C	0.8524	0.8514	-1.2	2.36E+07	1.03	1.21	2,790	5.15E+03		8.77
PCB-21/33 234'-/2'34"-TrCB	20.07	C	0.8598	0.8605	+0.8	1.36E+07	1.03	1.19	1,640	5.15E+03		8.97
PCB-22 234'-TrCB	20.41		0.8755	0.8751	-0.5	8.46E+06	1.01	1.28	945	5.15E+03		8.28
PCB-36 33'5"-TrCB	21.78		0.9336	0.9337	+0.1	2.97E+05	1.12	1.27	33.5	5.15E+03		8.36
PCB-39 34'5"-TrCB	22.10	J	0.9469	0.9473	+0.5	1.88E+05	1.19	1.60	16.9	5.15E+03		6.65
PCB-38 345"-TrCB	NotFnd		0.9688	-		0.00E+00		1.02	ND	5.15E+03		10.4
PCB-35 33'4"-TrCB	22.99		0.9856	0.9856	0	1.65E+06	1.10	0.89	266	5.15E+03		11.9
PCB-37 344'-TrCB	23.35		1.0008	1.0009	+0.1	8.42E+06	1.02	0.85	1,410	5.15E+03		12.5
PCB-54 22'66"-TeCB	17.46	J	1.0010	1.0007	-0.3	4.39E+04	0.82	0.95	5.56	2.43E+03		3.57
PCB-50/53 22'46"-/22'56"TeCB	19.36	C	0.9043	0.9029	-1.6	1.19E+06	0.75	0.69	207	2.45E+03		5.31
PCB-45 22'36"-TeCB	NotFnd		0.9305	-		0.00E+00		0.65	ND	2.45E+03		5.66
PCB-51 22'46"-TeCB	20.00		0.9338	0.9330	-1.0	6.67E+06	0.78	0.69	1,160	2.45E+03		5.31
PCB-46 22'36"-TeCB	20.22		0.9435	0.9431	-0.5	4.93E+05	0.82	0.62	94.7	2.45E+03		5.88
PCB-52 22'55"-TeCB	21.46		1.0010	1.0010	0	1.13E+07	0.77	0.94	1,450	2.45E+03		3.91
PCB-73 23'5'6"TeCB	NotFnd		1.0067	-		0.00E+00		0.83	ND	2.45E+03		4.42
PCB-43 22'35"-TeCB	21.65		1.0106	1.0102	-0.5	3.57E+05	0.85	0.70	61	2.45E+03		5.22
PCB-69/49 23'46"-/22'45"TeCB	21.88	C	1.0198	1.0206	+1.1	6.65E+06	0.80	0.97	825	2.45E+03		3.8
PCB-48 22'45"-TeCB	22.12		1.0323	1.0319	-0.5	2.31E+06	0.75	0.75	367	2.45E+03		4.88
PCB-44/47/65 22'35'-/22'44'-	22.35	C	1.0420	1.0427	+0.9	4.24E+07	0.77	0.83	6,120	2.45E+03		4.42
PCB-59/62/75 233'6"-/2346"-/24	22.60	C	1.0544	1.0541	-0.4	1.21E+06	0.83	1.14	127	2.45E+03		3.2
PCB-42 22'34"-TeCB	22.77		1.0624	1.0622	-0.3	2.47E+06	0.77	0.70	425	2.45E+03		5.27
PCB-41 22'34"-TeCB	23.08		1.0773	1.0766	-1.0	8.81E+05	0.82	0.60	175	2.45E+03		6.09
PCB-71/40 23'4'6"/22'33"-TeCB	23.19	C	1.0822	1.0819	-0.4	4.72E+06	0.77	0.90	629	2.45E+03		4.08
PCB-64 234'6"-TeCB	23.39		1.0912	1.0914	+0.3	5.23E+06	0.77	1.25	500	2.45E+03		2.93
PCB-72 23'55"-TeCB	24.14	J	0.8282	0.8290	+1.2	1.36E+05	0.75	1.36	12	3.58E+03		3.94
PCB-68 23'45"-TeCB	24.38		0.8368	0.8372	+0.6	5.89E+06	0.77	1.73	408	3.58E+03		3.1
PCB-57 233'5"-TeCB	24.73	J EMPC	0.8491	0.8492	+0.1	1.24E+05	0.59	1.12	13.3	3.58E+03		4.8
PCB-58 233'5"-TeCB	NotFnd		0.8562	-		0.00E+00		1.29	ND	3.58E+03		4.16
PCB-67 23'45"-TeCB	25.08	EMPC	0.8612	0.8613	+0.2	8.66E+05	0.90	1.48	69.9	3.58E+03		3.61
PCB-63 234'5"-TeCB	25.30		0.8690	0.8690	0	7.40E+05	0.77	1.53	58.1	3.58E+03		3.51
PCB-61/70/74/76 2345"-/23'4'5	25.61	C	0.8788	0.8795	+1.1	3.34E+07	0.78	1.28	3,130	3.58E+03		4.18
PCB-66 23'44"-TeCB	25.87		0.8884	0.8885	+0.2	1.68E+07	0.77	1.38	1,450	3.58E+03		3.87
PCB-55 233'4"-TeCB	26.03		0.8933	0.8939	+0.9	3.61E+05	0.82	1.20	36.2	3.58E+03		4.48
PCB-56 233'4"-TeCB	26.44		0.9081	0.9081	0	8.43E+06	0.79	1.36	743	3.58E+03		3.94
PCB-60 2344"-TeCB	26.63		0.9145	0.9146	+0.2	5.40E+06	0.82	1.16	557	3.58E+03		4.61
PCB-80 33'55"-TeCB	NotFnd		0.9263	-		0.00E+00		1.74	ND	3.58E+03		3.09
PCB-79 33'45"-TeCB	28.31		0.9712	0.9722	+1.7	2.66E+05	0.77	1.49	21.4	3.58E+03		3.59
PCB-78 33'45"-TeCB	NotFnd		0.9876	-		0.00E+00		1.21	ND	3.58E+03		4.42
PCB-104 22'466"-PeCB	NotFnd		1.0009	-		0.00E+00		0.99	ND	2.29E+03		4.94
PCB-96 22'366"-PeCB	22.59	J EMPC	1.0152	1.0151	-0.1	9.91E+04	0.78	1.11	14	2.29E+03		4.39
PCB-103 22'45'6"-PeCB	NotFnd		0.8879	-		0.00E+00		0.94	ND	3.12E+03		6.43

## P1977\_7528\_PCB\_004

Name	Actual RT	QC	Pred RRT	Actual RRT	Diff Secs	Response	Ra	RRF	Conc	Checkcode: Noise	η <sub>p</sub> DL
PCB-94 22'356'-PeCB	NotFnd		0.8949	-		0.00E+00		1.11	ND	3.12E+03	5.45
PCB-95 22'35'6-PeCB	24.84		0.9088	0.9085	-0.4	7.75E+06	0.61	0.89	1,300	3.12E+03	6.8
PCB-100/93 22'44'6-/22'356-P	NotFnd	C	0.9159	-		0.00E+00		0.82	ND	3.12E+03	7.38
PCB-102 22'456'-PeCB	25.15		0.9200	0.9199	-0.2	3.03E+05	0.71	0.75	60.2	3.12E+03	8.05
PCB-98 22'3'46-PeCB	NotFnd		0.9224	-		0.00E+00		1.03	ND	3.12E+03	5.83
PCB-88 22'346-PeCB	NotFnd		0.9330	-		0.00E+00		1.05	ND	3.12E+03	5.74
PCB-91 22'34'6-PeCB	25.58		0.9359	0.9355	-0.6	1.26E+06	0.60	1.11	168	3.12E+03	5.41
PCB-84 22'33'6-PeCB	25.77		0.9429	0.9425	-0.6	2.17E+06	0.59	0.75	430	3.12E+03	8.05
PCB-89 22'346'-PeCB	NotFnd		0.9579	-		0.00E+00		0.87	ND	3.12E+03	6.91
PCB-121 23'45'6-PeCB	NotFnd		0.9708	-		0.00E+00		1.55	ND	3.12E+03	3.9
PCB-92 22'355'-PeCB	26.87		0.9825	0.9827	+0.3	1.63E+06	0.56	0.81	299	3.12E+03	7.43
PCB-113/90/101 233'5'6-/22'3	27.36	C	0.9999	1.0008	+1.5	1.19E+07	0.61	0.90	1,960	3.12E+03	6.69
PCB-83 22'33'5-PeCB	27.73	EMPC	1.0155	1.0141	-2.3	5.48E+05	0.52	0.72	114	3.12E+03	8.41
PCB-99 22'44'5-PeCB	27.85		1.0189	1.0185	-0.7	4.56E+06	0.64	1.16	585	3.12E+03	5.2
PCB-112 233'56-PeCB	NotFnd		1.0227	-		0.00E+00		1.18	ND	3.12E+03	5.08
PCB-108/119/86/97/125/87 233	28.31	C	1.0354	1.0356	+0.3	8.42E+06	0.59	1.11	1,130	3.12E+03	5.45
PCB-117 234'56-PeCB	NotFnd		1.0543	-		0.00E+00		0.85	ND	3.12E+03	7.08
PCB-116/85 23456-/22'344'-Pe	28.87	C	1.0573	1.0561	-2.1	1.87E+06	0.57	1.24	225	3.12E+03	4.87
PCB-110 233'4'6-PeCB	29.03		1.0625	1.0618	-1.2	1.21E+07	0.61	1.41	1,280	3.12E+03	4.28
PCB-115 2344'6-PeCB	NotFnd		1.0651	-		0.00E+00		1.08	ND	3.12E+03	5.55
PCB-82 22'33'4-PeCB	29.30		1.0724	1.0716	-1.4	9.32E+05	0.65	0.87	159	3.12E+03	6.92
PCB-111 233'55'-PeCB	NotFnd		1.0845	-		0.00E+00		1.58	ND	3.12E+03	3.81
PCB-120 23'455'-PeCB	NotFnd		1.0988	-		0.00E+00		1.22	ND	3.12E+03	4.92
PCB-107/124 233'4'5-/2'3455'	31.01	C	0.9908	0.9911	+0.6	3.79E+05	0.65	1.06	53.1	3.12E+03	5.67
PCB-109 233'46-PeCB	31.21	EMPC	0.9974	0.9976	+0.4	4.72E+05	0.73	1.19	59	3.12E+03	5.07
PCB-106 233'45-PeCB	31.36	J EMPC	1.0039	1.0023	-3.0	1.45E+05	0.48	1.21	17.9	3.12E+03	4.99
PCB-122 2'33'45-PeCB	31.87	J EMPC	1.0100	1.0098	-0.4	7.71E+04	0.77	0.80	13.9	3.12E+03	7.22
PCB-127 33'455'-PeCB	NotFnd		1.0390	-		0.00E+00		1.00	ND	3.12E+03	5.74
PCB-155 22'44'66'-HxCB	27.16	J	1.0008	1.0008	0	1.51E+05	1.12	0.99	16.7	2.44E+03	3.74
PCB-152 22'3566'-HxCB	NotFnd		1.0069	-		0.00E+00		1.18	ND	2.44E+03	3.14
PCB-150 22'34'66'-HxCB	NotFnd		1.0122	-		0.00E+00		1.43	ND	2.44E+03	2.59
PCB-136 22'33'66'-HxCB	27.78		1.0235	1.0235	0	2.17E+06	1.25	0.98	240	2.44E+03	3.75
PCB-145 22'3466'HxCB	NotFnd		1.0329	-		0.00E+00		0.96	ND	2.44E+03	3.84
PCB-148 22'34'56'-HxCB	NotFnd		1.0803	-		0.00E+00		1.25	ND	2.44E+03	3.63
PCB-151/135 22'355'6-/22'33'	29.83	C	1.0995	1.0992	-0.5	4.05E+06	1.18	0.88	651	2.44E+03	5.15
PCB-154 22'44'5'6-HxCB	30.04		1.1069	1.1068	-0.2	1.48E+05	1.26	0.88	23.7	2.44E+03	5.15
PCB-144 22'345'6-HxCB	30.31		1.1166	1.1167	+0.2	7.33E+05	1.29	0.91	114	2.44E+03	4.97
PCB-147/149 22'34'56-/22'34'	30.61	C	1.1278	1.1277	-0.2	9.56E+06	1.24	1.04	1,300	2.44E+03	4.37
PCB-134 22'33'56-HxCB	30.78		1.1339	1.1342	+0.6	4.98E+05	1.23	0.68	104	2.44E+03	6.69
PCB-143 22'3456'-HxCB	NotFnd		1.1369	-		0.00E+00		1.25	ND	2.44E+03	3.64
PCB-139/140 22'344'6-/22'344'	31.10	J EMPC C	1.1466	1.1459	-1.3	1.46E+05	1.47	1.06	19.5	2.44E+03	4.27
PCB-131 22'33'46-HxCB	NotFnd		1.1529	-		0.00E+00		0.83	ND	2.44E+03	5.48
PCB-142 22'3456-HxCB	NotFnd		1.1578	-		0.00E+00		1.09	ND	2.44E+03	4.16
PCB-132 22'33'46'-HxCB	31.67		1.1672	1.1670	-0.4	2.92E+06	1.22	0.88	468	2.44E+03	5.13
PCB-133 22'33'55'-HxCB	32.11		1.1827	1.1830	+0.6	1.49E+05	1.29	0.84	25.2	2.44E+03	5.4
PCB-165 233'55'6-HxCB	NotFnd		0.9483	-		0.00E+00		0.91	ND	2.44E+03	4.99
PCB-146 22'34'55'-HxCB	32.64		0.9545	0.9545	0	1.53E+06	1.25	1.13	192	2.44E+03	4.02



## P1977\_7528\_PCB\_004

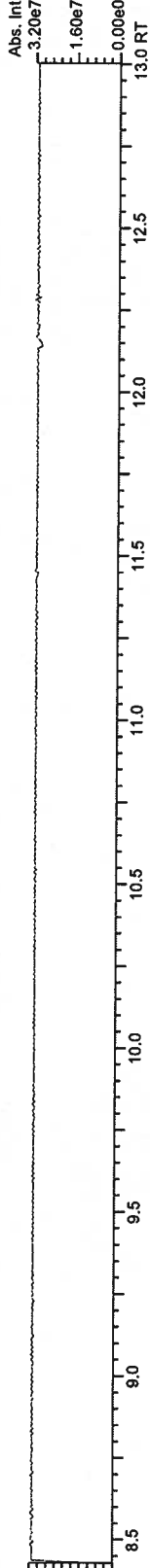
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PCB-161 233'45'6"-HxCB	NotFnd		0.9578	-		0.00E+00		1.09	ND	2.44E+03	4.15
PCB-153/168 22'44'55'"/23'44'	33.17	C	0.9703	0.9699	-0.8	1.02E+07	1.27	1.15	1,250	2.44E+03	3.95
PCB-141 22'3455'-HxCB	33.34		0.9746	0.9748	+0.4	1.98E+06	1.24	0.85	329	2.44E+03	5.31
PCB-130 22'33'45' "-HxCB	33.67	EMPC	0.9847	0.9847	0	3.02E+05	1.51	0.66	64.4	2.44E+03	6.83
PCB-137 22'344'5"-HxCB	33.86		0.9902	0.9901	-0.2	2.76E+05	1.27	1.13	34.6	2.44E+03	4.01
PCB-164 233'4'5'6"-HxCB	33.96		0.9930	0.9931	+0.2	6.90E+05	1.31	1.15	84.8	2.44E+03	3.94
PCB-163/138/129 233'4'56"/22'	34.22	C	1.0012	1.0007	-1.0	8.66E+06	1.23	0.99	1,240	2.44E+03	4.61
PCB-160 233'456"-HxCB	NotFnd		1.0048	-		0.00E+00		1.58	ND	2.44E+03	2.88
PCB-158 233'44'6"-HxCB	34.55		1.0104	1.0103	-0.2	1.04E+06	1.25	1.22	120	2.44E+03	3.71
PCB-128/166 22'33'44'"/2344'5	35.29	C	0.9601	0.9604	+0.6	8.06E+05	1.32	1.00	134	2.64E+03	5.55
PCB-159 233'455'-HxCB	36.08	J	0.9829	0.9819	-2.2	7.73E+04	1.27	1.16	11	2.64E+03	4.78
PCB-162 233'4'55' "-HxCB	NotFnd		0.9895	-		0.00E+00		1.49	ND	2.64E+03	3.72
PCB-188 22'34'566' "-HxCB	NotFnd		1.0007	-		0.00E+00		0.97	ND	2.37E+03	2.84
PCB-179 22'33'566' "-HxCB	32.30		1.0096	1.0097	+0.2	1.88E+06	1.07	1.13	158	2.37E+03	2.42
PCB-184 22'344'66' "-HxCB	NotFnd		1.0236	-		0.00E+00		1.01	ND	2.37E+03	2.71
PCB-176 22'33'466' "-HxCB	33.05		1.0330	1.0331	+0.2	6.20E+05	1.03	1.17	50.4	2.37E+03	2.35
PCB-186 22'34566' "-HxCB	NotFnd		1.0452	-		0.00E+00		0.98	ND	2.37E+03	2.79
PCB-178 22'33'55'6"-HxCB	34.59		1.0814	1.0813	-0.2	5.53E+05	1.17	0.73	72	2.37E+03	3.75
PCB-175 22'33'45'6"-HxCB	35.14		1.0983	1.0982	-0.2	1.36E+05	1.07	0.72	26	3.20E+03	7.33
PCB-187 22'34'55'6"-HxCB	35.36		1.1055	1.1052	-0.6	2.94E+06	1.04	1.01	400	3.20E+03	5.2
PCB-182 22'344'56' "-HxCB	NotFnd		1.1109	-		0.00E+00		0.97	ND	3.20E+03	5.43
PCB-183 22'344'5'6"-HxCB	35.88		1.1215	1.1214	-0.2	1.42E+06	0.98	0.89	218	3.20E+03	5.89
PCB-185 22'3455'6"-HxCB	35.98		1.1242	1.1245	+0.6	2.41E+05	0.94	0.95	34.8	3.20E+03	5.53
PCB-174 22'33'456' "-HxCB	36.08		1.1280	1.1277	-0.6	1.91E+06	1.02	0.95	277	3.20E+03	5.56
PCB-177 22'33'4'56"-HxCB	36.45		1.1396	1.1393	-0.7	9.87E+05	1.03	0.90	150	3.20E+03	5.83
PCB-181 22'344'56"-HxCB	NotFnd		1.1501	-		0.00E+00		0.77	ND	3.20E+03	6.79
PCB-171/173 22'33'44'6"/22'3	36.97	C	1.1559	1.1556	-0.7	5.17E+05	0.90	0.82	87.3	3.20E+03	6.45
PCB-172 22'33'455' "-HxCB	38.35		0.9006	0.9010	+0.9	2.44E+05	1.09	0.75	44.5	3.20E+03	6.98
PCB-192 233'455'6"-HxCB	NotFnd		0.9062	-		0.00E+00		1.00	ND	3.20E+03	5.25
PCB-180/193 22'344'55'"/233'	38.90	C	0.9130	0.9140	+2.3	3.61E+06	1.04	0.73	677	3.20E+03	7.17
PCB-191 233'44'5'6"-HxCB	NotFnd		0.9206	-		0.00E+00		0.96	ND	3.20E+03	5.5
PCB-170 22'33'44'5"-HxCB	39.96		0.9387	0.9389	+0.5	9.42E+05	1.08	1.36	131	3.20E+03	5.2
PCB-190 233'44'56"-HxCB	40.40		0.9492	0.9493	+0.2	2.78E+05	1.08	1.31	40.4	3.20E+03	5.42
PCB-202 22'33'55'66' "-OCCB	36.55		1.0006	1.0006	0	4.90E+05	0.96	0.87	63.9	3.07E+03	5.16
PCB-201 22'33'45'66' "-OCCB	37.33		1.0220	1.0219	-0.2	2.98E+05	0.86	0.81	41.9	3.07E+03	5.56
PCB-204 22'344'566' "-OCCB	NotFnd		1.0376	-		0.00E+00		1.00	ND	3.07E+03	4.5
PCB-207 22'33'44'66' "-OCCB	38.06	J	1.0429	1.0420	-2.1	1.37E+05	1.01	0.96	16.2	3.07E+03	4.67
PCB-200 22'33'4566' "-OCCB	38.17		1.0455	1.0450	-1.1	2.07E+05	0.78	0.75	31.3	3.07E+03	5.97
PCB-198/199 22'33'455'6"/22'	40.54	C	1.1098	1.1099	+0.2	7.51E+05	0.85	0.75	113	3.07E+03	5.95
PCB-196 22'33'44'56' "-OCCB	41.09		1.1255	1.1248	-1.7	3.39E+05	0.99	0.69	55.8	3.07E+03	6.52
PCB-203 22'344'55'6"-OCCB	41.25		1.1300	1.1294	-1.5	4.50E+05	0.97	0.88	58	3.07E+03	5.09
PCB-195 22'33'44'56"-OCCB	42.37	EMPC	0.9475	0.9476	+0.3	1.65E+05	1.03	0.97	38.6	3.72E+03	9.98
PCB-194 22'33'44'55' "-OCCB	44.33		0.9915	0.9916	+0.3	2.11E+05	0.97	1.01	47	3.72E+03	9.53
PCB-205 233'44'55'6"-OCCB	NotFnd		1.0004	-		0.00E+00		0.97	ND	3.72E+03	9.97
PCB-208 22'33'455'66' "-NoCB	42.16		1.0005	1.0004	-0.3	1.15E+05	0.87	0.95	24	3.39E+03	8.44
PCB-207 22'33'44'566' "-NoCB	NotFnd		1.0191	-		0.00E+00		1.04	ND	3.39E+03	7.71
PCB-206 22'33'44'55'6"-NoCB	46.18		1.0004	1.0004	0	9.38E+04	0.77	1.07	30.3	3.39E+03	11.9

AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

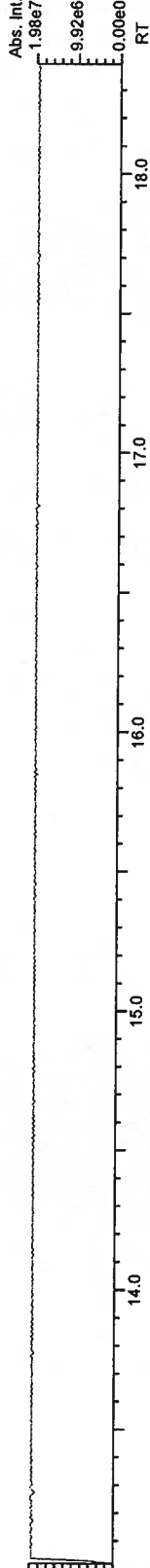
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VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

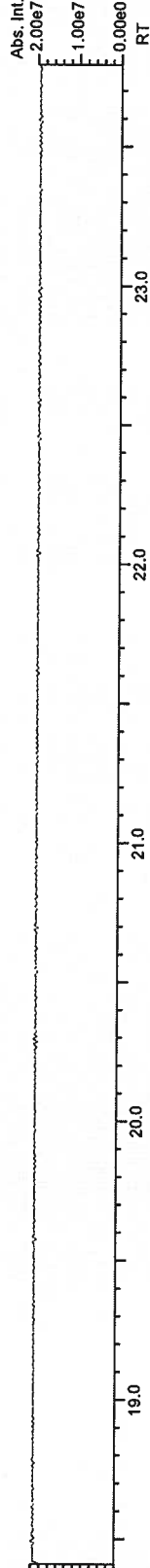
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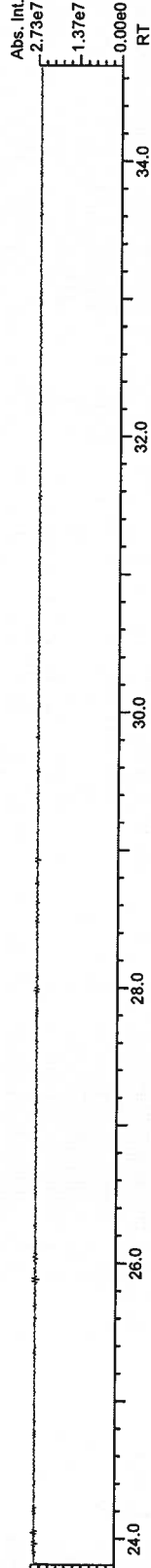
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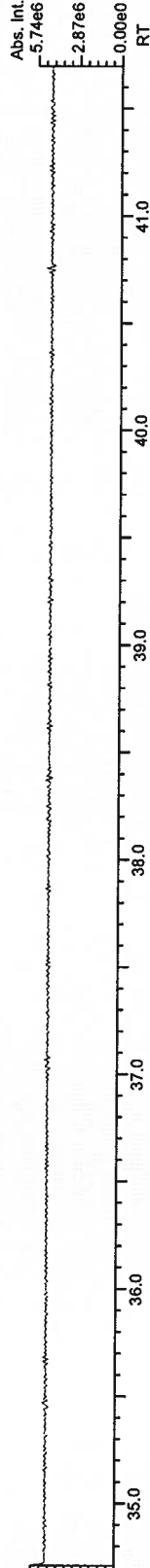
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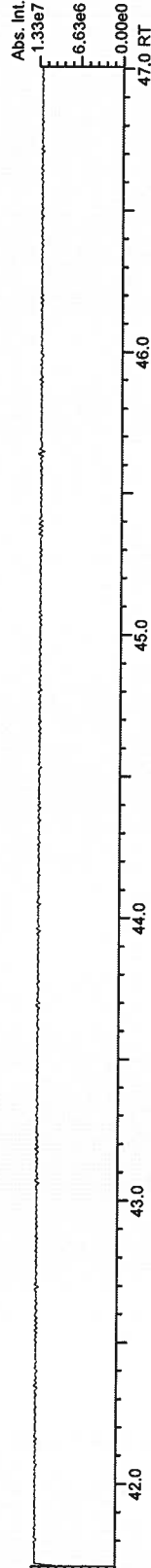
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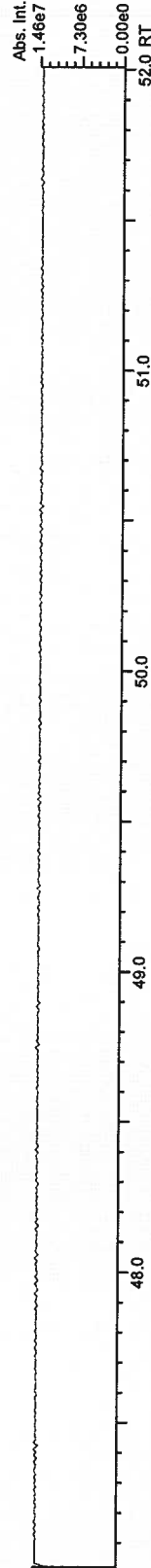
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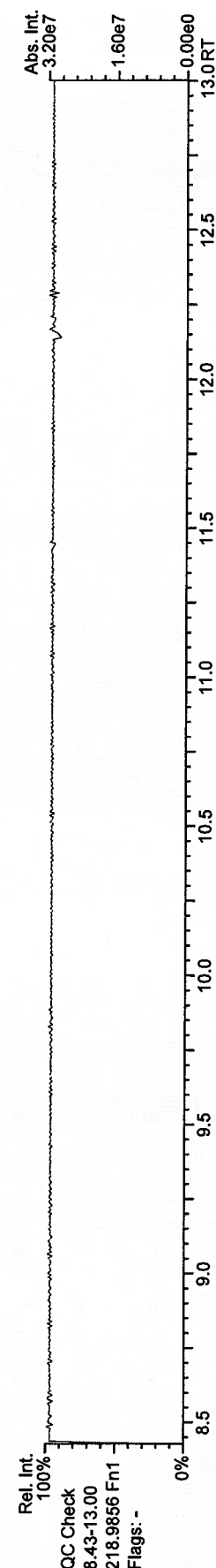
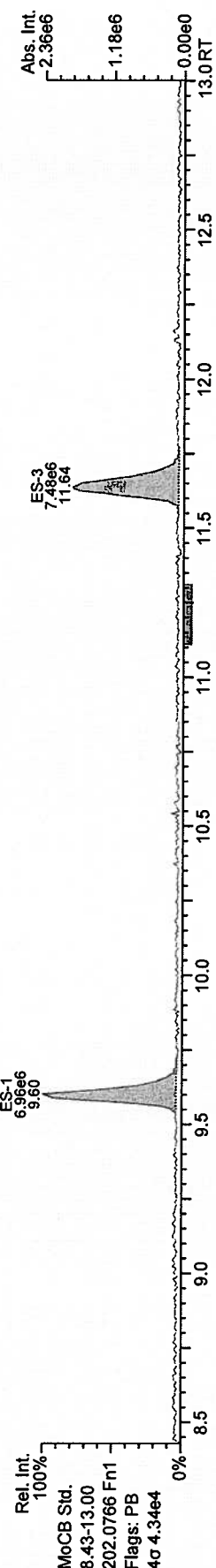
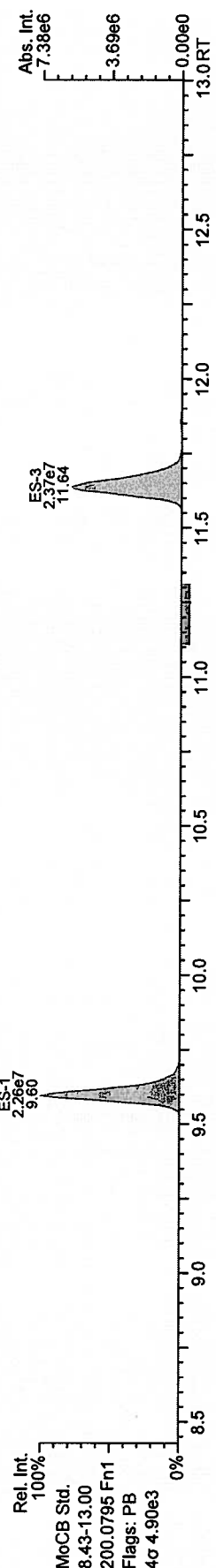
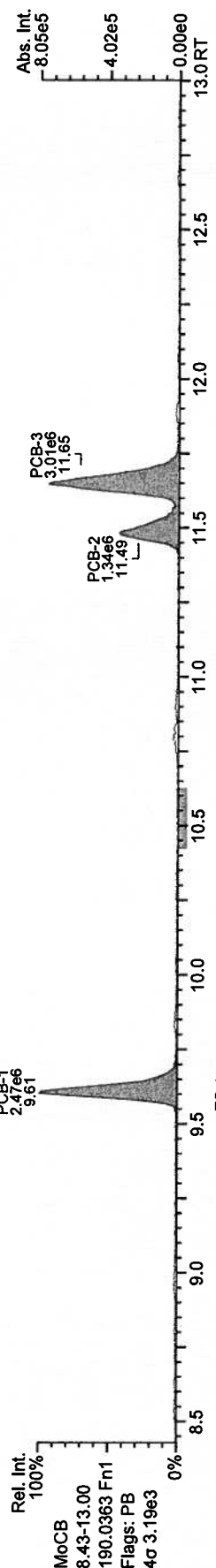
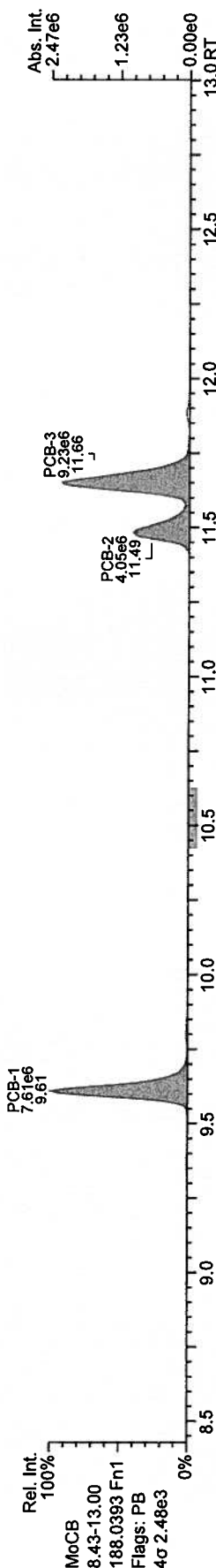


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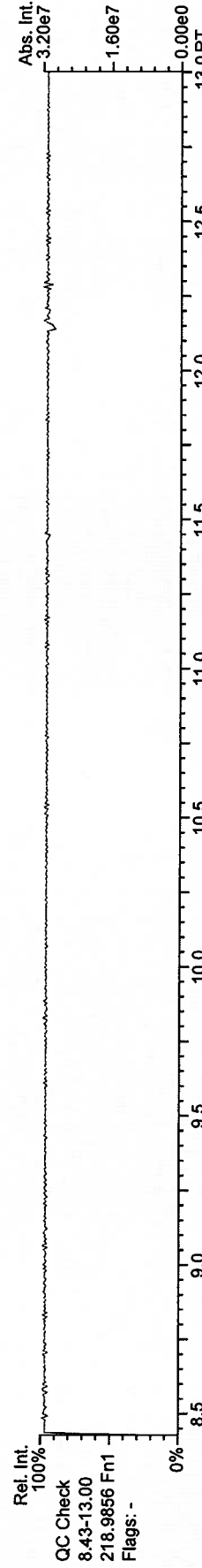
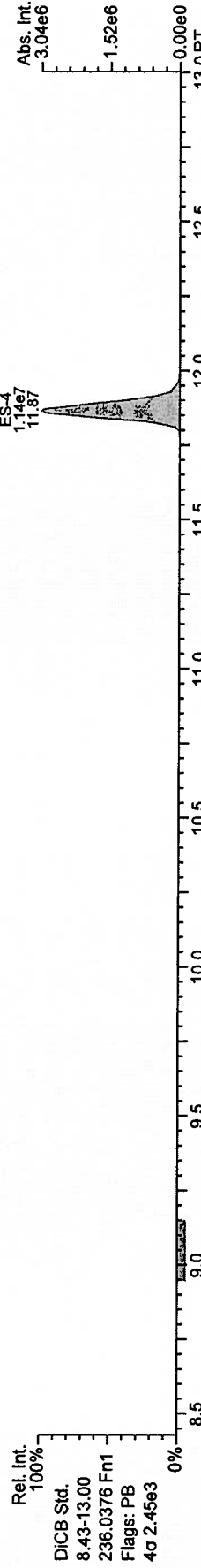
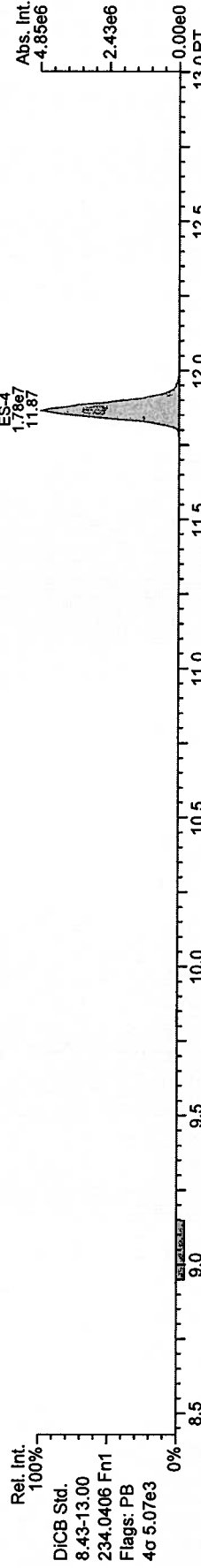
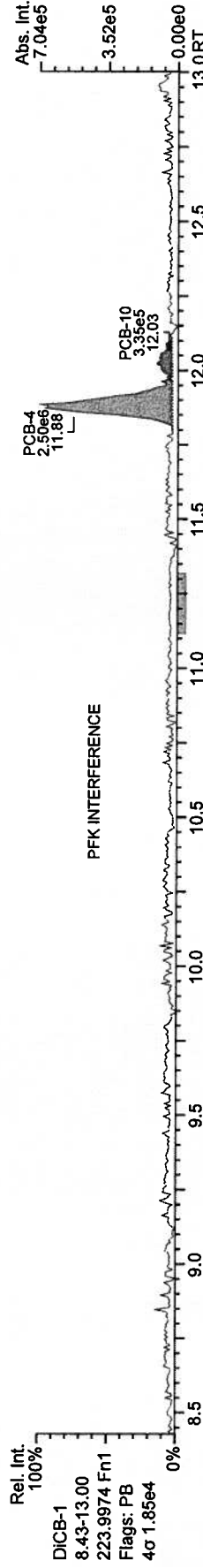
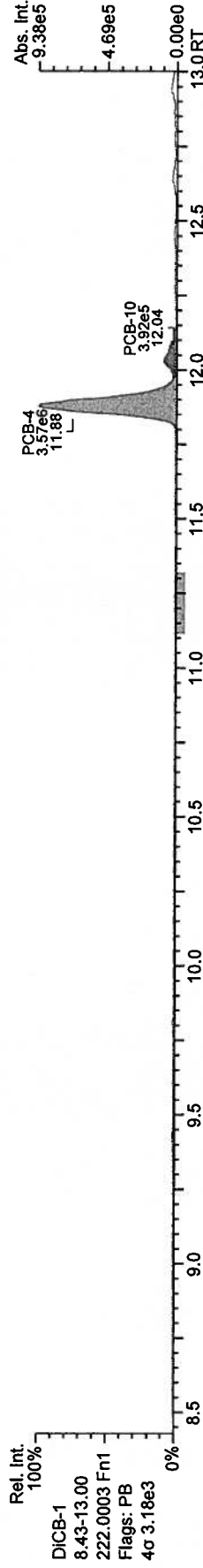
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Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:22:39 Page 1 of 22

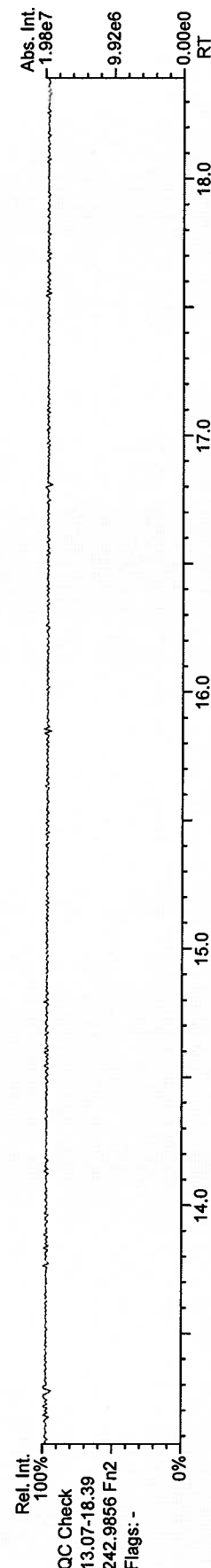
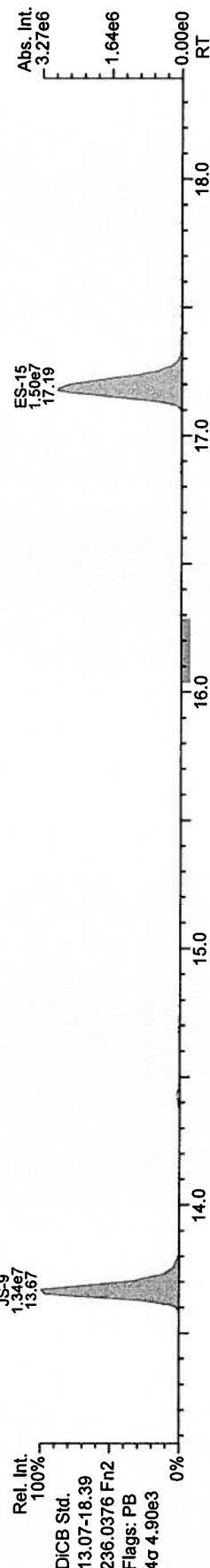
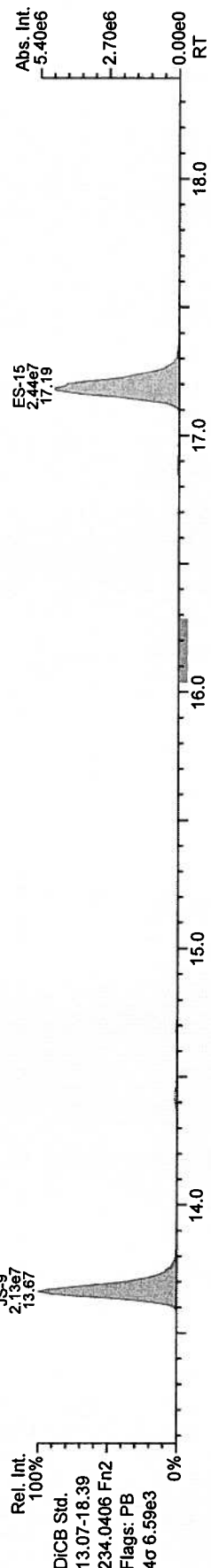
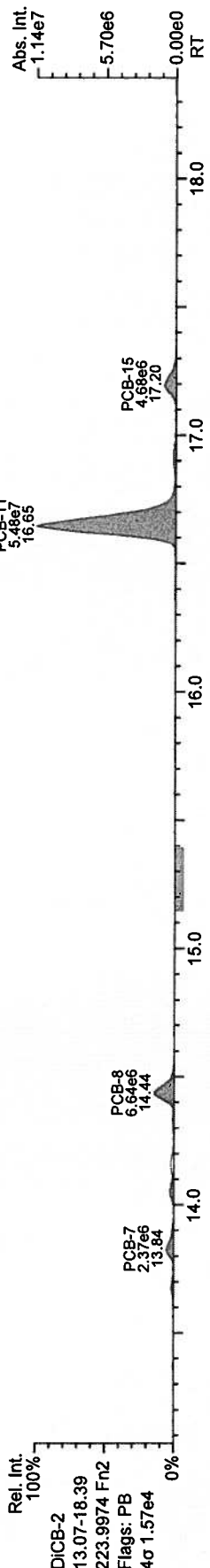
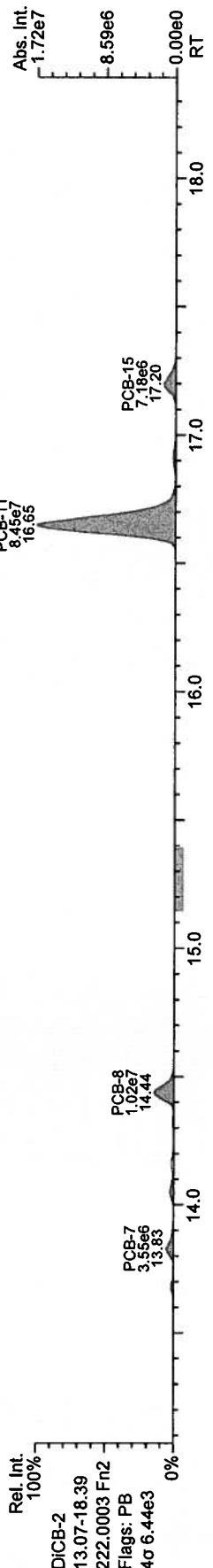


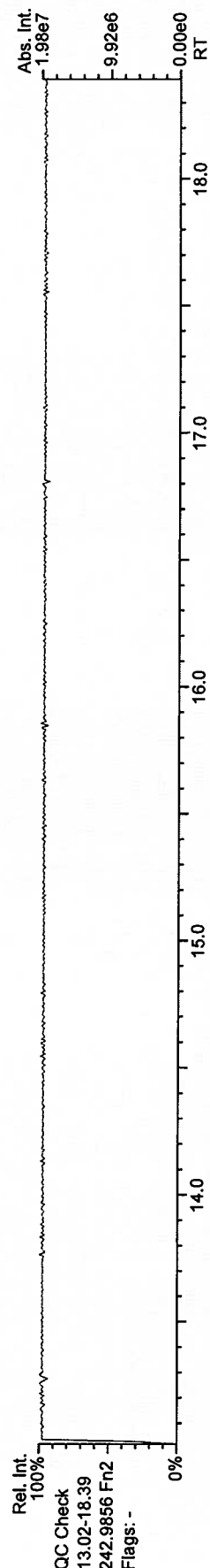
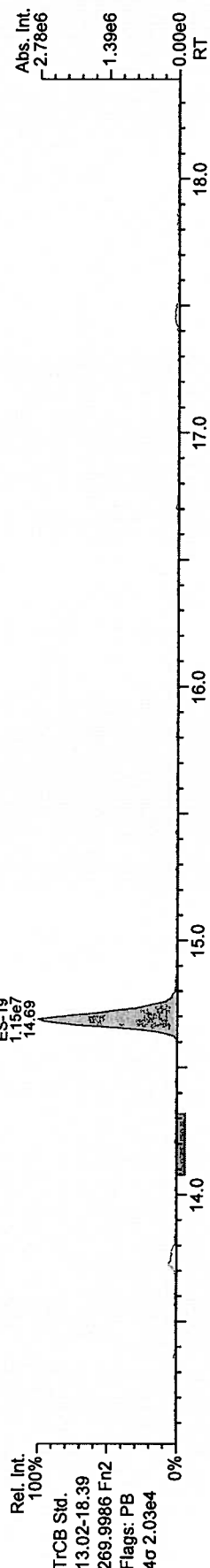
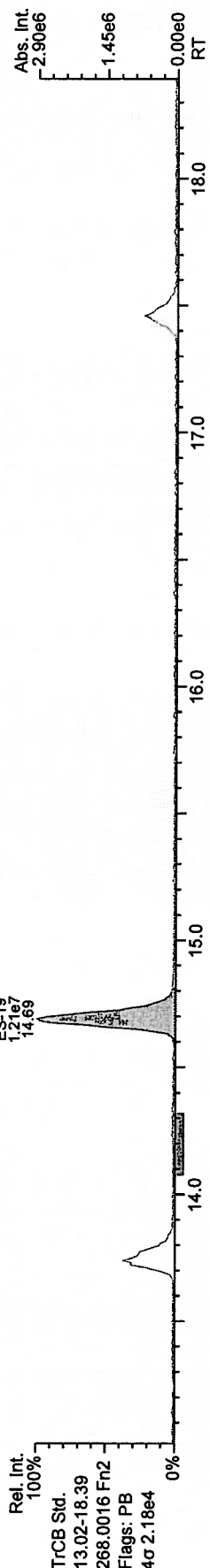
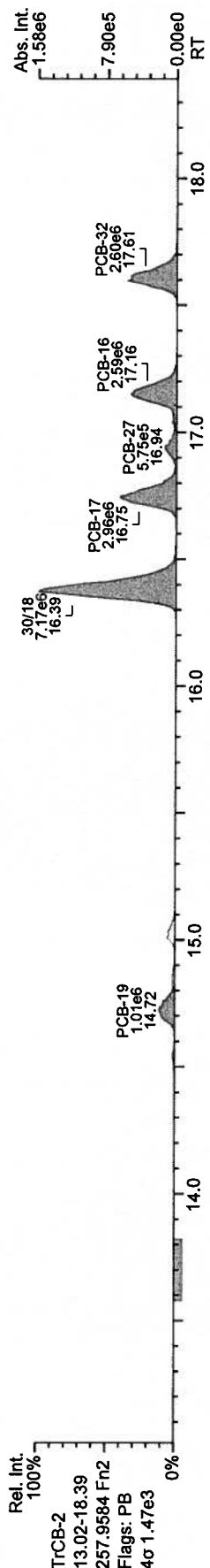
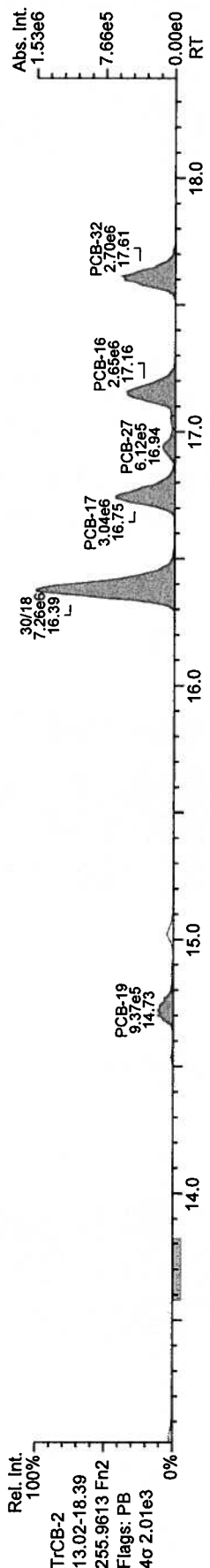
AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



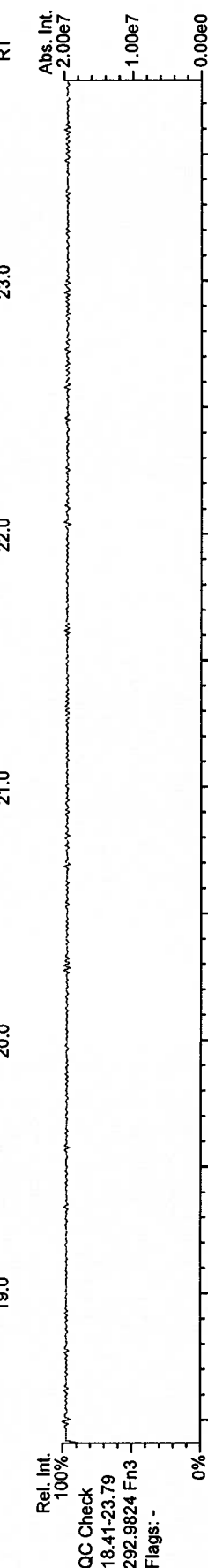
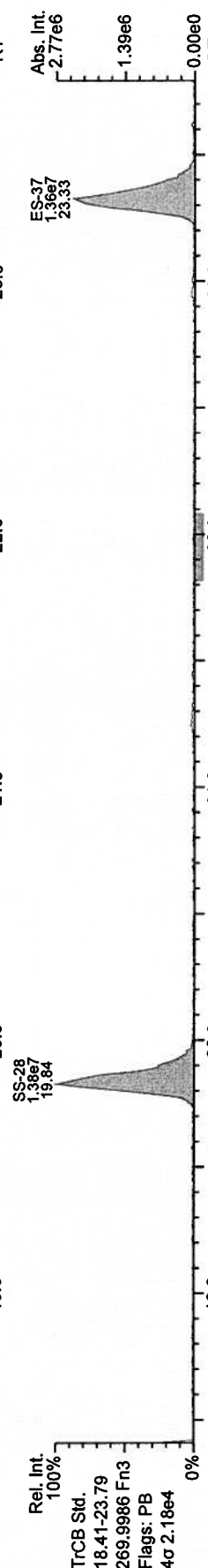
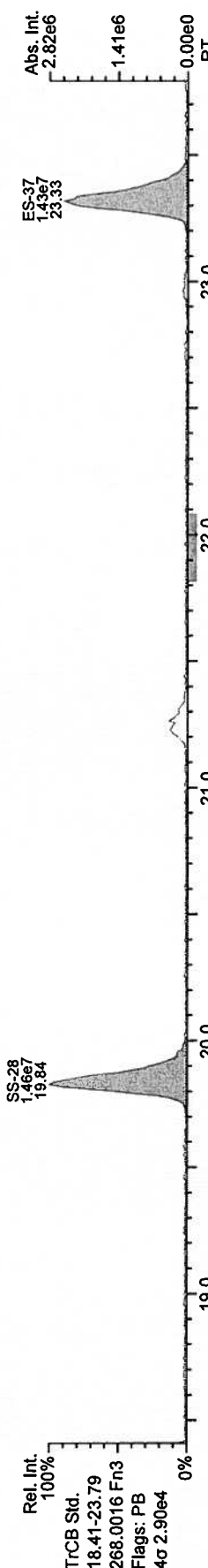
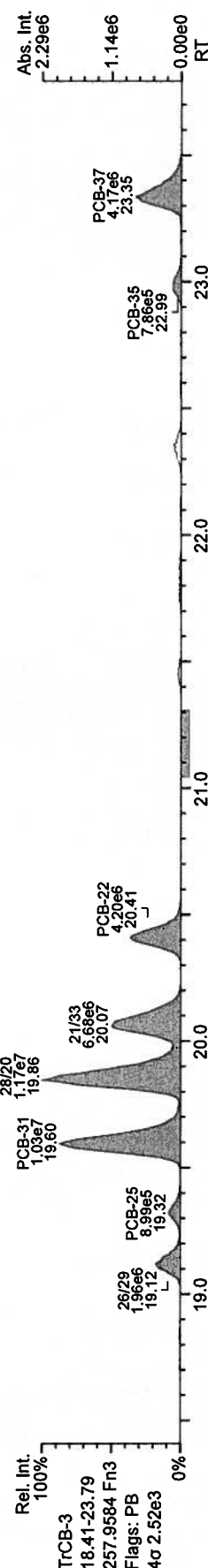
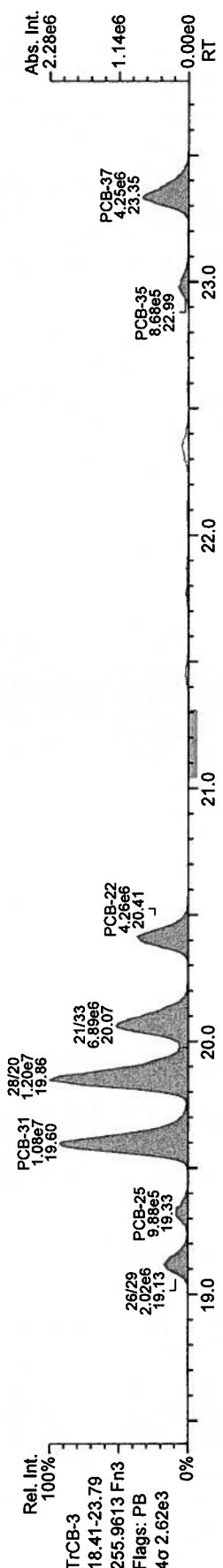




AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

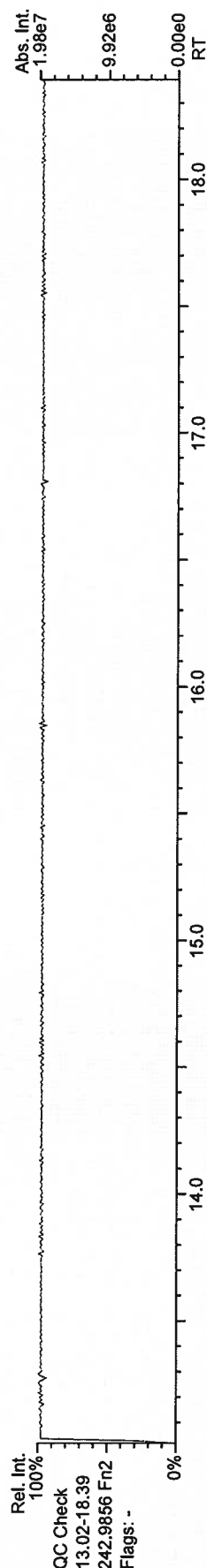
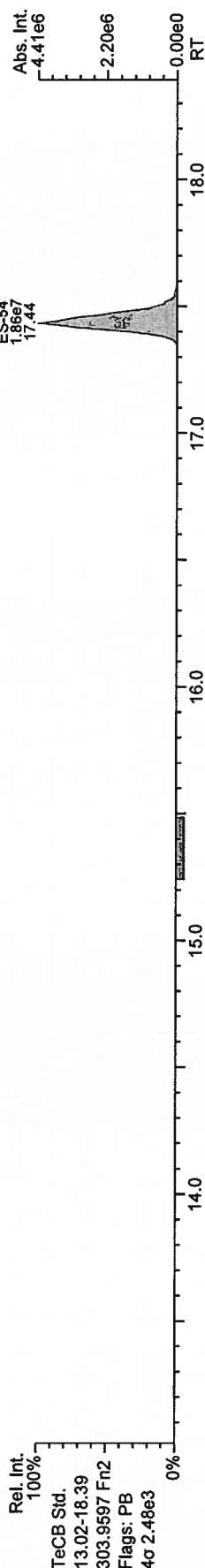
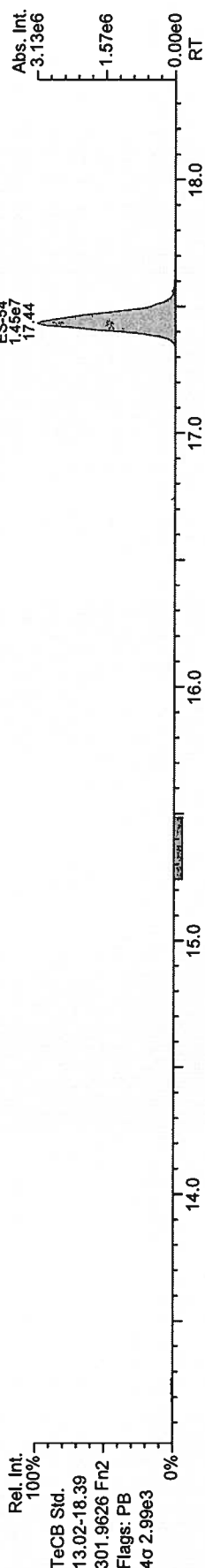
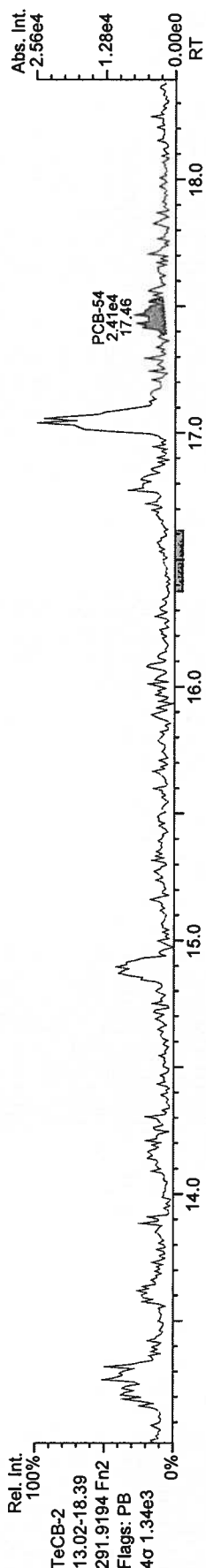
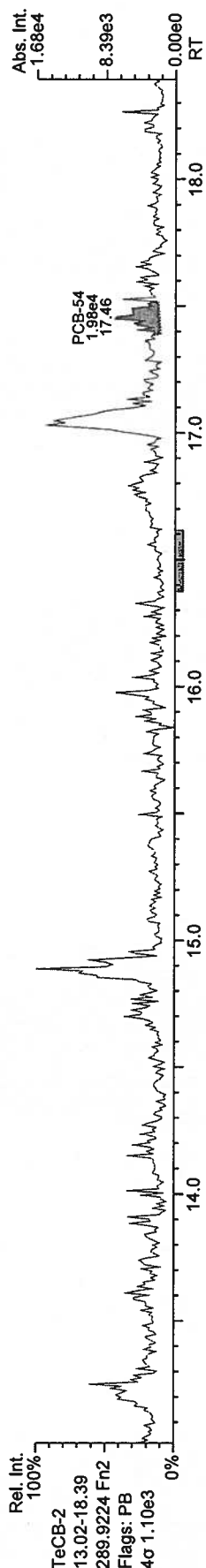
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AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



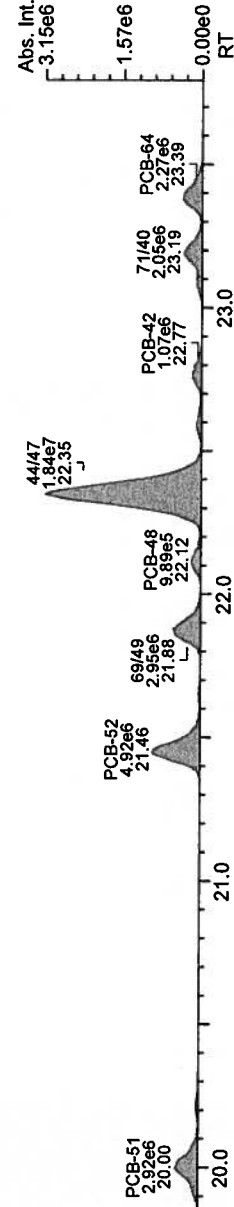


AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4

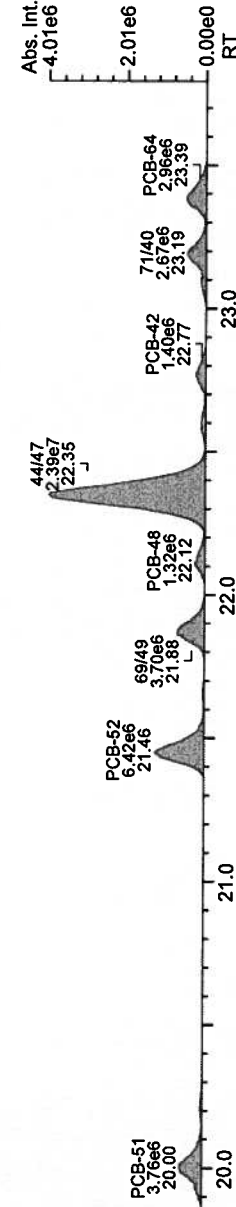
Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

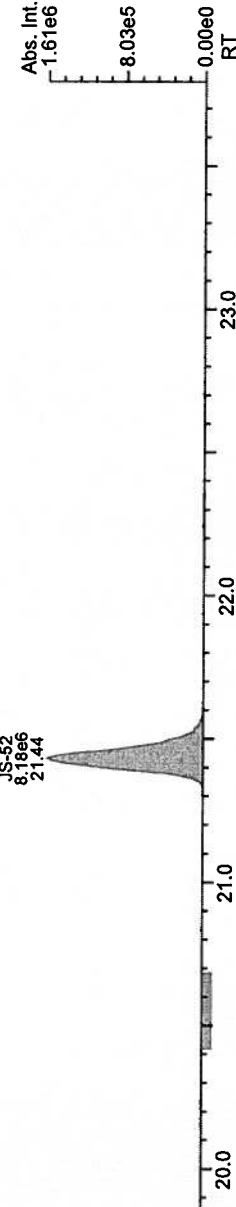
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TeCB-3  
18.41-23.79  
289.9224 Fn3  
Flags: PB  
4σ 1.11e3



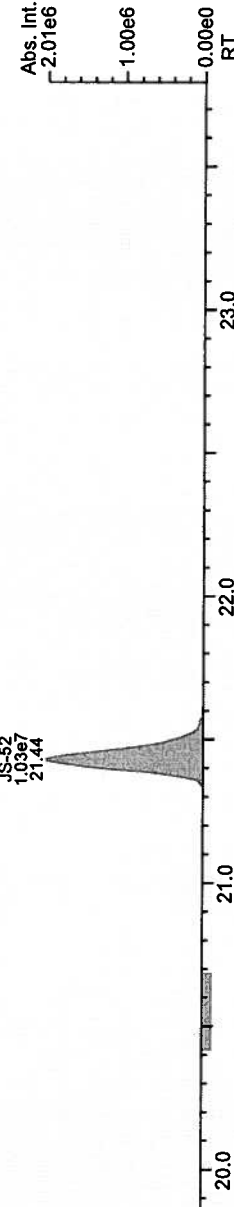
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18.41-23.79  
291.9194 Fn3  
Flags: PB  
4σ 1.34e3



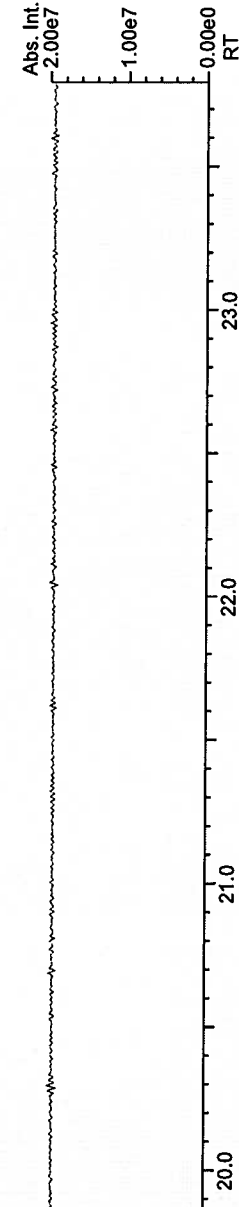
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TeCB Std.  
18.41-23.79  
301.9626 Fn3  
Flags: PB  
4σ 1.92e3



Rel. Int.  
100%  
TeCB Std.  
18.41-23.79  
303.9597 Fn3  
Flags: PB  
4σ 1.78e3



Rel. Int.  
100%  
QC Check  
18.41-23.79  
292.9824 Fn3  
Flags: -



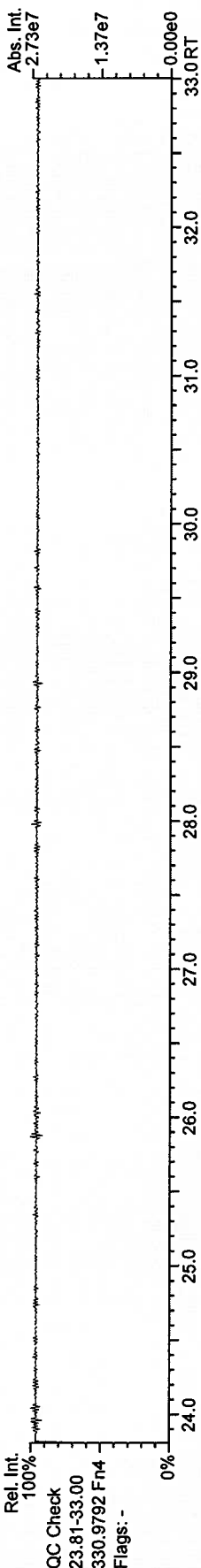
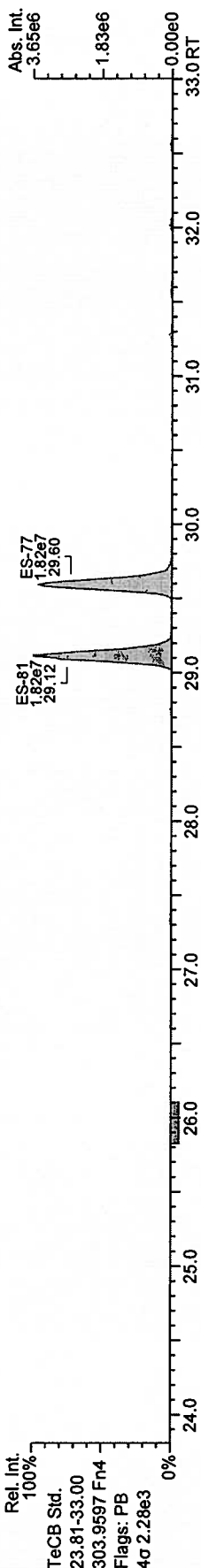
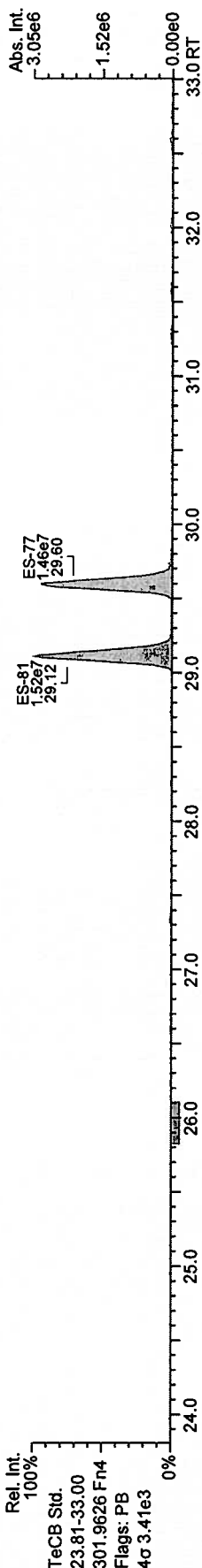
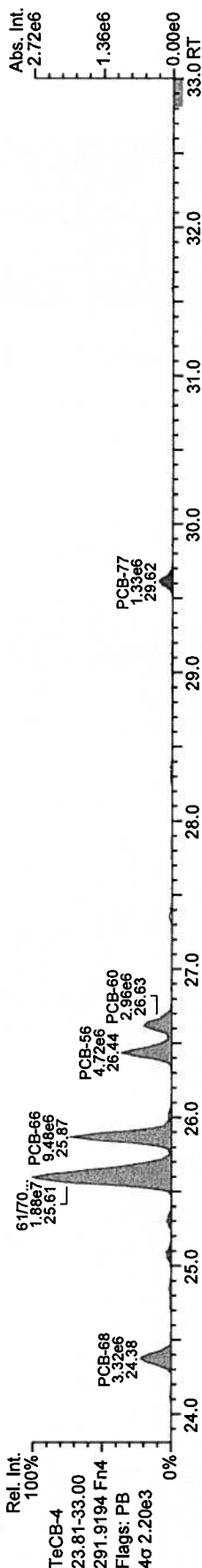
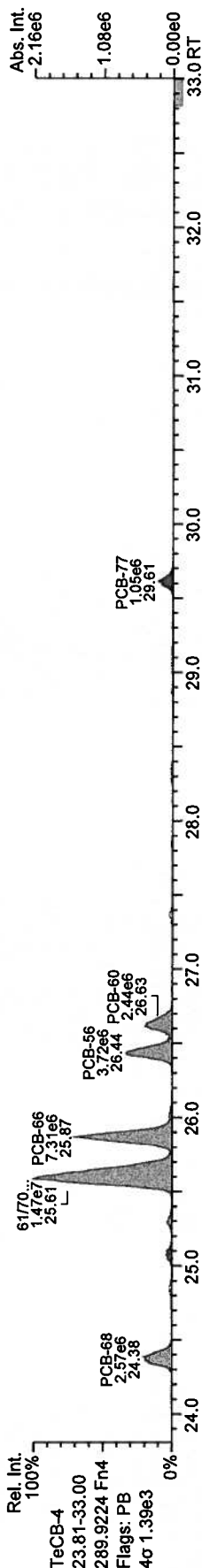
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AP UltraTrace-Pro V4.12 User/System: CW/CWIT-045 cc: 9379, 7374 scc: 174-973

Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:23:53 Page 8 of 22

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4

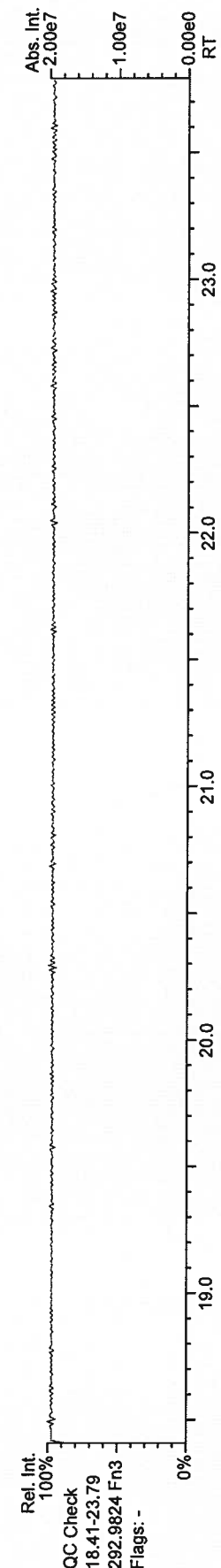
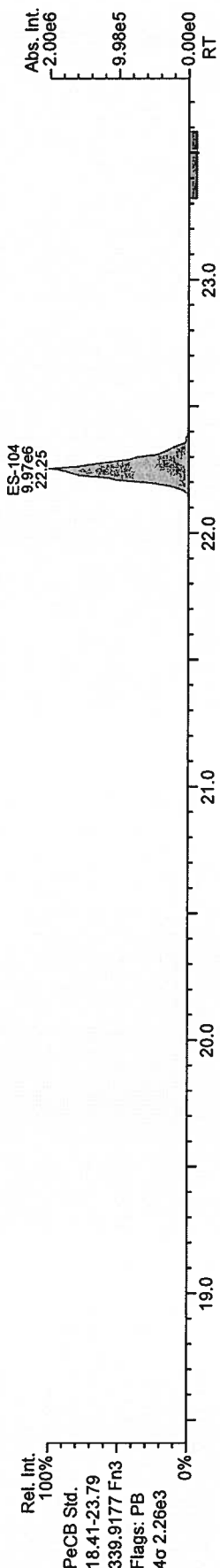
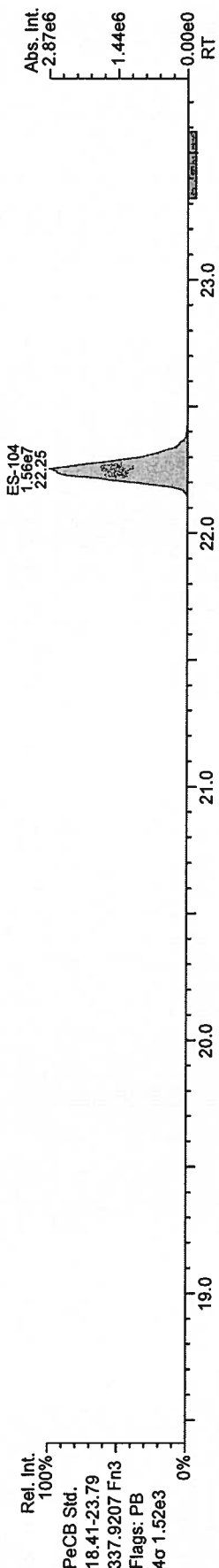
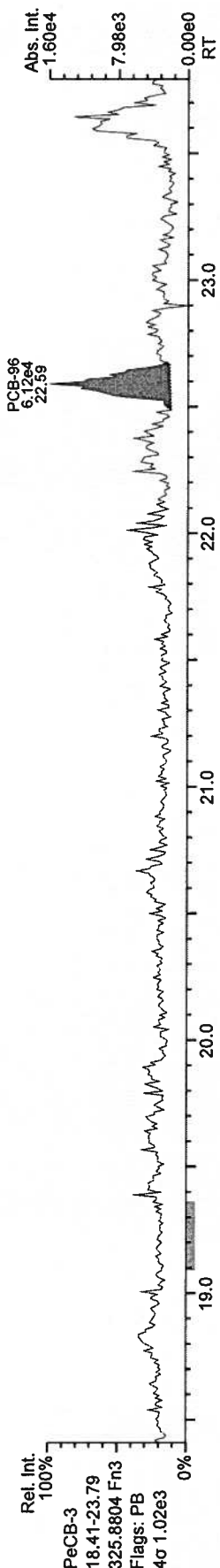
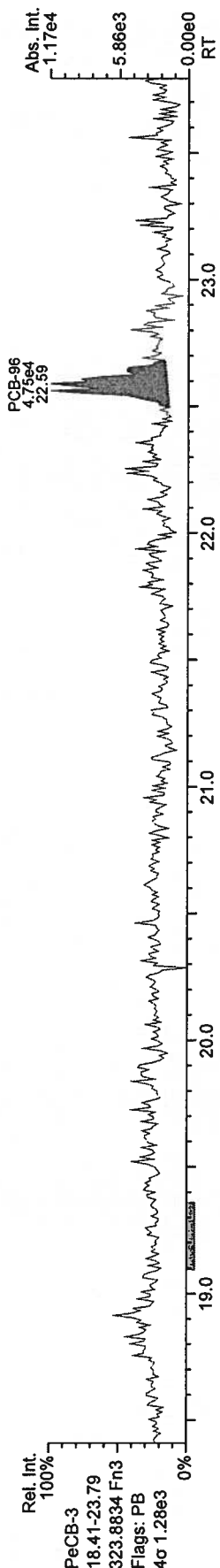


Results: P:\P1900\_P1999P1977P1977\_7528 PCBResourcesP1977\_7528\_PCB\_004.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 8847, 7645 scc: 174-973  
Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:24:08 Page 9 of 22

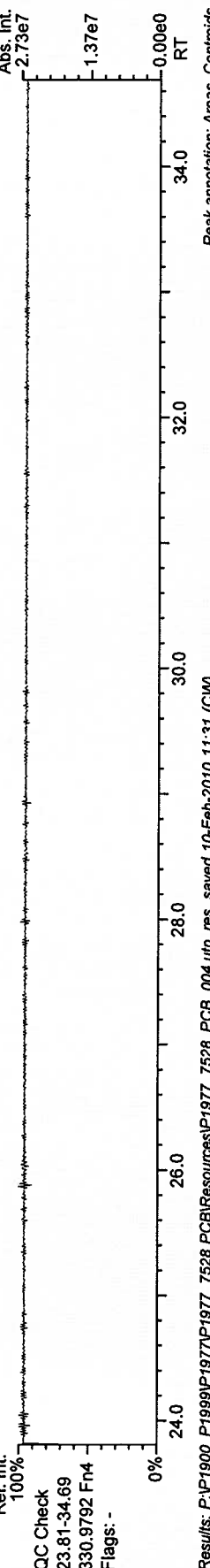
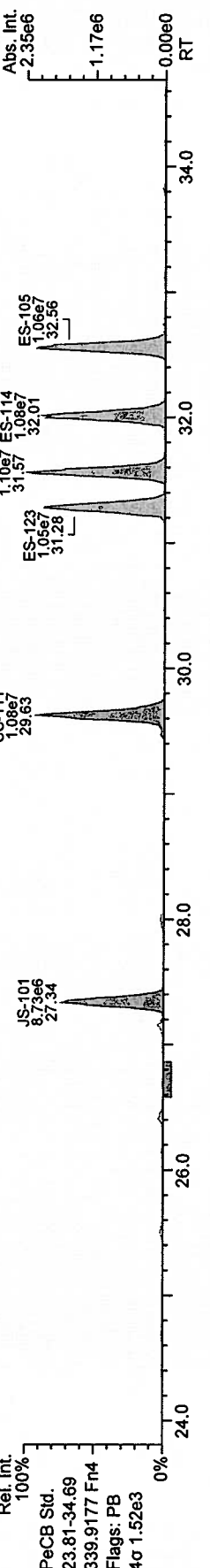
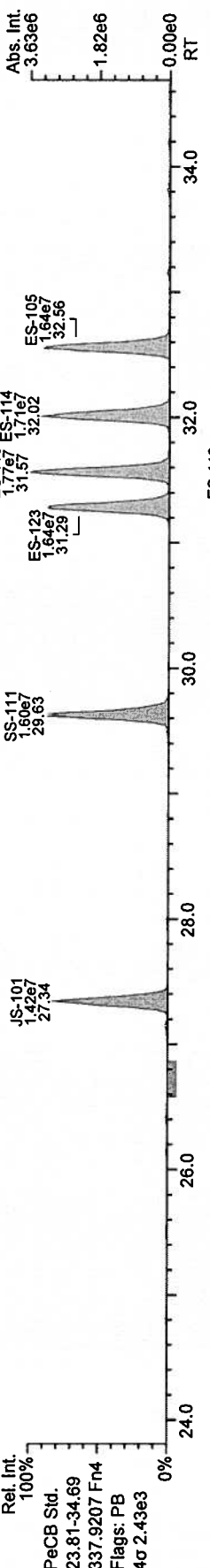
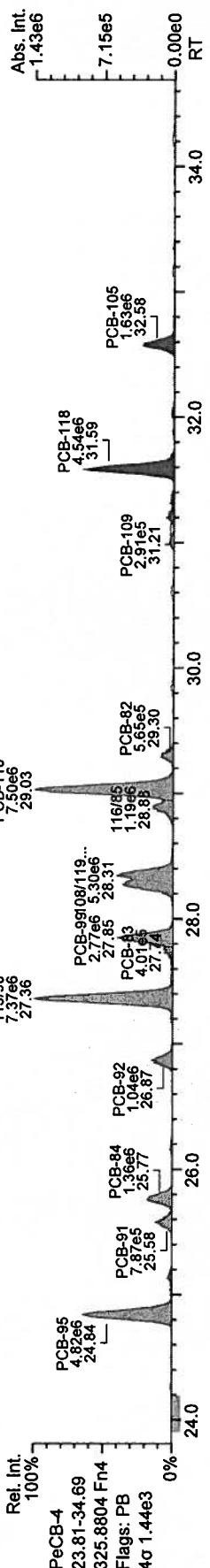
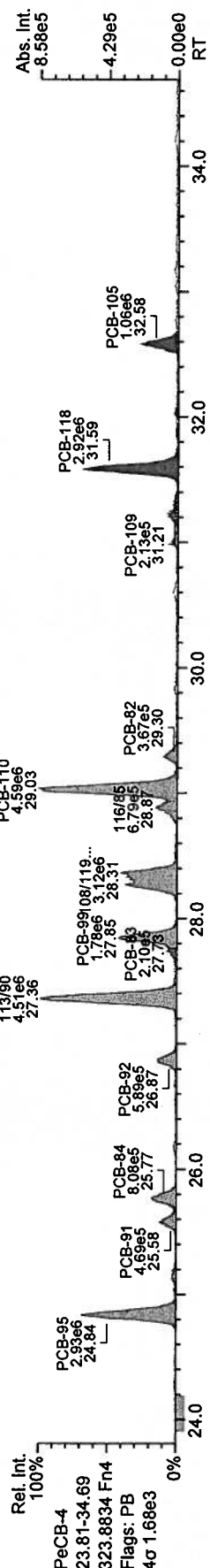
AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



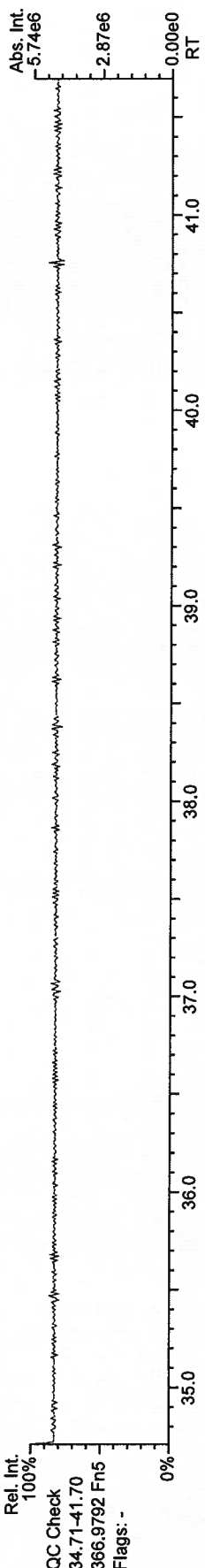
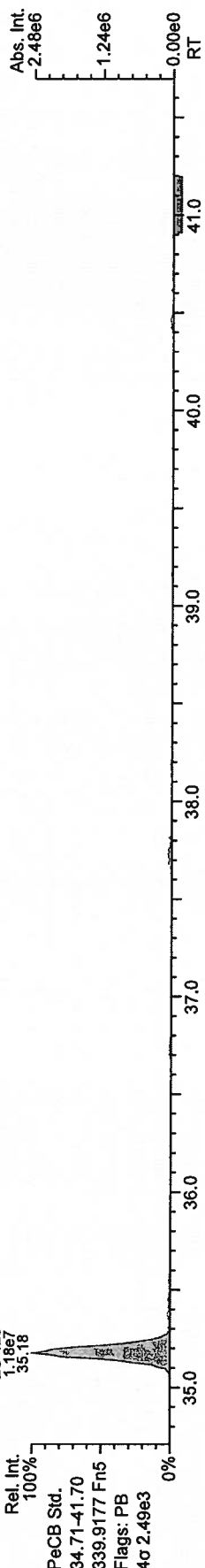
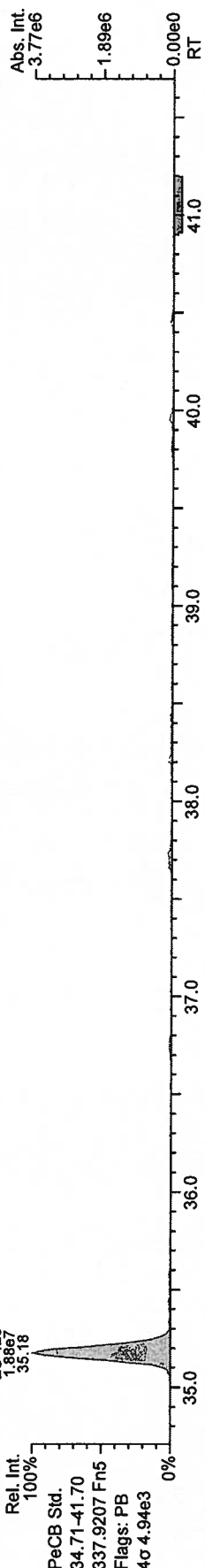
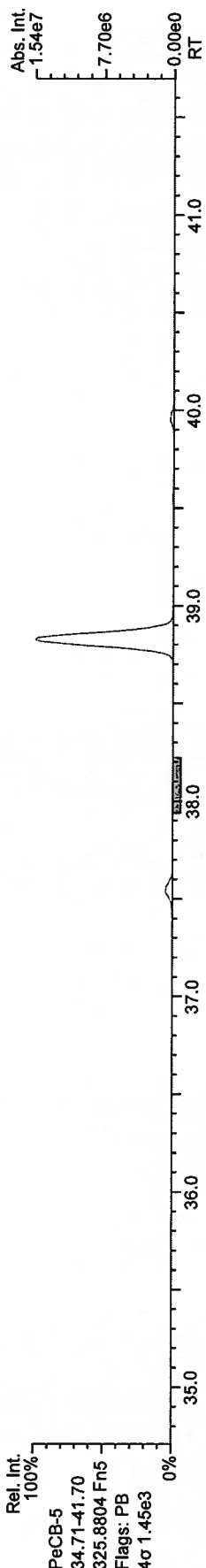
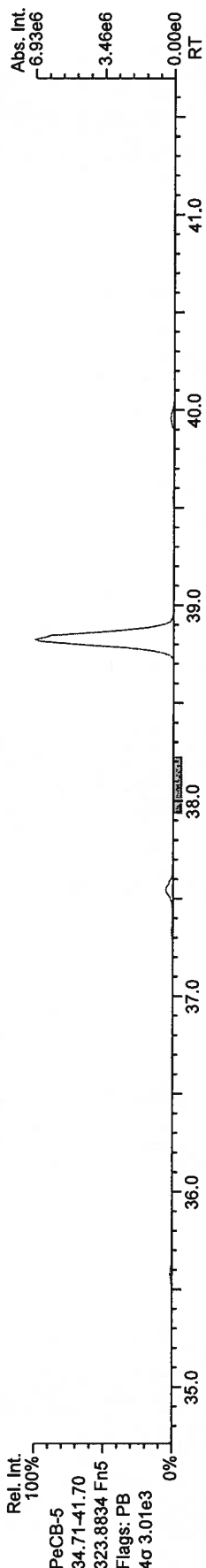
Results: P:\P1900\_P1999\P1977\_7528\_PCBResources\P1977\_7528\_PCB\_004.utp\_res saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 6898, 4731 scc: 174-973  
Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:24:17 Page 10 of 22  
Peak annotation: Areas, Centroids



AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

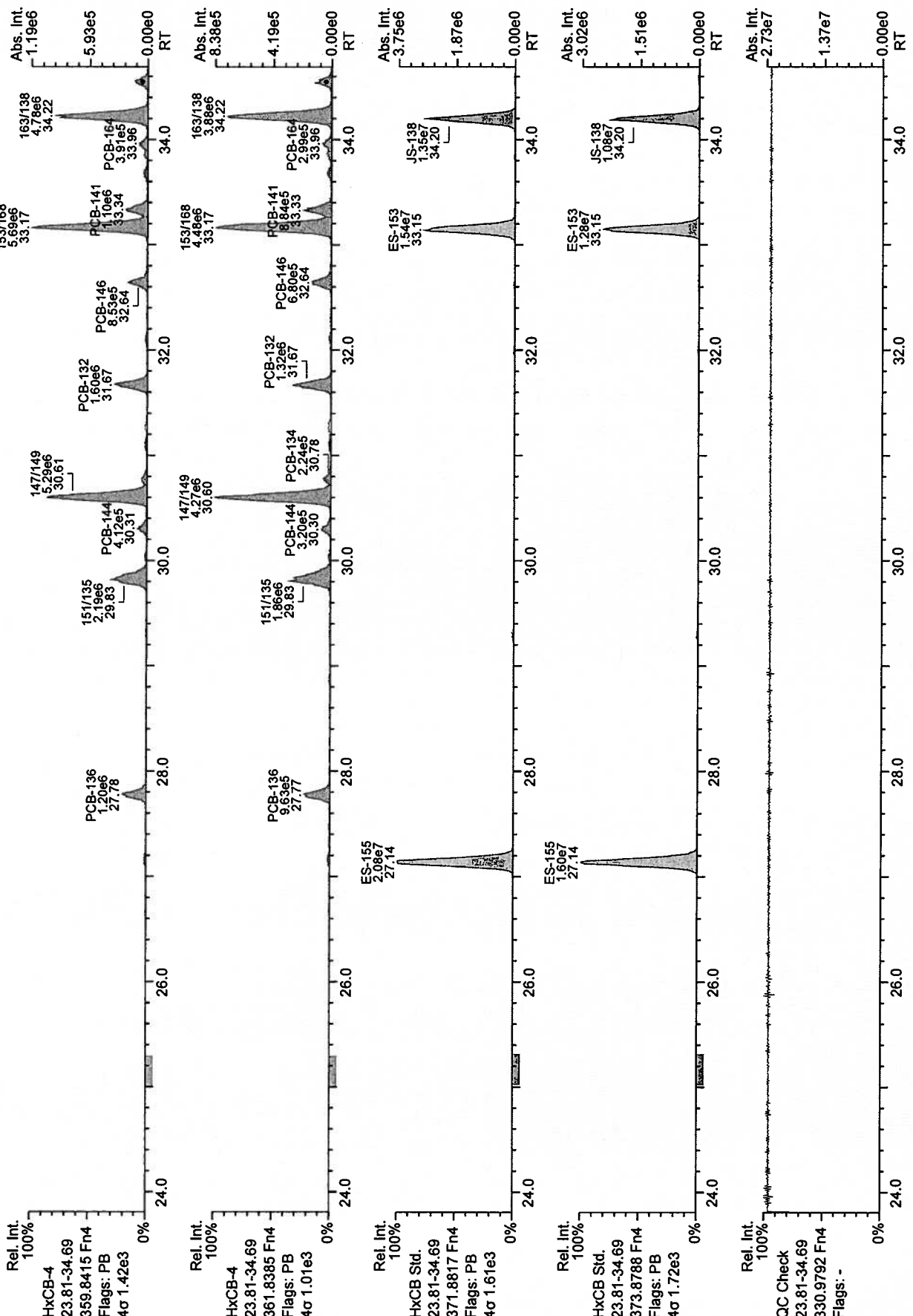
Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

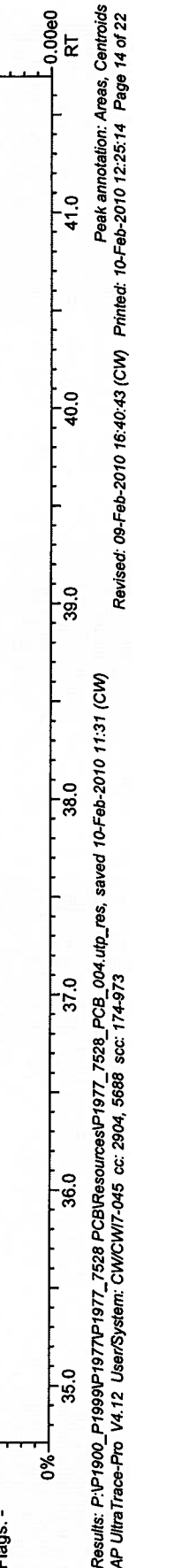
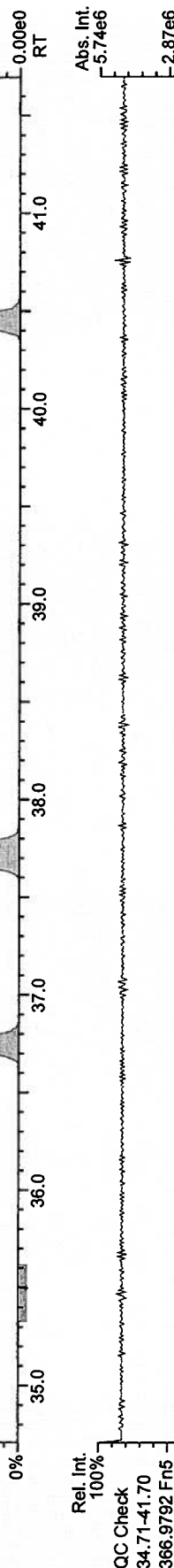
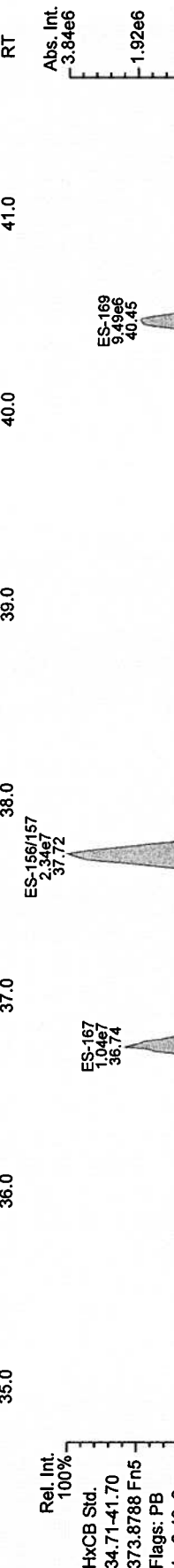
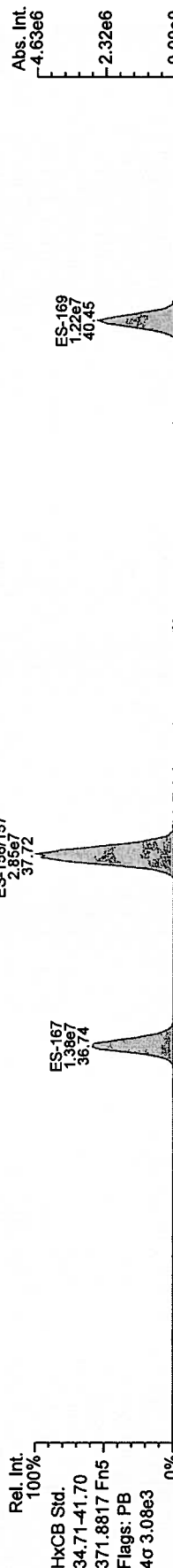
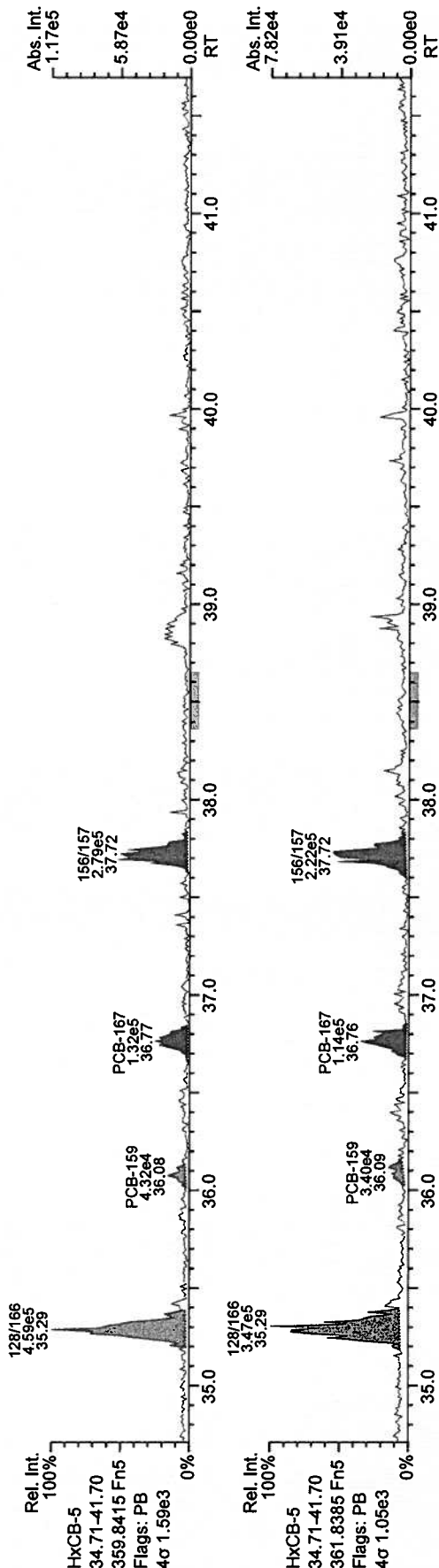


Results: P:\P1900\_P1999\P1977\_P1977\_7528\_PCBResources\P1977\_7528\_PCB\_004.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 5001, 3017 scc: 174-973

Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:24:45 Page 12 of 22

Peak annotation: Areas, Centroids

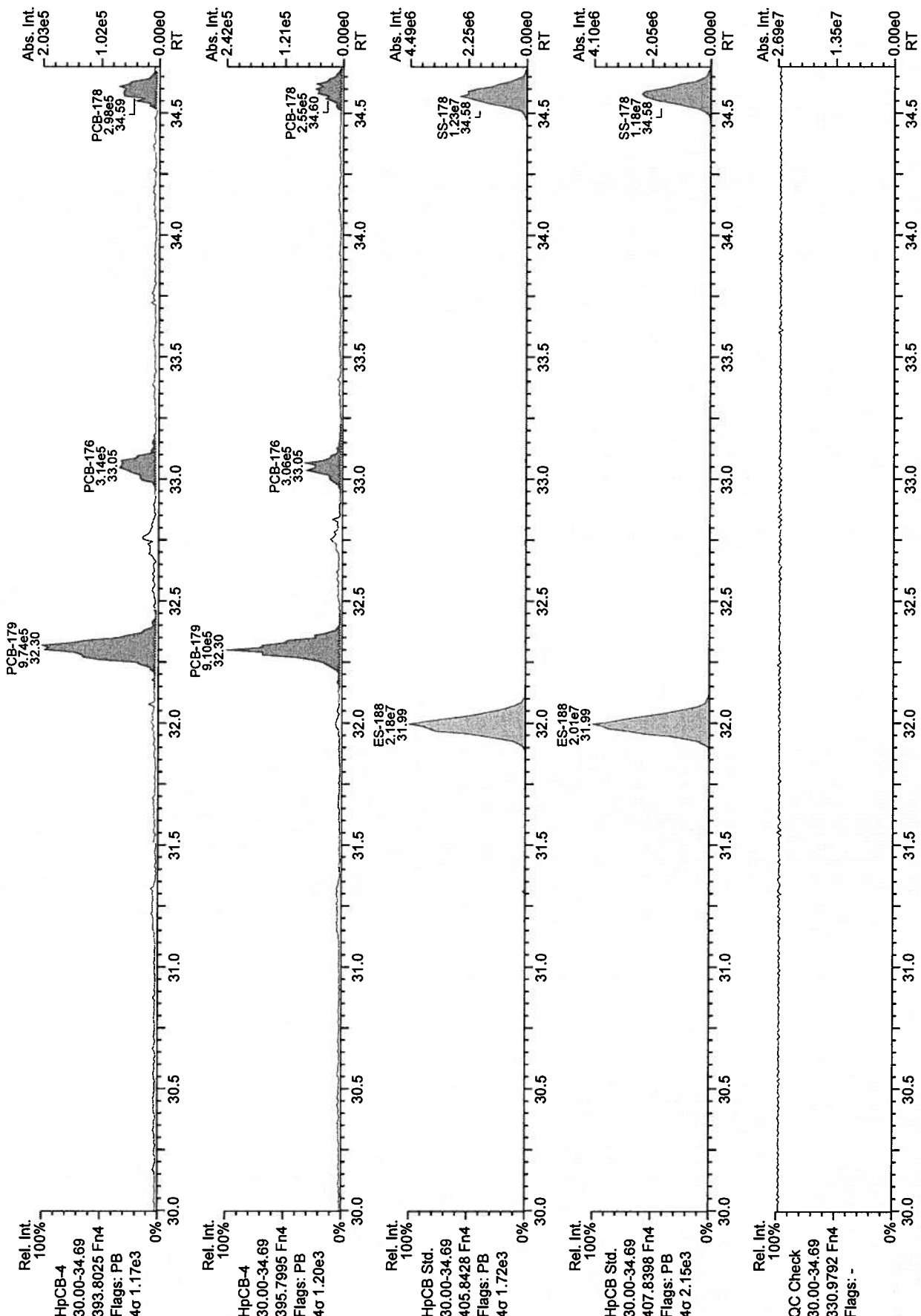




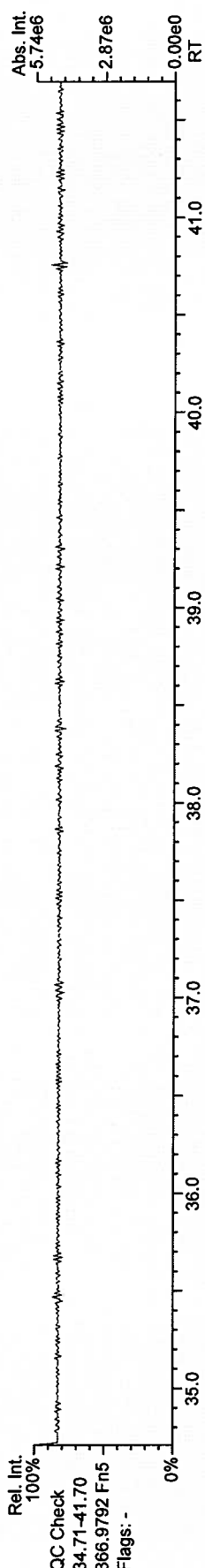
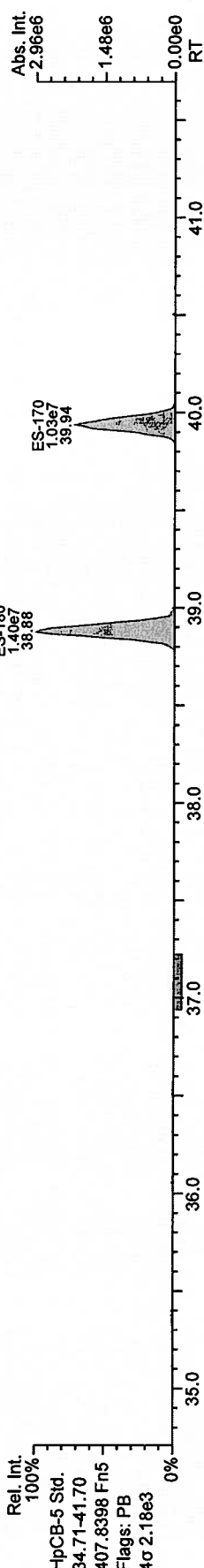
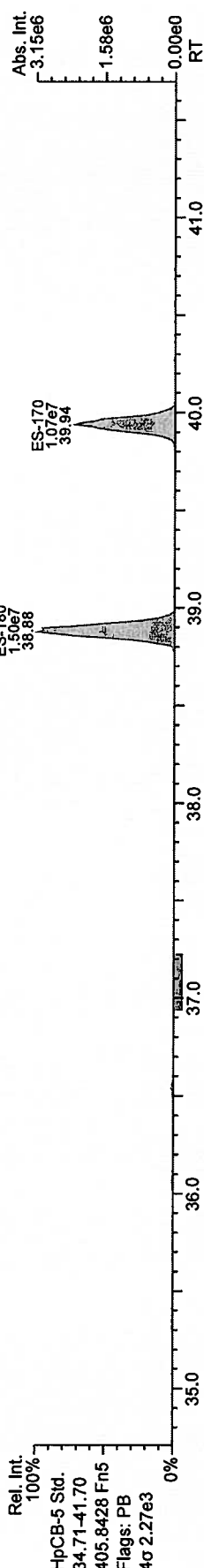
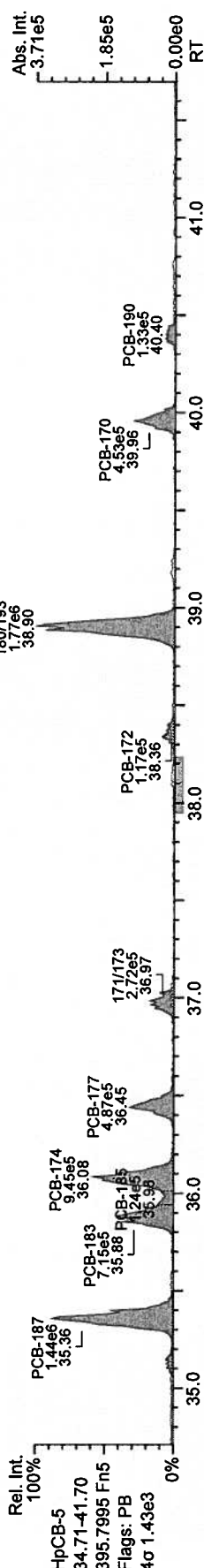
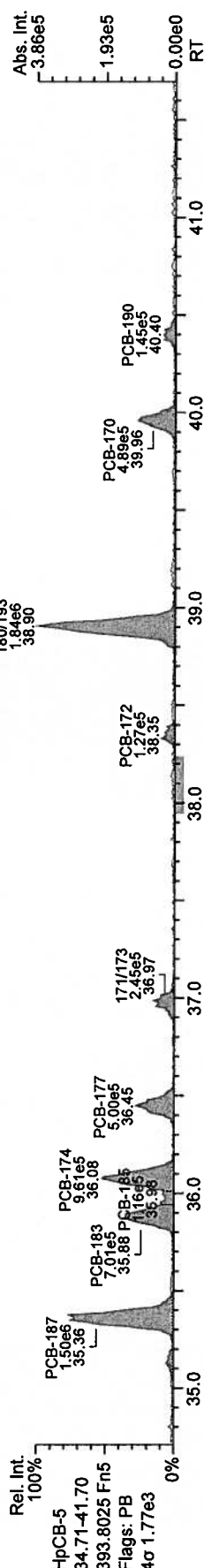
Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4



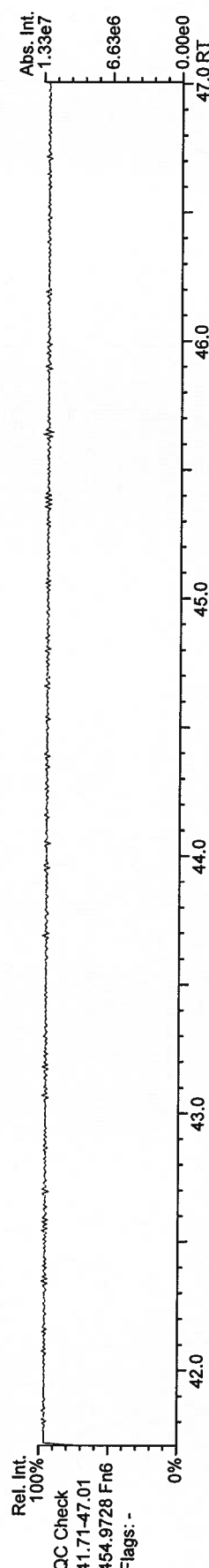
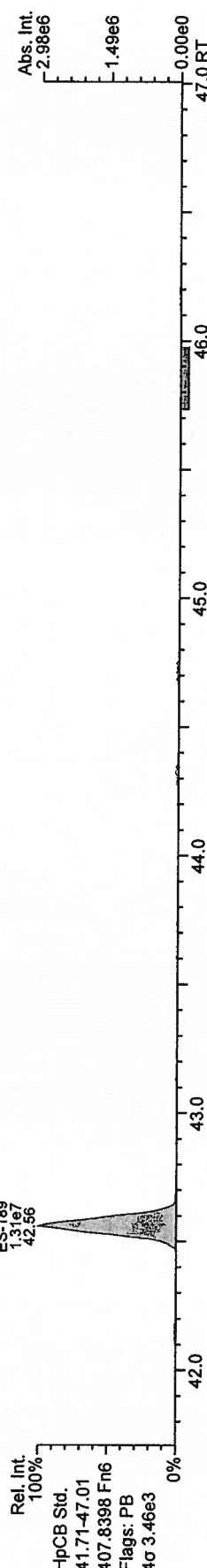
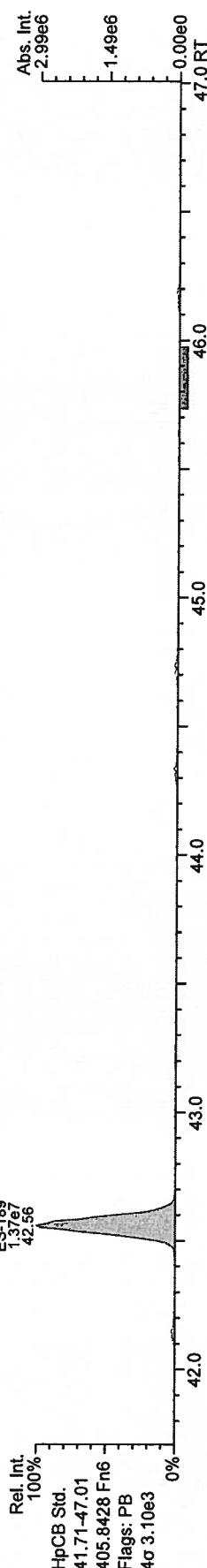
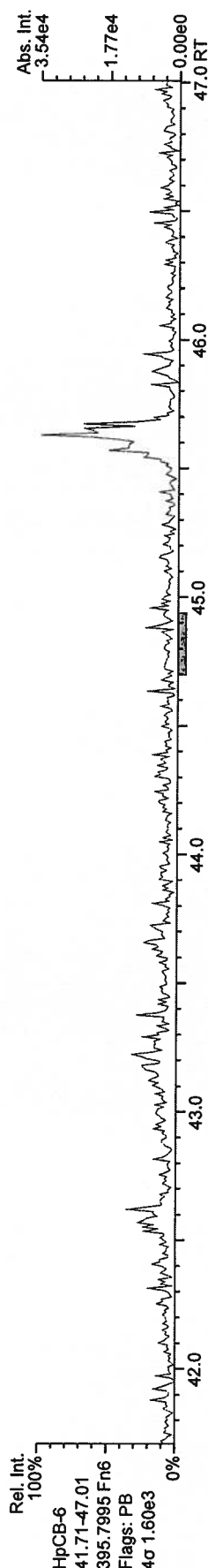
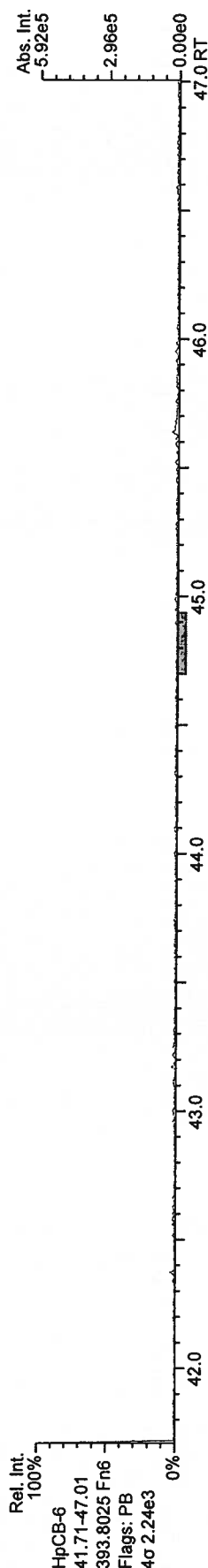




AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

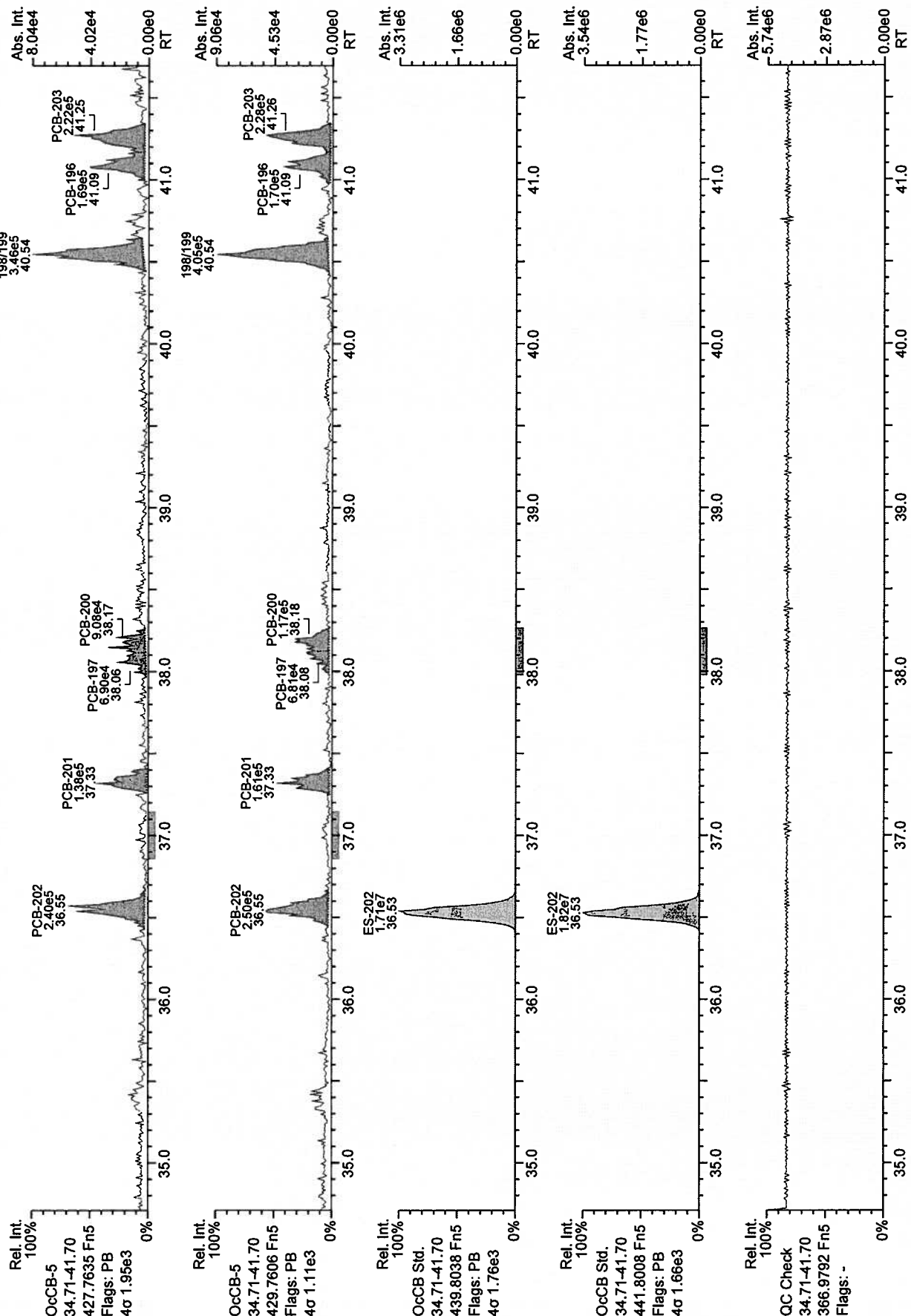


Results: P:\P1900\_P1999\P1977\P1977\_7528\_PCBResources\P1977\_7528\_PCB\_004\_ulp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 cc: 7789, 1390 scc: 174-973  
Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:25:44 Page 17 of 22  
Peak annotation: Areas, Centroids

AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

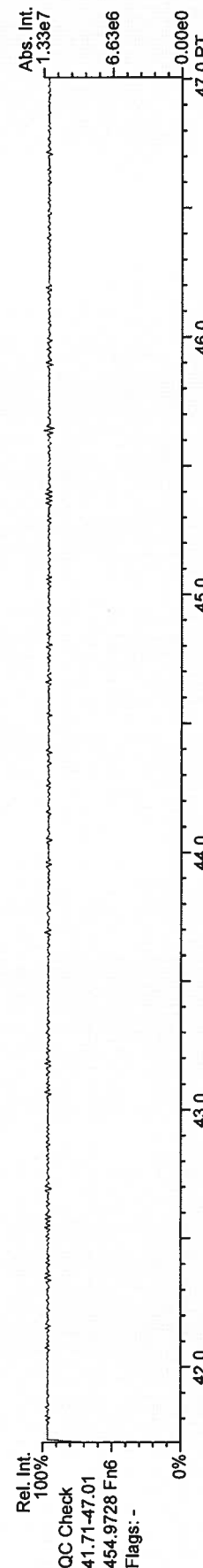
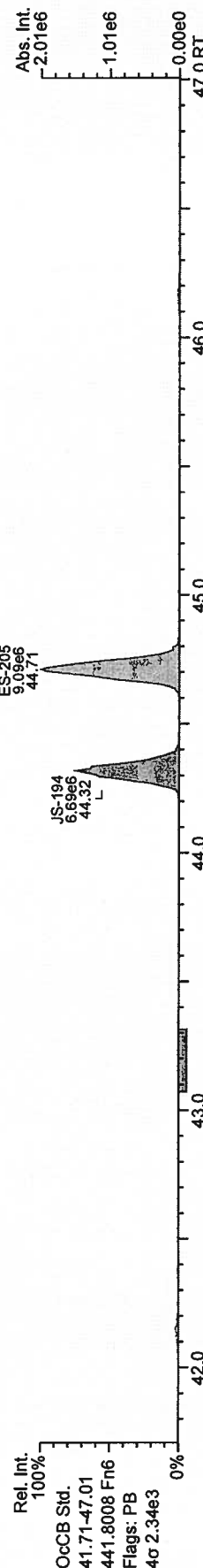
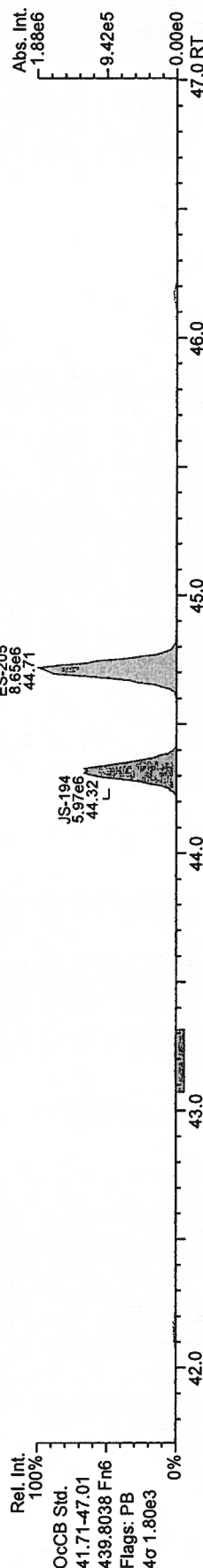
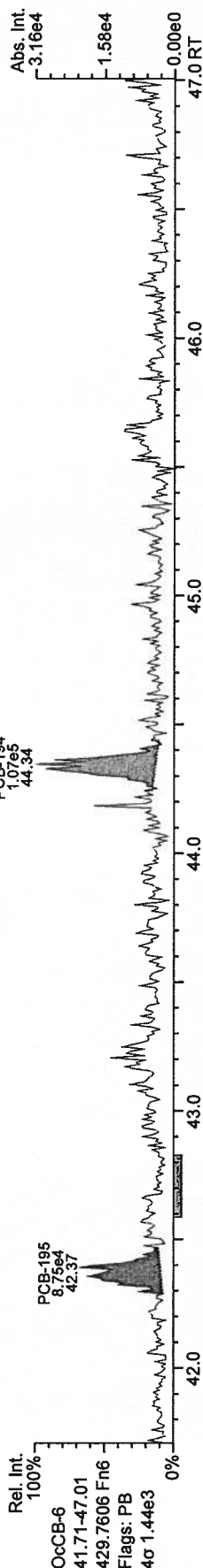
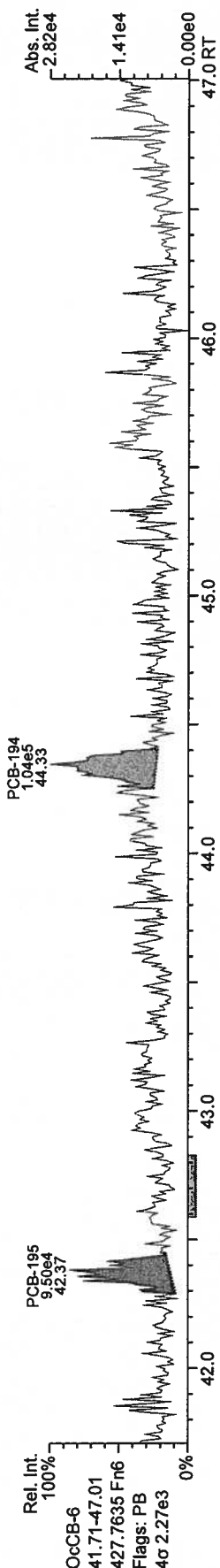
Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

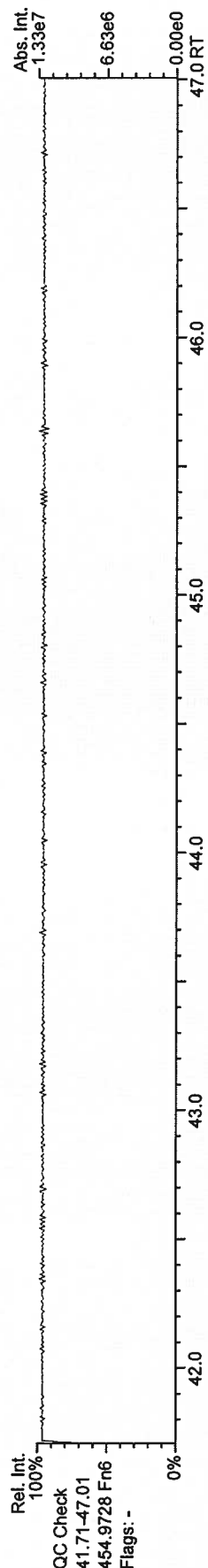
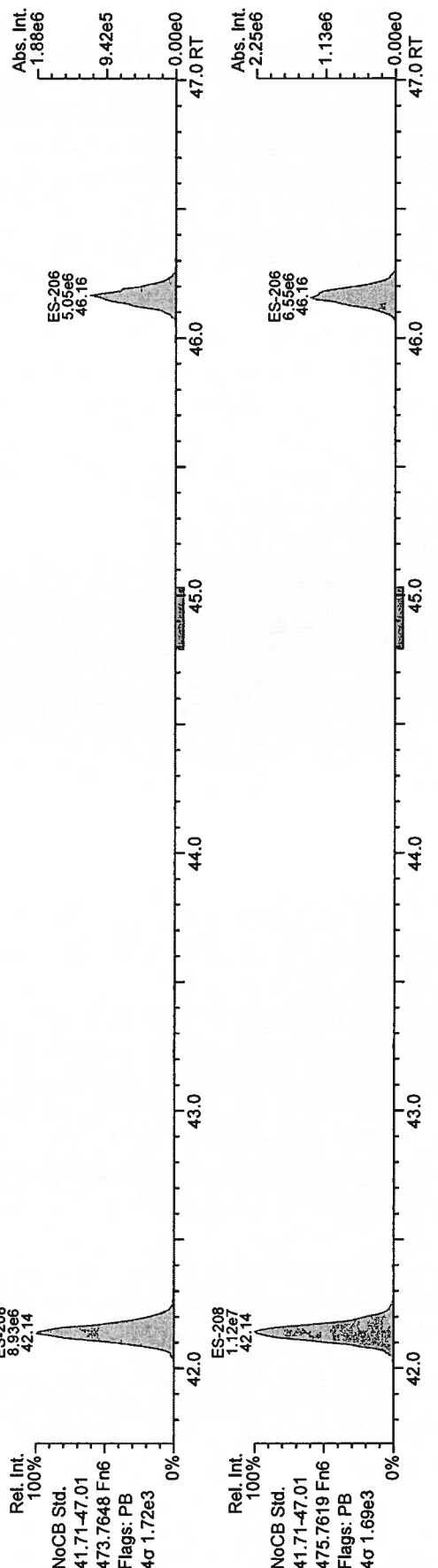
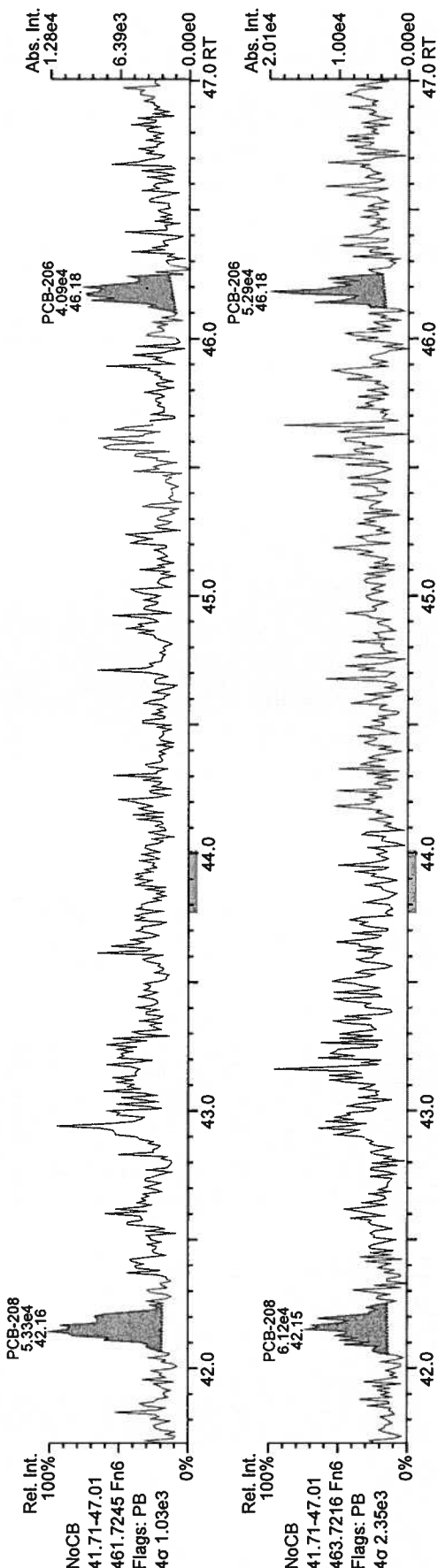
Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

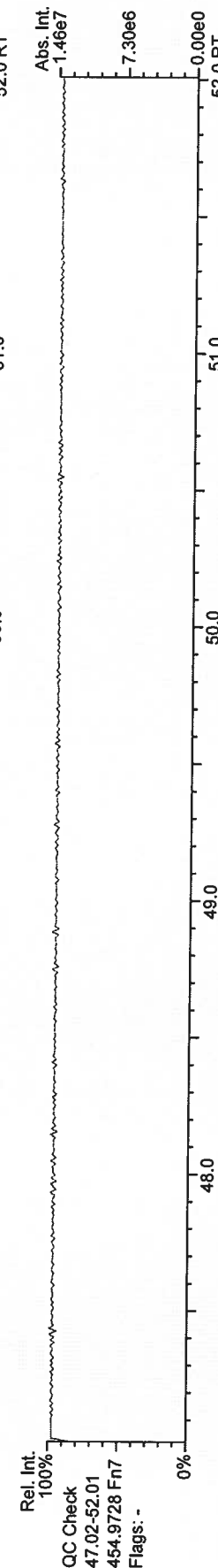
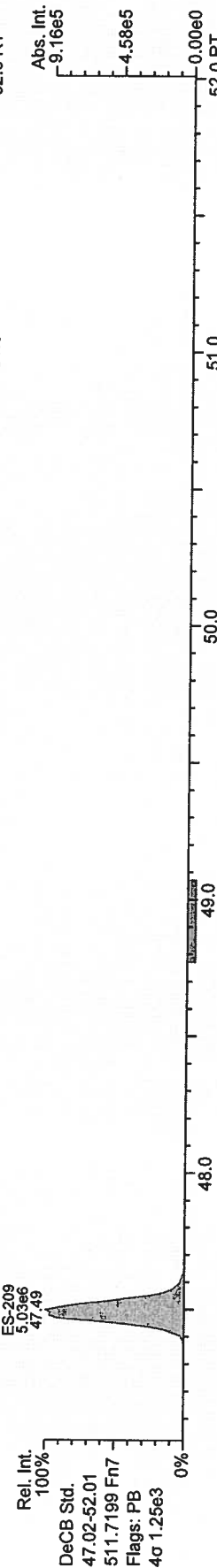
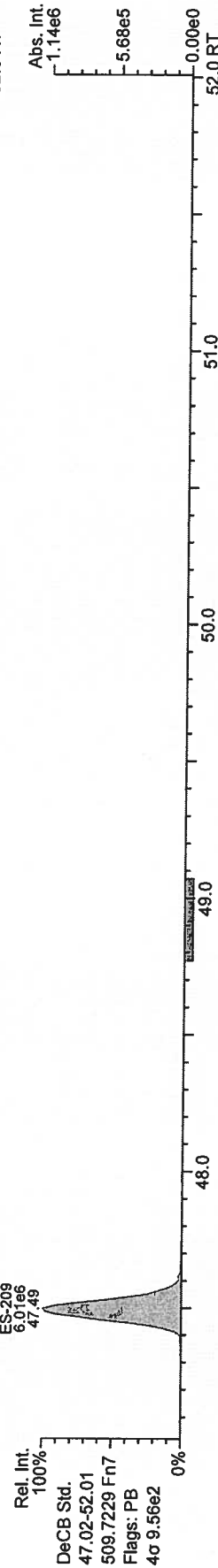
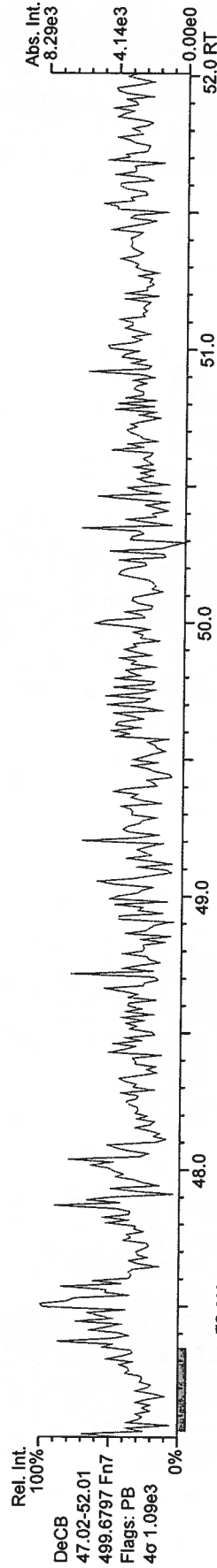
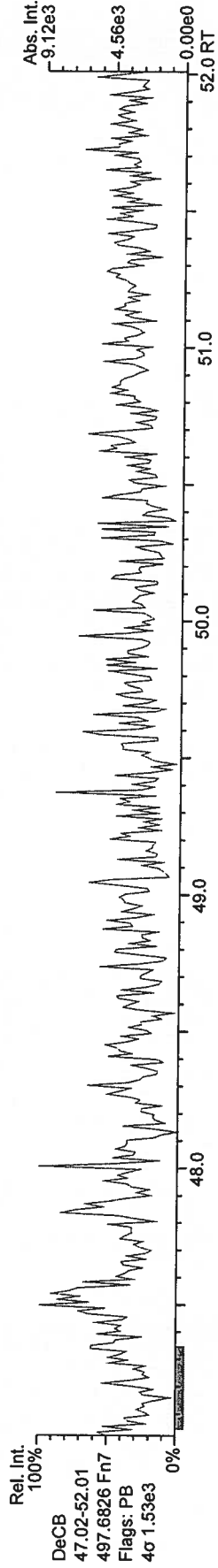
AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4



AP Lab ID: P1977\_7528\_PCB\_004  
Instr: AutoSpec-Ultima MM4

Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_c11-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)



Results: P:\P1900\_P1999\P1977\P1977\_7528\_PCBResources\P1977\_7528\_PCB\_004.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP Ultra Trace-Pro V4.12 User/System: CW/CW17-045 cc: 5885, 2419 scc: 174-973

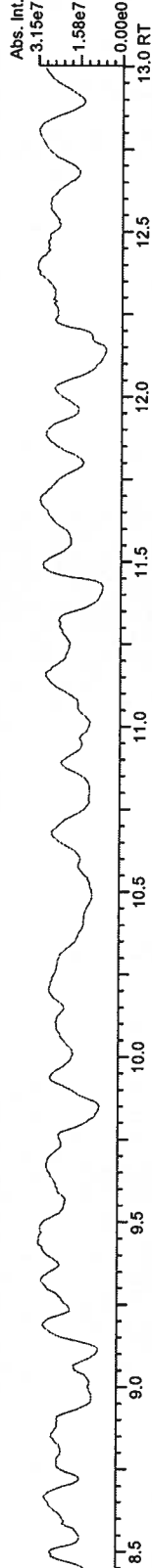
Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:26:25 Page 21 of 22  
Peak annotation: Areas, Centroids

AP Lab ID: P1977\_7528 PCB\_004  
Instr: AutoSpec-Ultima MM4

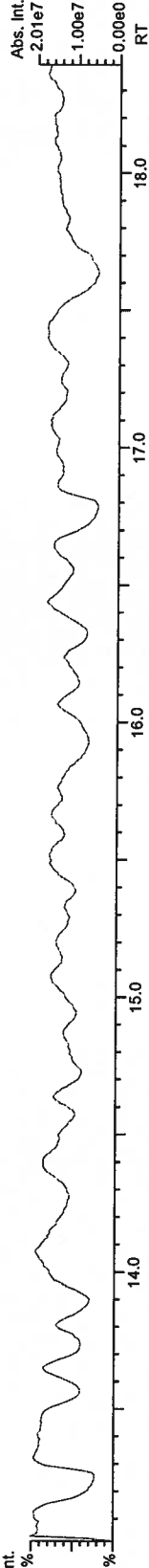
Sample ID: SSI #1-R-3  
VSIR expt: pcb0405\_cl1-10 GC: pcbx100\_a\_BI Vial: 34

Acq: 05-Feb-2010 04:26:06  
User: CW Datafile: 100204S16 (EQ)

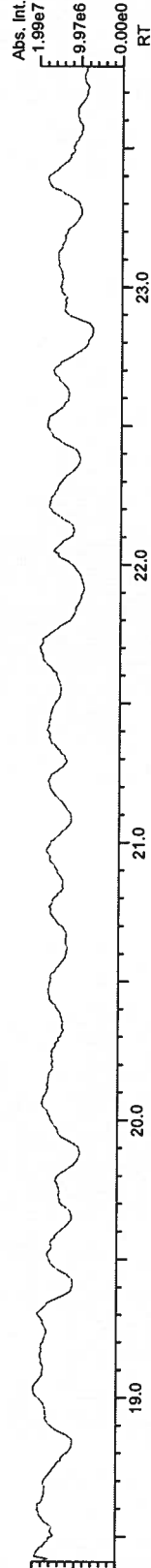
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QC (non-EQ)  
8.43-13.00  
218.9856 Fn1  
Flags: -



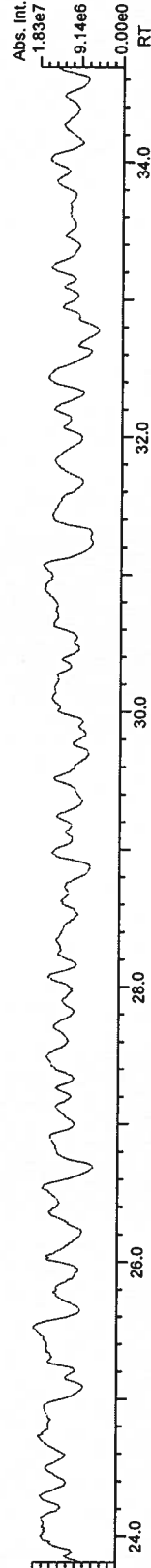
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13.02-18.39  
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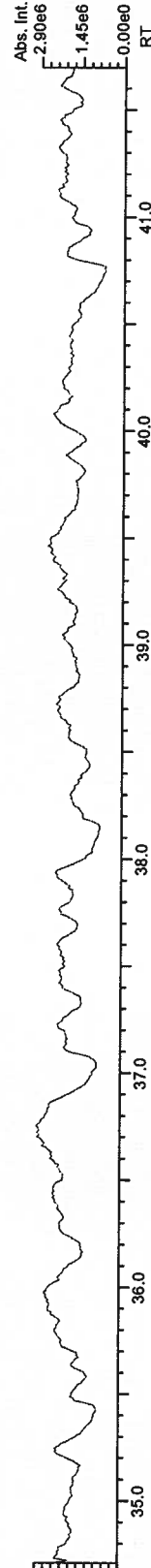
Rel. Int.  
100%  
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18.41-23.79  
292.9824 Fn3  
Flags: -



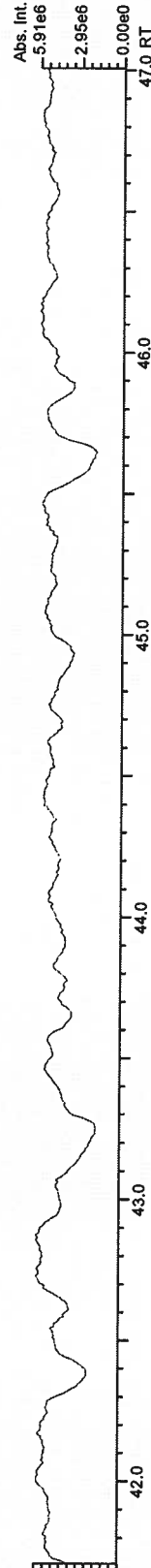
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23.81-34.69  
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Flags: -



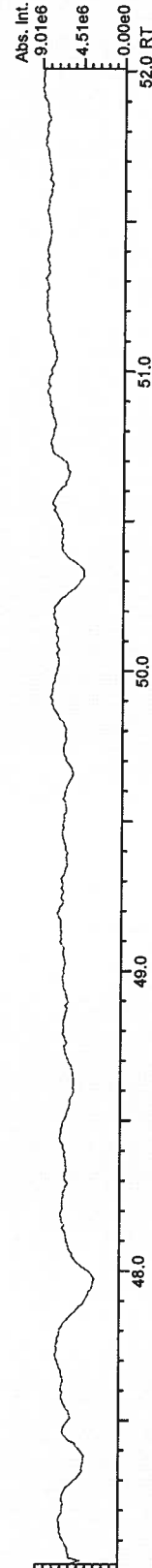
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100%  
QC (non-EQ)  
34.71-41.70  
366.9792 Fn5  
Flags: -



Rel. Int.  
100%  
QC (non-EQ)  
41.71-47.01  
454.9728 Fn6  
Flags: -



Rel. Int.  
100%  
QC (non-EQ)  
47.02-52.01  
454.9728 Fn7  
Flags: -



Results: P:\P1900\_P1999\P1977\P1977\_7528 PCB\Resources\P1977\_7528\_PCB\_004.utp\_res, saved 10-Feb-2010 11:31 (CW)  
AP UltraTrace-Pro V4.12 User/System: CW/CW17-045 scc: 174-973

Peak annotation: Areas, Centroids  
Revised: 09-Feb-2010 16:10:24 (CW) Printed: 10-Feb-2010 12:26:39 Page 22 of 22